

Human rights in the transition to a 'green economy' – Norway and a 'just transition' to a low-carbon society

Candidate number: 8001

Submission deadline: 15th May 2013

Number of words: 19,992

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ABBREVIATIONS

°C	Degrees Celsius
CCC	UK Committee on Climate Change
CCPA	Canadian Centre for Policy Alternatives
CCS	Carbon capture and storage
CO ₂	Carbon Dioxide
CPRs	Civil and Political Rights
EJ	Environmental Justice
ESCRs	Economic, Social and Cultural Rights
ETS	EU Emissions Trading Scheme
EU	European Union
Fivh	<i>Framtiden i våre hender</i>
GDP	Gross Domestic Product
GND	Green New Deal(ism)
GNP	Gross National Product
HDI	Human Development Index
HR(s)	Human right(s)
HRBA(s)	Human rights-based approach(es)
HRBAJT(s)	Human rights-based approach(es) to Just Transition(s)
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ILO	International Labor Organisation
IPCC	Intergovernmental Panel on Climate Change
JT(s)	Just Transition(s)
kg	Kilograms
KP	Kyoto Protocol
LO	<i>Landsorganisasjon i Norge</i> (Norwegian Confederation of Trade Unions)
Mt	Megatonnes
MW	Megawatts
NOK	Norwegian <i>kron</i> e
o.e.	Oil equivalent
OECD	Organisation for Economic Cooperation and Development
OHCHR	Office of the UN High Commissioner for Human Rights
ppm	Parts per million
R&D	Research and development
sm ³	Standard cubic meters
SDFIs	State direct financial interests
SSB	<i>Statistisk sentralbyrå</i> (Statistics Norway)
TWh	Terawatt hours
UDHR	Universal Declaration of Human Rights
UNEPGEI	UN Environmental Programme's Green Economy Initiative
UNFCCC	UN Framework Convention on Climate Change
YS	<i>Yrkesorganisasjonenes Sentralforbund</i> (Norgwegian Confederation of Vocational Unions)

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1 INTRODUCTION

Climate change challenges human rights (HRs) “as the dominant language of justice.”¹ The embryonic HRs and climate change discourse has accepted this challenge. However, this discourse remains marginal – both in traditionally-technocratic international climate policy and debates around transitions to ‘green economies’ (the transition discourse). A green economy ‘guidebook’ for the 2012 Rio+20 Conference did not mention HRs.²

This reflects HRs marginal status vis-à-vis the environment, development and economics generally. Suggesting these are HRs issues is a “frame change”³ from traditional approaches, raising questions of what understandings of HRs would assist such re-framing. Ultimately, it is questionable whether HRs are relevant in assisting transitions to low-carbon societies.

Based on these discursive ‘gaps,’ this thesis seeks reconciliation of the HRs and climate change discourse with relevant strands of the transition discourse, especially ‘Just Transition’ (JT). There is no off-the-shelf tool for reconciling these evolving bodies of theory and practice; their different socioeconomic, political, legal and environmental facets require transdisciplinary approaches. Critical theory provides insights for this task.

There is no single critical theory; as a “theoretical paradigm,”⁴ it recognises, as Cox said, “theory is always *for* someone, and... some purpose;” there is “no such thing as theory in itself, divorced from a standpoint in time and space.”⁵ This “self-reflective” approach suggests “interpretations and theories do not simply describe reality but also shape... it.”⁶

Critical theory distinguishes between “problem-solving” and “critical” theories. Problem-solving theory “takes the world” – its social relations and institutions – “as it finds it,” addressing issues within existing parameters. This positivism is not “value-free” as these parameters are themselves “value-bound;” thus, often unconsciously, we accept historical normative assumptions built into existing ideas and institutions. These normative assumptions appear “natural” and timeless given their hegemonic “commonsense status,” obscuring them from analysis. Issues effectively become problems (“sources of trouble”) for existing systems,

¹ Humphreys, 2010, p45

² UNDESA, 2012

³ Miller, 2010, p925

⁴ el-Ojeili and Hayden, 2006, p5

⁵ Cox, 1981, p128

⁶ el-Ojeili and Hayden, 2006, p11

resolved using paradigmatic assumptions of particular disciplines aimed at making these systems “work smoothly.”⁷

Contrastingly, critical theory “stands apart from the prevailing order,” asking “how that order came about.” Although starting in “particular sphere[s],” it seeks “construction of a larger picture” of historical processes. Crucially, “because it deals with a changing reality,” it “continually adjust[s]... to the changing object it seeks to understand,” rather than projecting itself as natural or timeless. Critical theory challenges “prevailing order by seeking out, analysing, and... assisting social processes” for “emancipatory change;” nonetheless, it seeks “possible alternatives” that “are feasible... in the existing world,” rejecting “improbable alternatives” through understanding historical processes in the interaction between social forces, ideas and institutions.⁸ Distinctions between hegemony and counter-hegemony assist this understanding; given critical theory recognises all theory is normative (explicitly or implicitly), it highlights counter-hegemonic discourses. This is why JT has been chosen for analysis, arising as it does from social movements and claiming to be a “bridge to the future.”⁹ The question is what role HRs can play in this bridge-building.

HRs and critical theory have common Enlightenment roots. HRs were, originally, counter-hegemonic challenges to enclosed “political community.”¹⁰ However, critical theory acknowledges contradictions *within* ideas; even seemingly-critical theories can become problem-solving when fixed into “static,” “ahistorical” systems.¹¹ Thus, HRs’ counter-hegemonic nature co-exists with growing hegemonic uses. The same applies for ‘green economy’ and ‘JT.’ These, too, require critical appraisal. This involves an “immanent critique... to expose contradictions and tensions between ideas and practices” that provide opportunities for social change.¹² Critical theory is therefore “both descriptive and constructive.”¹³

Critical approaches also apply for ecology. They distinguish between natural and social facts; the “difference between Nature and History” is “human beings have created one... not the other;” “that which humans have the power to make, they have the power to

⁷ Cox, 1981, pp128-130

⁸ Ibid

⁹ Baugh, 2010, p5

¹⁰ Hobden and Jones, 2006, pp240-241

¹¹ Cox, 1981, p133

¹² el-Ojeili and Hayden, 2006, p7

¹³ Ibid, p10

change.”¹⁴ Climate change – a *natural fact created by humans* – muddies this picture. Climate change is partly in our power to change; however, certain aspects are now, regardless of human agency, natural facts, limiting our responses. Meanwhile, those responses remain under our control. Consequently, it is vital, as Ytterstad suggests, to separate “political” and “natural realism”¹⁵ – recognising problem-solving approaches present certain paths as impossible, despite these being more consistent with scientific evidence. Thus, understandings of climate change are social constructions; critical approaches deconstruct these, working backwards from natural to political realism and highlighting the latter’s naturalising assumptions. Such approaches have only recently been applied to climate change. Cox suggests, given problem-solving and critical theories are “not mutually exclusive,” problem-solving theory is “necessary” for climate change, suggesting “how to proceed *given* certain conditions” (for example, meeting energy needs). However, critical theory “broadens... inquiry” to “forces favoring or opposing changing patterns of behaviour” and recognises humans are “*part of the biosphere,*” challenging hegemonic thinking “that nature is... created in service of humans” and “a force to be dominated.”¹⁶

Problem-solving approaches to HRs and climate change are necessary for assessing how climate change affects HRs, and how existing HRs systems address this. However, this does not provide a nexus for reconciliation with the transition discourse or JT. Firstly, given problem-solving approaches do not question frameworks within which they operate, they assume the continuation of basic tenets of the existing order, an order which causes climate change. Secondly, treating climate change as a ‘problem’ for HRs opens to its ‘resolution’ through ruling it out as a HRs issue altogether – or even using HRs as obstacles to progress. Critical re-evaluation is required to make HRs catalysts for the transition.

Ultimately, the “frame change” of seeing HRs as issues for economic development and the environment is a *critical* reframing, expanding HRs beyond traditional boundaries. Examining its overlap with JT continues this expansion. This thesis therefore seeks to contribute to pushing HRs in a more critical direction. Reconciling critical elements of JT and HRs can give a framework for critically examining normative assumptions of climate policy in a particular context; an analytical tool for climate policy, and a basis of action towards alternatives realigning political realities with natural realism while securing HRs enjoyment.

¹⁴ Kirkpatrick *et al*, 1979

¹⁵ Ytterstad, 2013, p23

¹⁶ Schouten, 2009

Norway is the chosen context because it offers interesting contradictions – maintaining a high-profile in international climate politics, while also a major petroleum exporter.

The main research question is therefore – *what role can HRs play in a JT to a 'green economy' in Norway?* This begets further questions addressed throughout, including: what understanding of HRs would be helpful in creating JT? Can HRs be catalysts for transitions? Can a HRs-based JT be both just *and* effective? Chapter Two, *Just Transition to a Green Economy*, examines the transition discourse and JT. Chapter Three, *Human Rights and the Transition*, charts the HRs and climate change discourse, examining critical approaches relevant to JT and how these approaches and JT might be reconciled. In Chapter Four, this reconciled approach is applied to Norway.

2 JUST TRANSITION TO A GREEN ECONOMY

2.1 The transition discourse

The term ‘green economy’ is “fiercely contested”¹⁷ and “confusing even for seasoned professionals.”¹⁸ While the contemporary transition discourse has roots in earlier environmental theories, it must be distinguished from ‘green economics,’ a body of theory associated with environmental movements. Gaining prominence in the late 2000s, ‘green economy’ has become a theme for responses to “multiple global crises,” especially climate and financial crises.¹⁹ ‘Transition’ and ‘green *economy*’ signify “a more... holistic approach to incorporating environment and development in economic... policy.”²⁰ Thus, this transition discourse’s emergence partly reacts to hegemonic environmental economic approaches labelled “ecoliberalism,” which stress “ecological modernization,” market-driven “techno-managerial innovations” and cost-benefit approaches within existing economic systems.²¹ Ecoliberalism itself has received renewed momentum given post-financial crisis fiscal austerity, including the British government’s ‘green economy’ initiatives.²²

Responses to ecoliberalism can be divided into two rough categories – ‘Green New Dealism’ (GND) and ‘environmental justice.’ GND, represented by the UN Environmental Programme’s Green Economy Initiative (UNEPGEI), seeks a larger state role in the transition, effectively envisioning returns to “Fordist” industrial relations with social dialogue and domestic industrial strategies;²³ the transition thus renegotiates the neoliberal settlement, but does not reject existing economic paradigms, including economic growth. While UNEP’s “green economy” definition is “becoming hegemonic,” this is contested by EJ proponents (particularly those frustrated by the Rio+20 conference)²⁴ who argue GND, especially UNEPGEI, reduces ecology to *part of* economics, ignoring that one cannot have economies without ecology. Pricing “ecological services” is considered methodologically dubious given their necessity to survival, and wrongly assumes “substitutability” of ecosystems through trading. Furthermore, by integrating ecology into markets, it removes participatory influences

¹⁷ Boehnert, 2013, p2

¹⁸ Ibid, p14

¹⁹ UNDESA, 2012, pp7-8

²⁰ Ibid, p60

²¹ Nugent, 2011, p60

²² HMG, 2011

²³ UNDESA, 2012, p61

²⁴ Boehnert, 2013, p3

on environmental decision-making and provides opportunities to hegemonic actors, effectively perpetuating and reinvigorating neo-liberalism by failing to address imbalances between market and state.²⁵ EJ, and similarly climate justice, thus questions fundamental tenets of capitalist accumulation causing mutually-reinforcing social and environmental injustices,²⁶ seeking state interventionism combined with grassroots social movement pressure.

GND and EJ share talk of a “green industrial revolution,”²⁷ questioning markets’ ability (at least alone) to deliver rapid or fair transitions based on growing awareness that impacts will be geographically “uneven.”²⁸ The discourse therefore focuses greatly on employment and ‘green jobs.’ This has gathered evidence that, far from being a “job-killer,”²⁹ renewables are more labour-intensive “per megawatt of power installed, per unit of energy produced, and per [unit] of investment” than fossil fuels, with energy efficiency-related jobs even more so.³⁰ This is partly because green investments involve greater domestic infrastructural investment and local sourcing, and generate more jobs at all pay levels, including lower-paid, “entry-level” jobs.³¹ Energy efficiency can also create further jobs through energy savings.³² Studies of mitigation or green economy strategies in Europe,³³ North America,³⁴ Australia, and large ‘developing’ states³⁵ all predict net employment gains in scenarios with fossil fuel jobs losses.

However, labour mobility and skills shortages might, short-term, cause structural unemployment;³⁶ these are often overlooked by input-output models in green jobs studies, which have fixed relationships between sector outputs, and assume no labour or resource constraints.³⁷ Achieving potential green jobs therefore requires skills strategies. Studies critical of input-output models still find renewables produce more jobs in manufacturing, construction, operation and maintenance, and fuel production and processing than fossil

²⁵ Ibid, pp8-13

²⁶ Nugent, 2011, p60

²⁷ Lee and Card, 2012, p15

²⁸ EMCO, 2010, p5

²⁹ Martinez-Fernandez *et al*, 2010, p13

³⁰ Kammen *et al*, 2004, p3

³¹ Pollin *et al*, 2008, pp11-12

³² Marshall, 2002, p38

³³ WWF, 2009, pp7-8; pp23-24

³⁴ Demerse, 2011, p21

³⁵ GCN, 2009, pp5-6

³⁶ Martinez-Fernandez *et al*, 2010, p17

³⁷ Demerse, 2011, p23

fuels.³⁸ Analytical computer modelling also predicts net gains. Fundamentally, such predictions *depend on the strategies modelled*; OECD modelling finds only modest net gains when carbon pricing revenues reduce labour taxation,³⁹ although their estimates cover isolated policies (emissions trading) rather than comprehensive programmes outlined by others. Indeed, most ‘baseline’ scenarios simply project current trends forward, rather than comparing green jobs scenarios to deleterious effects from climate change⁴⁰ or fossil fuel depletion.

Thus, this debate, originally attempting to overcome the false, essentialist ‘jobs versus environment’ dichotomy, has itself become essentialising, implying certain technologies or policies *naturally* produce net job gains. More critically, net gains *can* result from green job programmes, but this depends on their parameters; any “positive net effect, and the duration and pain of the transition, are materially affected by the extent of comprehensive planning.”⁴¹ As Lee and Card conclude, “estimates should be considered potential jobs... realized only through... [a] “just transition.””⁴²

2.2 Just Transition

There is no fixed definition of JT, which makes charting its historical development imperative. It emerged among North America trade unionists responding to nascent 1970s environmental policy, including timber job losses during Redwood National Park expansion.⁴³ It reemerged in revitalised labour-environmentalist alliances around 1990s anti-globalisation campaigns.⁴⁴ JT has subsequently been adopted by trade unions and governments internationally alongside the rise of the transition discourse. In the 2010 Cancun Agreements, UN Framework Convention on Climate Change (UNFCCC) parties recognised “ensuring a just transition of the workforce that creates decent work and quality jobs” within “a paradigm shift towards... a low-carbon society” that “ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and

³⁸ Kammen *et al*, 2004, pp10-11

³⁹ Demerse, 2011, pp24-26

⁴⁰ OECD, 2011, pp94-95

⁴¹ Strietska-Illina *et al*, 2011, p.xx

⁴² Lee and Card, 2012, p38

⁴³ CLC, 2000, pp18-19

⁴⁴ Evans, 2009, p144

consumption.”⁴⁵ Thus, JT is an idea *within* the transition discourse, varying from deployment as a slogan to comprehensive transformative visions.

I offer the following thin definition, which JT’s different strands share: *JT is a normative marker of workers and communities embracing a transition from environmentally-harmful to sustainable production provided their interests are protected.*

JT is a *normative marker* because its defines itself as much by what it *opposes* as what it *proposes*, drawing on perceptions (backed empirically)⁴⁶ that past environmentally-induced (and general) industrial transformations have been *unjust*, and that fear of “creative destruction,” inherent to ecological modernisation, is an “obstacle to structural change.”⁴⁷ Therefore, “few workers” will support transitions “if they fear they will lose their livelihood.”⁴⁸ JT thus stresses transition planning, rather than reliance on market forces. *Embracing* the transition recasts workers and communities as participants, rather than “victims.”⁴⁹ This shifts “the debate from... how to save certain *jobs* to how to save certain *workers*... resituat[ing] environmental problems in human terms” and avoiding “ecocentric arguments... many workers find inaccessible.”⁵⁰

Transitioning from environmentally-harmful to sustainable production provided workers’ and communities’ interests are protected envisages a “green social contract,” guaranteeing “no-one will be left behind” as “a prerequisite for change.”⁵¹ JT has expanded from “reactive” roots (focussed on *particular job losses*) to more “proactive” perspectives (focussed on *general job creation*).⁵² It is concerned with jobs’ quality *and* quantity; as industrialised countries’ carbon-intensive jobs are often well-paid and unionised,⁵³ JT seeks to transfer this job security to green economies, recognising green jobs are not automatically decent.⁵⁴ JT thus usually envisages workers’ protection schemes in carbon-intensive industries alongside green jobs programmes. Protection programmes commonly include targeted retraining; income support during transitions to new jobs; “top-up” income for a period if workers receive a lower paid job (as “wage insurance” incentivising returns to work); and

⁴⁵ UNFCCC, 2010, pp2-4

⁴⁶ Evans, 2009, pp155-156

⁴⁷ Jänicke, 2004 pp205-206

⁴⁸ PHI and LI, 2000, pp18-19

⁴⁹ Rätzl et al, 2010, p2

⁵⁰ Nugent, 2011, p77

⁵¹ Lee and Card, 2012, p19

⁵² Nugent, 2011, p77

⁵³ Lee and Card, 2012, p25

⁵⁴ Scholtz, 2011, p10

relocation assistance.⁵⁵ Suggested funding includes phasing-out carbon-intensive subsidies,⁵⁶ pollution taxes,⁵⁷ and redistributive taxation.⁵⁸

Beyond these commonalities, there is significant interpretative divergence over JT's different aspects, partly given its dialectical evolution between more reformist strands (now associated with GND) and EJ traditions. Therefore, "minimalist" interpretations, emphasising "reformist change... green jobs, social protection, retraining and consultation" for vulnerable workers, exist alongside "transformative" visions of "new ways of producing and consuming."⁵⁹ Thus, while the Cancun Agreements place JT alongside economic growth, others suggest "the crisis we face today largely exists" given growth has been used "to measure success."⁶⁰

Varying labour movement traditions can spur such divergences. JT's roots in Anglo-Saxon economies, where tripartite cooperation between unions, employers and governments is (at best) underdeveloped, and EJ narratives originated, have begotten a distinct JT strand focused on labour-environmental alliances through "social movement unionism"⁶¹ and class struggle. Workers' protections during Redwood National Park expansion, inspiring the first JT proclamations, were won through labour-environmentalist campaigning.⁶² Proponents of this strand often cite the "Lucas Plan" in 1970s Britain among archetypal JT struggles.⁶³ Workers at arms producers Lucas Aerospace answered proposed job cuts with a programme for transitioning from weapons production to solar cells, wind turbines,⁶⁴ and electric cars. Blue and white-collar unions cooperated; however, employers and government met them with hostility.⁶⁵ Lacking coordinated protest strategies, the unions were defeated. This episode nonetheless inspired similar transition plans at Chrysler,⁶⁶ and new formal American labour-environmentalist alliances.⁶⁷ It is often invoked to illustrate social dialogue's limits and the need for social movement strategies. Another example used to illustrate this is the 'Green

⁵⁵ Marshall, 2002, pp43-45

⁵⁶ Ibid, p7

⁵⁷ Nugent, 2011, p77

⁵⁸ Neale, 2011, p11

⁵⁹ Cock, 2011

⁶⁰ Scholtz, 2011, p10

⁶¹ Evans, 2009, pp141-142

⁶² CLC, 2010, p18-19

⁶³ R athzel *et al*, 2010, p1

⁶⁴ Bowman and Wainright, 2009

⁶⁵ Baugh, 2009, p30

⁶⁶ WCA, 2009, p1

⁶⁷ Baugh, 2009, p30

Bans' movement in 1970s Australia, when workers in environmentally-damaging construction developments, allied with local conservationists, refused to work and joined direct action, saving numerous green spaces.⁶⁸

Simultaneously, JT's export to European welfare capitalist countries, with traditions of tripartite cooperation, has seen another strand emerge focussed on social dialogue, seeing JT itself as a means to strengthen tripartite cooperation (as in the European Trade Union Congress's JT principles).⁶⁹ Social dialogue played a role when Navarre, Spain, launched an active programme, including skills initiatives between social partners and local universities, to replace its declining car industry with wind energy. Navarre is now a leader within European wind, maintaining Spain's lowest unemployment levels during the financial crisis while increasing renewable energy production from 0 to 65 percent in 15 years.⁷⁰ This strand appreciates labour-environmentalist collaboration to a lesser extent, but can incorporate environmentalists alongside social partners. In Germany, the "Alliance for Employment and the Environment," created by the Confederation of German Trade Unions and now a partnership with employers, government and environmental groups, regularly exceeds targets to retrofit 300,000 homes and create 200,000 jobs annually, renovating 2.4 million residences over 10 years and reducing emissions by 1.5 megatonnes (Mt) CO₂ in 2009 alone.⁷¹ JT is thus used to bridge perceived irreconcilability between unions and community groups, which sometimes prioritise short-term social issues despite "longer-term interests (whether recognised or not)" vis-à-vis climate change and resource scarcity, and environmentalists, who sometimes neglect social justice.⁷² JT proponents, particularly from EJ strands, stress what can be "learned from each other"⁷³ through cross-fertilisation between labour and environmentalist principles.

From critical perspectives, focus on social dialogue can overlook power relations *behind* dialogue. Dialogue mostly succeeds on small-scales where capital, labour and state interests are aligned (as in Navarre) or where there are dialogue traditions. To succeed more generally, prior mobilisation is necessary to strengthen labour's relative negotiating position. Where this has not happened, social dialogue is ineffective; Spanish sector roundtables on the

⁶⁸ Munday, undated

⁶⁹ ETUC, 2011, p5

⁷⁰ UNECE *et al*, 2012, p100

⁷¹ Syndex, 2011, pp45-46

⁷² Johnson *et al*, 2010, pp5-6

⁷³ Neale, 2010, p43

Kyoto Protocol (KP) were criticised by unions after other social partners' commitment waned during the financial crisis.⁷⁴ Thus, focussing on social dialogue without addressing power relations encourages a problem-solving tendency within JT that serves union leaderships' and industries' interests through giving the *appearance* of incorporating climate concerns without significantly changing course. Indeed, while many unions have embraced environmental concern, "close political network[s]" between employers, industry ministries and unions in carbon-intensive sectors⁷⁵ have often been "the single largest barrier" to transitions.⁷⁶ Problem-solving versions of JT do not sufficiently address how concerned workers in such industries might otherwise participate, effectively assuming unions always represent members' (long-term) interests.

Furthermore, focus on the *process* of social dialogue does not necessarily outline parameters for *outcomes*, effectively postponing consideration of what JT is to achieve. Thus, JT can simply give the *appearance* of embracing transitions while the "content of that commitment is unclear,"⁷⁷ some visions therefore promote little more than "a compensation culture"⁷⁸ that does not achieve climate or social goals, with social partners self-defining dialogue parameters to serve parochial interests. This makes JT a formalistic exercise that does not challenge hegemonic approaches; indeed, recognition in the Cancun Agreements exemplifies formal commitments with few, if any, concrete consequences.

This relates to contradictions between minimalist and transformative JT visions. Fundamentally, one can ask why those losing jobs because of climate initiatives should receive special protections unavailable to other laid-off workers – a question of whether JT defends parochial interests or envisages "universal rights."⁷⁹ Thus, regarding *interests* to be protected, there is also a divide between narrower visions focussed on *existing economic interests*, and broader transformations to deepen workers' and communities' rights and extend rights to traditionally-disadvantaged groups. EJ proponents criticise more defensive strands for reproducing Northern "postwar class compromise[s]... between organized labor, the state, and capital" that, through protecting existing entitlements, "further marginalize... women, racialized communities... and the Majority World." GND, in "strengthening the political

⁷⁴ Syndex, 2011, pp65-66

⁷⁵ Binder *et al*, 2001, pp10-11

⁷⁶ Lee and Card, 2012, p55

⁷⁷ Cock, 2011

⁷⁸ O'Driscoll, 2011

⁷⁹ UNEP *et al*, 2008, pp292-293

power of [Northern] unions” *as institutions*, “could foster... militant particularism” instead of “global environmental justice.”⁸⁰

This is relevant regarding ‘carbon leakage,’ which occurs when climate policy in one (usually ‘developed’) country causes carbon-intensive industries to relocate to another (usually ‘developing’) state with lower environmental standards, increasing global emissions and causing job losses in ‘developed’ states.⁸¹ Several actors, including Norwegian JT supporters, argue against unilateral climate action given leakage, effectively placing multilateral agreements *before* JTs.⁸² Empirical studies suggest leakage has been minimal for several climate policies,⁸³ and is “highly unlikely” to invalidate completely national emission reductions.⁸⁴ Furthermore, the OECD suggests environmental policies’ effects “pale in comparison” to economic factors in industrial relocation.⁸⁵ Thus, carbon leakage occurs due to competitiveness drivers, *not* climate policy. Nonetheless, given affected industries are “politically powerful,” climate policy often includes compensatory measures,⁸⁶ hampering policy effectiveness⁸⁷ and effectively postponing transitions. As Tømte notes, unions fixated on carbon leakage’s job-related effects would not drop demands for good wages and working conditions, which more directly trigger relocation; clinging to carbon leakage suggests some unions would rather “go to the bottom” with carbon-intensive industries than be part of solutions.⁸⁸ This again suggests problem-solving JT approaches can *delay* climate action.

More critical, EJ accounts cite capitalist accumulation and overconsumption as increasing emissions,⁸⁹ regard economic democratisation as “central” to JT given “limited resources will mean determining who has access to these resources,”⁹⁰ and stress internationalist linkages to create “enabling environment[s]” for transitions.⁹¹ Thus, transitions from fossil fuel exports implicate fossil fuel dependency elsewhere.⁹² This is recognised by “Transition Towns,” which build local resilience against fossil fuel dependence

⁸⁰ Nugent, 2011, pp63-64

⁸¹ IEA and OECD, 2008, p3

⁸² Tømte, 2012

⁸³ de Serres *et al*, 2011, pp23-26

⁸⁴ IEA and OECD, 2008, p4

⁸⁵ OECD, 2011, pp98-99

⁸⁶ de Serres *et al*, 2011, pp24-26

⁸⁷ OECD, 2011, pp98-99

⁸⁸ Tømte, 2012

⁸⁹ Nugent, 2011, pp63-64

⁹⁰ Scholtz, 2011, p3

⁹¹ Newell, 2011, p64

⁹² Evans, 2009, p214

following cross-national templates.⁹³ Here, environmentalist principles, like localisation, clearly influence JT and social movements use “prefigurative politics,”⁹⁴ a form of being the change one wants to achieve.

This table summarises JT’s common features and emphases of different strands:

ASPECT	COMMONALITIES	GND	EJ
<i>Main proponents</i>	Unions; Environmentalists; Community groups.	Welfare capitalist states; Industries with social dialogue tradition.	Anglo-Saxon economies; Industries without social dialogue tradition.
<i>A normative marker...</i>	Reaction to past transitions; Planning, not market forces.		
<i>... Workers and communities embrace...</i>	Participation; Labour-environmentalist alliances.	Social dialogue.	Social movement unionism; Environmentalist principles.
<i>... Transition from environmentally-harmful to sustainable production provided interests are protected.</i>	Workers’ protection and green jobs; State interventionism.	Reformism; Primarily economic interests; Green growth.	Social transformation; Economic democratisation; Internationalism.

These aspects, particularly JT’s contradictions, are relevant when addressing the role of HRs in JT.

⁹³ Newell, 2011, pp53-54

⁹⁴ el-Ojeili and Hayden, 2006, p208

3 HUMAN RIGHTS AND THE TRANSITION

This chapter examines the emerging climate change and HRs discourse and the possible roles for HRs in JT.

3.1 HRs and climate change

The climate change and HRs discourse outlines how climate change affects HRs directly *and* indirectly (through responses to climate change).⁹⁵ Fundamentally, climate change challenges HRs “as the dominant language of justice;”⁹⁶ thus, HRs reframe climate change in justice terms. Humphreys’s main climate justice issues are:⁹⁷

- *Corrective justice* – those responsible for climate change “cause injuries” to a “different (much larger) group,” who are also the most vulnerable;
- *Substantive justice* – mitigation could reduce development potential for those that have not undertaken carbon-intensive development, exacerbating inequality;
- *Procedural justice* – this concerns participation and distributive justice; and
- *Formal justice* – strict legal approaches suggest historical polluters, unaware of climate change, cannot be denied their built-up wealth, and might be compensated during any transition. This usually involves property rights,⁹⁸ but is arguably relevant to workers’ protection.

HRs responses to these can be divided between problem-solving and critical approaches, legalistic and structural approaches, or (in Galtung’s critical HRs theory) “actor-orientated” and “structure-orientated” approaches.⁹⁹ Predominance of legalistic approaches has restricted HRs’ role within the transition discourse and encouraged viewing HRs as obstacles, rather than catalysts, for transitions.

⁹⁵ Orellana *et al*, 2010, p13

⁹⁶ Humphreys, 2010, p45

⁹⁷ *Ibid*, pp40-42

⁹⁸ *Ibid*, p46

⁹⁹ Galtung, 1994, p49

3.2 Legalistic approaches

Legalistic perspectives dominate HRs systems. These have been applied to climate change, including the ‘Inuit petition’ to the Inter-American Court of Human Rights, in which Inuit communities alleged US action and inaction caused numerous HR violations. The petition failed to satisfy eligibility criteria or allow judges (in their view) “to determine whether the alleged facts... characterize[d] a violation.”¹⁰⁰ UN Human Rights Council resolutions since 2008, and an Office of the High Commissioner’s (OHCHR) report on climate change, have also influenced legal approaches.¹⁰¹

Several factors restrict legalistic approaches from impacting on climate politics or the transition discourse.

3.2.1 Attribution

Humphreys suggests HRs most clearly implicated by climate change are also the most difficult to enforce under international law, namely economic, social and cultural rights (ESCRs).¹⁰² ESCRs have occupied secondary status within the HRs system as some states and actors regard them as “aspirational,” not “justiciable.”¹⁰³ The main HRs treaties – the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICESCR) – were originally intended as one document, but were split under Cold War-related disagreements over ESCRs’ “practical difficulties.”¹⁰⁴ ICCPR has long been equipped with a committee to hear individual complaints, developing an international jurisprudence alongside CPRs’ historical domestic jurisprudence (given these were the ‘first generation’ of HRs emerging in modern states). However, ICESCR’s individual complaints mechanism will only enter into force in 2013.¹⁰⁵ This jurisprudential mismatch reinforces views that ESCRs are non-justiciable, despite evolving enforcement nationally.¹⁰⁶ This restricts HRs’ application to economic issues. Where ESCRs have been recognised, actor-orientated approaches encourage a view that basic needs must be “provided by “somebody”... here and now,” rather than reforming structures to

¹⁰⁰ Dulitzky, 2006

¹⁰¹ CIEL, 2011, pp4-5

¹⁰² Humphreys, 2010, pp4-5

¹⁰³ Dennis and Stewart, 2004, p465

¹⁰⁴ Ibid

¹⁰⁵ OHCHR, 2013

¹⁰⁶ Langford and Scheinin, 2009, pp99-100

secure sustainable access.¹⁰⁷ Even where CPRs are implicated by climate change, attributing violations to discrete actors is difficult;¹⁰⁸ OHCHR suggests it is “virtually impossible to disentangle... complex causal relationships” linking emitters to specific events, or contributions of anthropogenic versus natural emissions.¹⁰⁹ Regardless, HRs enforcement mechanisms, globally and nationally, are considered weak.¹¹⁰

Litigation has proved frustrating, despite increasing recognition of state’s duties to protect against third party violations; improving scientific foundations for attribution;¹¹¹ and creative uses of legal principles, including joint and several liability, alongside climate-related norms like ‘common but differentiated responsibilities.’¹¹² Legal strategies have focussed on the few clear direct violations thus far; tackling climate change’s core economic drivers has been difficult, and it remains unclear how *indirect* threats can be addressed litigiously. Ultimately, legal professionals, particularly judges, seem reluctant to treat climate change as a legal issue.

3.2.2 Reactive rights

Even when courts hear climate-related cases, they are usually only in a position to grant relief *after* violations. For Humphreys, HRs professionals “are unlikely, as a matter of professional orientation” to take up “hypothetical” issues; “future harms simply escape [HRs’] ordinary purview.” HRs references within climate politics are thus “almost exclusively” related to “harms that have already taken place.”¹¹³ Legal approaches involve *some* “forward thinking” as “judicial systems are... deterrence mechanisms;”¹¹⁴ however, climate-related deterrence effects are limited. Financial remedies are usually insufficient to deter corporations or governments,¹¹⁵ while litigation’s public relations consequences are not always effective, especially when those targeted do not have direct public relationships.¹¹⁶

¹⁰⁷ Galtung, 1994, p49

¹⁰⁸ Humphreys, 2010, pp4-5

¹⁰⁹ OHCHR, 2009, p23

¹¹⁰ Humphreys, 2010, pp4-5

¹¹¹ Johnson *et al*, 2010, p57

¹¹² Limon, 2010, pp554-555

¹¹³ Humphreys, 2010, p4

¹¹⁴ *Ibid*, p313

¹¹⁵ *Ibid*, pp59-60

¹¹⁶ Deva, 2012, p143

3.2.3 Statecentricism

Sovereignty is “the biggest impediment” to tackling climate change¹¹⁷ but also the bedrock of the HRs system. States, as primary HRs duty-bearers, have three HRs obligations – respect (refraining for harm), protect (measures against harm by third parties) and fulfil (initiatives to promote enjoyment of HRs) duties. Vis-à-vis climate change, respect duties correspond to mitigation; protection involves regulating third-parties, as well as adaption; and fulfil obligations encompass all measures for fully realising HRs, including international assistance.¹¹⁸ However, given states most affected by climate change are also those with least responsibility *or* capacity to respond, victims find obtaining relief difficult through national or international structures.¹¹⁹ Deriving extraterritorial HRs duties (owed to people outside of a state’s territory) – from ICESCR Article 2’s reference to “international assistance and co-operation,” or given many affected HRs are *erga omnes* obligations¹²⁰ or *jus cogens* – has faltered given states’ unwillingness to concede such obligations. Courts have set high bars for extraterritorial HRs application (including the European system and American Alien Tort statutes).¹²¹ As Humphreys highlights, states are traditionally reluctant to challenge each other using interstate complaints mechanisms, even after Chernobyl. Meanwhile, powerful private actors, particularly corporations, can escape liability through using *forum non conveniens* and parent-subsidiary structuring, swiftly moving operations between countries, and extracting favourable conditions from states.¹²² Sovereignty remains an “unresolved contradiction” for HRs¹²³ given states’ violator-protector duality.

3.2.4 Formal justice

HR can also be *direct obstacles* to climate policy through legal formalism. Adelman notes how HRs’ can suffer “depoliticisation,” becoming “ends in themselves,” not “means towards... substantive justice.”¹²⁴ Broader justice issues behind positive law, and their relevance to climate-related justice debates, are thus overlooked, perpetuated by legal

¹¹⁷ Adelman, 2010, pp166-167

¹¹⁸ Bodansky, 2010, pp519-521

¹¹⁹ Humphreys, 2010, pp53-55

¹²⁰ Doebler and Wewerinke, 2011, pp158-159

¹²¹ Humphreys, 2010, pp53-55

¹²² Ibid, pp56-60

¹²³ Adelman, 2010, pp166-167

¹²⁴ Ibid, p177

positivism's artificial separation between politics and law. Examples include how once "subaltern" rights to sovereignty over natural resources and development have been misused to justify conceiving of carbon reserves as "sovereign property," rather than commons.¹²⁵ Humphreys laments that "international law can... endorse claims based on historical entitlements, yet deny claims for rectification of historical wrongs."¹²⁶

Furthermore, formalistic argumentation can *exclude* HRs from climate policy altogether – defining climate change as an "emergency" could allow use of derogation clauses in HRs treaties to suspend certain HRs, echoing arguments that HRs are a "brake on... the greater good" of avoiding climate catastrophe.¹²⁷ Some HRs "traditionalists" may also "seek limits on climate action" given it "empower[s] government" over individuals.¹²⁸

3.2.5 Uses of law

Legal approaches are most fruitful where individual judgments draw broader structural conclusions. Examples include *actio popularis* and the European Court of Human Rights Pilot Judgement Procedure, applying individual rulings to similar cases in instances of systematic abuses. However, these approaches are limited. Practically, litigation is inaccessible for the most vulnerable given time and resources.¹²⁹ Fundamentally, governments enjoy significant scope to circumvent judgments given undeveloped consensus around climate-related HR rules. As Humphreys suggests, states claim they fulfil HRs obligations simply by participating in climate negotiations aimed at clarifying such rules.¹³⁰ Consensus around climate-related HRs norms has to be *built before* legal applications become possible. Focusing on *lex lata* (law as it *is*) thus neglects not only *lex ferenda* (law as it *should* be), but also *how* law is made and *who* makes it. For example, British climate legislation, applied in various legal judgments, resulted from political processes and social movement mobilisation; its continued development is defined by political *and* legal interpretations.¹³¹

¹²⁵ Ibid, p179

¹²⁶ Humphreys, 2010, pp44-45

¹²⁷ Ibid

¹²⁸ Ibid, p6

¹²⁹ Gready and Ensor, 2005, pp9-10

¹³⁰ Humphreys, 2010, pp53-55

¹³¹ Bjartnes, 2011, *passim*

There is a tendency towards legal traditionalism, a “legal reflex,”¹³² both *within* HRs discourses and *external perceptions* of HRs, which has become hegemonic. Pogge suggests this fixation with “juridification” is both “too strong” (given HRs can be secured without legislation) and “too weak” (as legalisation does not guarantee access), while militating against culturally-diverse approaches.¹³³ Humphreys therefore concludes that the HRs system’s weaknesses “appear exacerbated” by climate change¹³⁴ and it is unclear whether “recourse to human rights law or principles” answers climate justice claims.¹³⁵ Galtung suggests “only a fraction of” HRs-related issues “can be adequately conceived of... within an actor-orientated discourse,” which obscures “social evils.”¹³⁶

Ultimately, legal approaches’ individualism, through violator-violated binaries, is unsuited to climate change. Problem-solving HRs approaches to climate change have focused on climate change *effects*, rather than *causes*. By overlooking structural factors, they do not challenge social forces or institutions that uphold carbon-intensive economic systems, meaning they fail to address corrective or substantive justice; while they have potential for procedural justice, greater recognition is currently available in international law for formal justice claims. Given problem-solving approaches aim to make systems work smoothly, the HRs system’s response to climate ‘problems’ has effectively been to avoid facing its justice implications, or to employ HRs as ‘brakes’ to avoid disruption.

3.3 Structural approaches

More critical, structural HRs approaches are often inspired by Universal Declaration of Human Rights (UDHR) Article 28 (“everyone is entitled to a social and international order in which the rights and freedoms... in this Declaration can be fully realized”).¹³⁷ Structural approaches go beyond law, considering HRs, in Beitz’s words, as a “global practice... both discursive and political” within “a global discursive community” that “recognize[s] the practice’s norms as reasoning-giving... in deliberating and arguing about how to act;” thus, HRs are “reason-giving for various kinds of political action” and actors.¹³⁸ For Gready and

¹³² Gready and Ensor, 2005, pp9-10

¹³³ Pogge, 2008, pp50-53

¹³⁴ Humphreys, 2010, p63

¹³⁵ Ibid, p46

¹³⁶ Galtung, 1994, p49

¹³⁷ Ibid, p144

¹³⁸ Beitz, 2009, p8

Ensor, this recognises HRs as “rights as the everyday” – they are, simultaneously, rules, structures, institutions, relationships and processes. Conceptualising rights within socio-political processes recognises their “generative” status, constantly constructed and re-constructed through struggle. This “social change function” acknowledges, in a globalised world, HRs continuously require new duties and duty-bearers, overcoming static statecentricism.¹³⁹ As Adelman suggests, HRs “are a contradictory mixture of transcendence – universal, inherent and inalienable – and... immanence in struggle and resistance.”¹⁴⁰ Structural approaches therefore emphasise HRs’ collective dimension – both their collective *exercising*, and collective *duties* shared across actors.

Relevant structural approaches, and their climate-related applications, are explored here.

3.3.1 Analytical frameworks

One category of structural approaches provides analytical frameworks for reinterpreting HRs vis-à-vis changing structural processes, including ecology. These therefore address Humphrey’s corrective and substantive justice issues.

One such approach is ‘solidarity rights’ – a postulated ‘third generation’ of HRs seeking to “overcome the solitary autonomy” of traditional CPRs and ESCRs.¹⁴¹ They reformulate HRs’ fulfilment around new “threats” from “global interdependence” that are threats in themselves *and* to other HRs, implying HRs originally did not provide a coherent normative framework for their joint implementation in an interdependent world. They are termed ‘enabling,’ or ‘meta-rights,’ because they seek fulfilment of *all* HRs under one umbrella right.¹⁴²

Some argue solidarity rights (chiefly rights to development, peace and a healthy environment) can be derived from existing HRs;¹⁴³ alternatively, solidarity rights offer a fundamentally different approach by reframing HRs around global issues, and redefining them as *fundamentally about* HRs. This shifts the unit of analysis for development, peace or the environment from states to individuals, where HRs are minimal guarantees protecting

¹³⁹ Gready and Ensor, 2005, pp10-12

¹⁴⁰ Adelman, 2010, pp167-168

¹⁴¹ Wellman, 2000, p642

¹⁴² UNHRC, 2007, pp5-6

¹⁴³ Wellman, 2000, p650

human dignity against these larger forces. Thus, solidarity rights *reclaim* global issues as *individual* rights, ensuring individuals have access regardless of states' disposition;¹⁴⁴ and, simultaneously, *reframe* HRs as exercised *collectively*.

Adelman describes climate change as “the sticking point at which repeated post-colonial demands for a fairer international order,” including the right to development, “must finally... be met.”¹⁴⁵ Adelman proposes a climate-related “meta-right.”¹⁴⁶ Such meta-rights (like ‘Greenhouse Development Rights’) are often expressed as an equal right to emit, distinguishing between “luxury” and “subsistence emissions,” the latter of which are necessary to HRs.¹⁴⁷ However, these effectively presume subsistence and emissions are inextricably linked *beyond the current economic paradigm*. As Hayward stresses, “it is the benefits [of emissions], not the emissions” that matter.¹⁴⁸ Hayward instead proposes a right to “ecological space,” recognising the ecological crisis’s entirety, and that clearer links exist between *all* natural resources and human survival. Thus, legitimate substantive justice claims for development “are not assumed... to translate into emissions entitlements” that further exacerbate climate change. Rather, those who exceed their ecological space must realign with ecological limits but also accrue “ecological debt,” obliging reparations to those affected through wealth and technology transfer.¹⁴⁹ This effectively defines sustainable development and a ‘green economy’ as enjoying HRs within an amount of ecological space that, if generalised, could be enjoyed by everyone without affecting future generations’ rights, thus realigning HRs with natural realism. This suggests HRs cannot be neutral on fundamental economic questions, such as economic growth. “Immaterial” growth is empirically dubious; even service industries require enormous (physical) resources.¹⁵⁰ The “dilemma of the N-curve” also shows how ecological efficiency gains are often eclipsed by subsequent growth.¹⁵¹ Crucially, after certain levels of material wealth, many social indicators (HRs proxies) have no correlation with wealth.¹⁵² Growth for growth’s sake is incompatible with ecologically-limited rights; HRs enjoyment should measure progress.

¹⁴⁴ Hayden, 2002, p153

¹⁴⁵ Adelman, 2010, p178

¹⁴⁶ *Ibid*, p174

¹⁴⁷ Humphreys, 2010, pp13-15

¹⁴⁸ Hayward, 2011, pp442-443

¹⁴⁹ *Ibid*, pp445-448

¹⁵⁰ Coutrot and Gadrey, 2012, pp2-3

¹⁵¹ Jänicke, 2004, pp204-205

¹⁵² Coutrot and Gadrey, 2012, pp3-4

Another structural approach is cosmopolitanism, especially Pogge's "institutional" theory, which goes beyond domestic theories of justice, acknowledging interactions between institutions across borders.¹⁵³ This sees HRs as "primarily... claims on coercive social institutions and secondarily... claims against those who uphold such institutions."¹⁵⁴ Since HRs are moral claims on societal organisation, societies "ought to be so (re)organized that all its members have secure access" to HRs.¹⁵⁵ "Members" include those in other societies, given societies affect one another, and future participants (also affected by present considerations).¹⁵⁶ "Negative" duties (duties not to subject others to particular actions) are therefore paramount – everyone has a negative duty "not to cooperate in upholding" a coercive order unless they compensate "by protecting its victims or... working for its reform." Before directly supplying HRs, we should first ensure any coercive social order we "collectively impose upon" ourselves "is one under which, insofar as reasonably possible, each has secure access to these necessities."¹⁵⁷

Pogge's use of the negative-positive dichotomy is unfortunate; the 'negative' duties he envisions require significant 'positive' action, making the distinction analytically-dubious. Nevertheless, Humphreys suggests Pogge's ideas are relevant for climate change; negative duties recommend "urgent and stringent mitigation," while institutional focuses recognise we should question international law's existing inadequate "architecture" vis-à-vis climate change.¹⁵⁸ The key coercive institution vis-à-vis climate change is carbon-intensive development itself, and various structures and actors upholding it. Vitaly, Pogge recognises HRs can be enjoyed short-term without long-term access being secure¹⁵⁹ – thus, HRs in carbon-intensive societies are insecure from climate effects *and* depletion of non-renewable resources on which they depend.

Pogge parallels Shue's definition of HRs as "rationally justified demand[s] for social guarantees against standard threats" guaranteed "only when arrangements have been made... to enjoy" them, necessitating a universal duty "to make and keep effective arrangements."¹⁶⁰ This recognises HRs' "dynamic character" – changing threats require new arrangements. Bell

¹⁵³ Pogge, 2008, pp38-40

¹⁵⁴ Ibid, pp50-51

¹⁵⁵ Ibid, p70

¹⁵⁶ Ibid, pp37-38

¹⁵⁷ Ibid, pp72-75

¹⁵⁸ Humphreys, 2010, pp301-302

¹⁵⁹ Pogge, 2008, pp70-71

¹⁶⁰ Shue, 1996, pp16-17

develops this into an overarching climate-related HRs obligation to promote effective institutions for protecting basic HRs against climate threats; climate change violates HRs given “our collective failure to fulfil” this. This obligation implies a “general duty” to “promote and maintain effective institutions that... ‘specify and allocate’ the more specific duties needed to” protect basic HRs on the basis of justice principles. However, to avoid allowing actors to argue they fulfil this simply through negotiation, the general duty also implies a “duty of rectification” where “previous non-compliers... accept more burdensome duties” than “if they had always complied with the general duty;” and a duty “not to accept benefits... from the failure of other[s]... to comply with the general duty,” for example through halting progress in negotiations. Thus, previous non-compliers must begin reducing emissions immediately and abide by emissions targets when the general duty is fulfilled.¹⁶¹ Existing HRs thus insist on climate action *independent* of climate agreements; the USA may reject the KP for lacking targets for ‘developing’ states, but remains accountable “irrespective of the action or inaction of any other nation.”¹⁶²

3.3.2 Policy principles

Other structural HRs approaches address evaluating and planning climate policy. HRs-based approaches to development (HRBAs) increasingly tackle climate change. Humphreys argues climate change places HRs “firmly within the context of development.”¹⁶³ While HRBAs were produced for ‘developing’ states, its principles apply for economic development generally.

HRBAs reframe achieving HRs “as an objective of development.” They share critiques of existing developmental models, envisaging moving “away from a... service-driven, to a more strategic approach”¹⁶⁴ in response to needs-based approaches and neo-liberalism;¹⁶⁵ explicit use of HRs *standards* to guide development *outcomes*;¹⁶⁶ and explicit use of HRs *principles* to guide development *processes*.¹⁶⁷ These therefore implicate all of Humphrey’s justice claims.

¹⁶¹ Bell, 2011, pp112-115

¹⁶² Rajamani, 2010, p419

¹⁶³ Humphreys, 2010, p11

¹⁶⁴ Miller, 2010, p916

¹⁶⁵ Gready and Ensor, 2005, pp20-21

¹⁶⁶ Miller, 2010, pp916-917

¹⁶⁷ Jonsson, 2005, pp49-50

HRBAs are increasingly used to “put a human face on climate change,”¹⁶⁸ with rights “language” helping “explain climate injustice.”¹⁶⁹ Key aspects of this are examined below.

3.3.2.1 Normative standards

HRBAs aim to give development, an abstract term simply expressing “a normative conception of desired change,” a “substantive coherence” and “legal and normative foundation in international law with broad-based international support.”¹⁷⁰ This “explicit normative framework” emphasises “mutually-reinforcing deprivations” constituting poverty and underdevelopment¹⁷¹ based on the ‘Capabilities Approach’ outlined by Sen. HRBAs thus seek not only quantitative outcomes but “a political transformation,” challenging existing power relations.¹⁷² First steps in HRBAs are analysing inequality in a given context, before identifying relevant international HRs standards.¹⁷³

When applied to climate policy, as Caney notes, HRs “specify minimum moral thresholds” that cannot be breached, either directly or indirectly through responses. Thresholds “override all other moral values,” including aggregate welfare,¹⁷⁴ thus rejecting consequentialism’s countenance of partial suffering to avoid higher costs for the majority, while recognising intergenerational equity.¹⁷⁵ Thresholds provide normative standards for defining “dangerous anthropogenic interference” under the UNFCCC, namely interference that “systematically undermines... widespread” HRs enjoyment.¹⁷⁶ Consequently, “there is a maximum permissible level of emissions.”¹⁷⁷ This challenges the oft-cited two degree Celsius (°C) target. Indeed, the 2°C target originated with an economist in the 1970s, a “marginal remark” resurrected in the 1990s “as a possibility to delimit a domain of safety.”¹⁷⁸ After adoption by the EU,¹⁷⁹ it has influenced further target-setting, gaining acceptance in the

¹⁶⁸ Bodansky, 2010, p516

¹⁶⁹ Johnson *et al.*, 2010, pp20-21

¹⁷⁰ Andreassen, 2003, pp227-230

¹⁷¹ OHCHR, 2006, p4

¹⁷² Gready and Ensor, 2005, pp22-23

¹⁷³ Jonsson, 2006, p53

¹⁷⁴ Caney, 2010, p73

¹⁷⁵ *Ibid.*, pp84-85

¹⁷⁶ *Ibid.*, pp89-90

¹⁷⁷ Bodansky, 2010, p515

¹⁷⁸ Jaeger and Jaeger, 2010, pp5-6

¹⁷⁹ *Ibid.*, p9

2009 Copenhagen Accords.¹⁸⁰ Hansen describes 2°C as “a prescription for disaster.”¹⁸¹ Certain small-island states will be inundated by sea-level rises.¹⁸² Even 1°C warming threatens HRs through deteriorating crop yields, reduced fresh water supplies,¹⁸³ more extreme weather events and increased climate-related disease¹⁸⁴ – trends already experienced below 1°C.¹⁸⁵ Furthermore, given climate “tipping points” and positive feedbacks¹⁸⁶ causing “runaway” climate change,¹⁸⁷ Hansen suggested (in 2008) that increasing emissions “for just another decade, practically eliminates” short-term possibilities for returning atmospheric compositions beneath tipping levels. Thus, retaining control over mitigation requires a rapid and deep transition, targeting atmospheric concentrations of 350 parts per million (ppm) or lower;¹⁸⁸ concentrations passed 400ppm in May 2013.¹⁸⁹ The Intergovernmental Panel on Climate Change’s (IPCC) estimates a 350-400ppm target requires emissions to peak no later than 2015, dropping at least 85 percent (compared with 2000 levels) by 2050.¹⁹⁰ Hansen concludes preserving “a climate... to which humanity is accustomed” requires most remaining carbon reserves are “never emitted.”¹⁹¹

In line with the precautionary principle, the only guarantee of avoiding “dangerous” interference that systematically undermines HRs is thus to limit emissions as much as possible. Nonetheless, policy benefits from setting long-term targets for large-scale emissions reductions *and* shorter-term targets providing continuity, like the UK Climate Change Act (which mandates periodic carbon budgets towards a long-term goal).¹⁹² Significantly, given emissions anywhere matter, states must not only cut domestic emissions but also emissions they contribute to elsewhere. HRs thus insist on stringent mitigation standards.

Thresholds also address formal justice disputes by insisting on satisfying thresholds first in clashes between rights. In conflicts between the right to continued carbon-intensive development in industrialised nations and the right to self-determination in small-island states,

¹⁸⁰ UNFCCC, 2009, para.1

¹⁸¹ Lynch, 2011

¹⁸² Humphreys, 2012, pp2-3

¹⁸³ Stern, 2006, p.v

¹⁸⁴ Jha, 2009

¹⁸⁵ IPCC, 2007, *passim*

¹⁸⁶ Hansen *et al*, 2008, p225

¹⁸⁷ *Ibid*, pp217-218

¹⁸⁸ *Ibid*, pp228-229

¹⁸⁹ Carrington, 2013

¹⁹⁰ IPCC, 2007, pp66-67

¹⁹¹ Hansen *et al*, 2008, p13

¹⁹² Bjartnes, 2011, *passim*

the right to development does not protect “relatively trivial” Western lifestyles over “non-trivial” thresholds HRs threatened by extinguishing the right to self-determination,¹⁹³ however large or small the groups in question are. Conversely, HRs’ indivisibility means the right to a safe environment “cannot be bought at the expense of” people’s right to an adequate livelihood;¹⁹⁴ thus, mitigation programmes must also seek to satisfy, not limit, people’s threshold HRs.

3.3.2.2 Disaggregation, non-discrimination and prioritisation

HRBAs criticise previous development practices for failing to protect, or target measures towards, most vulnerable groups through the non-discrimination principle. HRs’ “lens of analysis”¹⁹⁵ disaggregates development, focussing on inequality’s root causes. Vis-à-vis climate change, HRBAs can focus “more directly on... real-life effects on... individuals and communities,” directing efforts to the most vulnerable.¹⁹⁶ This also helps determine priorities. HRs specify minimum core obligations (thresholds) that must be met before other improvements.¹⁹⁷ This can justify prioritisation based on historical neglect. HRs also prioritise based on interdependencies between rights. The non-retrogression principle also insists rights must not slide backwards. Together, these mean development strategies must not conduct trade-offs, like allowing inequality to persist in return for growth, or sacrificing CPRs for economic gains.¹⁹⁸ Prioritisation may only happen on *practical*, rather than *intrinsic*, grounds, and only in allocation of *incremental* resources.¹⁹⁹ Furthermore, process rights ensure local priorities are central.²⁰⁰ HRs therefore acknowledge mutuality between ESCRs and CPRs,²⁰¹ expanding development beyond economics to encompass the totality of human experience.²⁰²

¹⁹³ Rajamani, 2010, p416

¹⁹⁴ Nicholson and Chong, 2011, p132

¹⁹⁵ UNDP, 2007, p17

¹⁹⁶ UNHRC, 2009, p10

¹⁹⁷ UNDP, 2007, p22

¹⁹⁸ Jonsson, 2005, p60

¹⁹⁹ OHCHR, 2006, pp11-13

²⁰⁰ UNDP, 2007, p26

²⁰¹ Jonsson, 2005, p60

²⁰² OHCHR, 2006, p6

3.3.2.3 Participation and empowerment

HRs can bolster increasing acknowledgement of procedural rights in environmental law, including the Aarhus Convention.²⁰³ While participation and empowerment have been invoked in development before, Gready and Ensor insist they are “reclaimed and repoliticized” from neo-liberalism under HRBAs.²⁰⁴ Enforceable rights make participation “non-negotiable” in development, rather than simply desirable,²⁰⁵ and provide a focal point for social movement mobilisation.²⁰⁶ This “mobilisation potential” is vital given mass participation’s decisive role historically in social change.²⁰⁷ Participation provides development with legitimacy²⁰⁸ and sustainability by encouraging rights-holders to take ownership.²⁰⁹ Decentralisation and democracy become instruments of development. Furthermore, ensuring meaningful participation means guaranteeing economic security, and empowering participants through education and key CPRs, like freedom of association.²¹⁰

3.3.2.4 Accountability

HRBAs reframes development around duty-bearers’ accountability to rights-holders, rather than operating through promise-making. Accountability is simultaneously formal, informal, legal and political. Identifying rights and duty-holders is “not a neutral act;” it focuses on “deep-rooted inequalities” for which HRs “abuses are conceived as symptoms and structural causes of conflict.”²¹¹ Regarding climate change, HRBAs make duty-holders directly accountable for reducing people’s vulnerability. HRs become “tool[s] for monitoring and evaluating mitigation and adaptation... and their impacts.”²¹² OHCHR also suggests the use of HR-based indicators to monitor progress; while many will be standard socioeconomic indicators (including unemployment figures), what differentiates a HR indicator is “explicit derivation from” a HR and “the purpose to which it is put,” namely HRs monitoring to hold duty-bearers accountable.²¹³

²⁰³ Rajamani, 2010, p426

²⁰⁴ Gready and Ensor, 2006, p24

²⁰⁵ UNDP, 2007, p22

²⁰⁶ Andreassen, 2003, pp227-230

²⁰⁷ Andreassen, 2006, pp320-322

²⁰⁸ UNDP, 2008, p22

²⁰⁹ Gready and Ensor, 2005, pp22-23

²¹⁰ Ibid, pp14-16

²¹¹ Ibid, p24

²¹² UNHRC, 2009, p4

²¹³ OHCHR, 2009, p3

HRs also extend accountability to international actors. International assistance becomes obligatory (unlike in aid politics), drawing on ICESCR Article 2, while accountability mechanisms exist internationally, and states must respect HRs in international negotiations and agreements.²¹⁴ As suggested previously, these systems have a poor record in accountability. However, HRs also offer normative and moral accountability, providing standards by which actions are judged and against which claims are made. Furthermore, for Caney, HRBAs not only reframes debates about costs to ensure they are not used as obstacles, but also considers “duties of compensation.” HRs-based compensation is not “permission to engage in... violations” assuming these can eventually be compensated;²¹⁵ rather, remedies are owed to affected communities *as a right*.²¹⁶

3.3.2.5 Criticisms of HRBAs

HRBAs face two main criticisms. On the one hand, some see them as too political, ignoring the implications of advocating a “paradigm shift” that challenges development actors to confront issues they traditionally avoid.²¹⁷ At their worst, HRs can justify powerful states’ breaches of others’ sovereignty, constitute a form of aid conditionality, or, through stressing individual rights, be co-opted by neo-liberalism, promoting individualistic development.²¹⁸ Some suggest HRs give “false hope,” recasting people as “subject/victim” reliant of external elites.²¹⁹ Specifying clear normative parameters for development also begs the question of what is left for participatory processes to discuss, or what happens if participants articulate priorities contradicting HRs.

Conversely, HRBAs have also been criticised for not being political enough. Ideas like empowerment can become naïve and apolitical, overlooking structural issues and entrenching inequality.²²⁰ Paradoxically, those who see HRs as not political enough *also* fear they can allow neo-liberalism to “reposition itself” in HRs terms.²²¹ Critics question the value-added of using HRs, suggesting they simply restate development problems in HRs language without

²¹⁴ OHCHR, 2006, pp8-9; pp20-21

²¹⁵ Caney, 2010, pp86-89

²¹⁶ Oxfam, 2008, pp11-12

²¹⁷ Alston, 2005, pp803-808

²¹⁸ Gready and Ensor, 2006, p35

²¹⁹ Ibid, p38

²²⁰ Alston, 2005, pp804-805

²²¹ Gready and Ensor, 2005, pp30-31

practical guidance.²²² Furthermore, by insisting rights are indivisible, HRBAs are said to offer little guidance for resource-constrained prioritisation.²²³

These mutually-exclusive critiques of HRBAs – labelled the “depoliticization/politicization nexus” by Gready and Ensor²²⁴ – testify to how HRBAs can be used as “an all-encompassing veneer... malleable to the needs” of whoever adopts them. This ambiguity is captured by development practitioners responding to Miller; while one complained there was “no Bible” for implementing a HRBA, another criticised HRBAs given they “don’t need a Bible.” HRBAs thus have much in common with JT – they can remain normative markers, suggesting an alternative development philosophy, without specifying content. Differences between minimalistic and broader JT approaches are paralleled in distinctions between “legalistic” (*rights*-based) and “empowerment” (*human rights*-based) approaches.²²⁵ Miller finds many organisations use “rights-framed,” rather than *rights-based*, approaches, incorporating HRs “only at... operational level,” thus taking advantage of the “ideological promiscuity of rights talk.”²²⁶ Similarly, Gready and Ensor suggest three levels of HRBAs. One simply restates development in HRs rhetoric; a second inserts HRs indicators into existing programmes; and a third seeks a “fundamental rethinking” of development.²²⁷

Miller suggests HRs themselves are a “master frame,” repackaging the very idea of being human alongside ideas like dignity and justice. Furthermore, the convergence of development and HRs is itself a “frame change” from traditional approaches.²²⁸ The same applies to the convergence of climate change and HRs. Reframing environmental issues in human terms is crucial for JT, the HRs and climate change discourse, and EJ, which stresses “framing... environmental concerns as civil rights, social justice, and human rights issues.”²²⁹ This recognises mainstream environmentalist frames – even the term ‘environment’ – suggest environmentalism “is an area of life separate from... the economy and jobs.”²³⁰ Therefore, it worth remembering JT and HRs are social constructions; they share a desire to develop frames for linking ecology and society, but require clarity about their normative parameters they assume to avoid them becoming solely problem-solving.

²²² Alston, 2005, pp802-803

²²³ Gready and Ensor, 2005, p26

²²⁴ Ibid, pp30-31

²²⁵ Miller, 2010, pp915-918

²²⁶ Ibid, pp921-924

²²⁷ Gready and Ensor, 2005, p39

²²⁸ Miller, 2010, p925

²²⁹ Pellow and Brulle, 2005, pp12-13

²³⁰ Johnson *et al*, 2010, p29

3.4 HRs and JT

Thus, there is considerable overlap between JT and structural HRs approaches. The Cancun Agreements recognised both JT and HRs for the first time,²³¹ with JT supporters welcoming HRs references given both are “important elements of a social and economic vision for a climate agreement.”²³² Rights language is a regular feature of JT visions. However, a reconciliation of the two – a HRBA to JT (HRBAJT) – has not been undertaken.

Broadly, HRs standards offer much-needed normative clarity to JT’s central tenets, ensuring JT transcends defensive parochialism by stressing broader social transformations; while JT focuses HRs on the immediacy of climate change and ecological crisis, and brings an equally-necessary focus on work’s centrality and social movement agency in achieving a transition.

3.4.1 Analytical frameworks and JT

Early JT statements often claimed an umbrella “right to a just transition”²³³ as an opportunity for a broader transformation of society, just as solidarity rights envisage fulfilling all HRs. A right to JT could be seen alongside the right to ecological space as equally necessary enabling rights; JT is ineffective without recognising ecological limits, while realigning society along these limits requires a JT. This cuts through ‘efficacy versus equity’ debates; HRBAJTs are only effective if they achieve sustainability, which itself encompasses equality; if they do not, they will perpetuate inequality. Thus, JT is only effective if it is just and only just if it is effective. Ecological limits thus set natural realism as the benchmark by which effectiveness is judged.

Where JT stresses embracing transitions is ultimately in workers’ and communities’ *self-interest*, Pogge’s approach offers a clearer *moral* imperative for participants in unjust structures to work for their reorganisation. Crucially, the institutional approach emphasises HRs enjoyment can be insecure. This stresses to JT that *workers’ rights are insecure* where premised on non-renewable resources and self-defeating contributions to climate change. This gives a *longer-term view* of workers’ self-interest, avoiding a parochial JT that defends short-

²³¹ CIEL, 2011, p8

²³² Baugh, 2010, p5

²³³ PHI and LI, 2000, p90

term interests of those in carbon-intensive industries when their long-term interests are at risk. This gives impetus to JT and militates against delays. Bell also stresses this is a *duty of rectification* owed to those affected by climate harms, necessitating a transition away from carbon-intensive production that has historically brought workers and communities significant benefits. Therefore, this effectively provides criteria for what is ‘just’ in JT, stressing Humphrey’s corrective and substantive justice. Mitigation is imperative for both HRs and JT; institutional approaches emphasises *negative* duties ending harm caused by one group to another, giving mitigation greater moral impetus, while JT promotes replacing carbon-intensive industries, a *positive* duty for the transition. Bell’s general duty to allocate specific climate duties matches JT’s focus on planning the transition. Furthermore, where Bell stresses mitigation regardless of new climate agreements, JT also seeks a transition as quickly as possible without requiring international agreements first.

Ultimately, the institutional approach provides an analytical framework for reorganising society; JT focuses on *who* achieves this through working-class and community agency.

3.4.2 HRBAs and JT

3.4.2.1 Normative standards

HRs’ substantive coherence gives JT much needed clarity. Rather than being simply desirable, HRs make JT an obligatory part of decarbonisation.

HRBAs employ specific HRs standards. As JT stresses work’s importance, seeing work *as a right* is crucial for HRBAJTs. HRs recognise work’s contribution to “individual fulfilment... constitution of one’s identity, and social inclusion” as well as “survival” and other subsistence HRs.²³⁴ By stressing work’s importance to human dignity, HRs bolster JT’s insistence on its centrality in the transition.

UDHR declared the right to work as encompassing free choice, just and favourable working conditions and remuneration, non-discrimination, collective organisation, protection from unemployment, and social protection.²³⁵ Its key articulations are ICESCR Articles 6 (and accompanying General Comment 18), 7 and 9, and International Labor Organisation

²³⁴ Sarkin and Koenig, 2011, p3

²³⁵ UDHR, Art.23

(ILO) conventions.²³⁶ Under ICESCR, states must “take steps,” using “maximum... available resources,” towards “achieving progressively... full realization” of ESCRs;²³⁷ General Comments and ILO standards highlight what such full realisation entails. Given its Cold War origins, the right did not achieve consensus on whether it is a right “to a job;”²³⁸ ICESCR “recognize[s],” rather than *guarantees*, the right; however, clearer emphasis on protection against unemployment and a “right not to be prevented from working”²³⁹ makes *work-related security* a core aspect. Stephenson notes social protection, key to the ILO’s “decent work” agenda, encompasses work-related security given it “promotes human dignity and security in the workplace.” Stephenson concludes work-related security is “key” to the right to work. This links to Sen’s view of unemployment as a “capability deprivation.” Thus, links “can be drawn between decent work, or more specifically social protection and human security.” Stephenson also stresses how “job security” (linked to a particular job with particular skills) has evolved into “employment security,” which seeks to “guarantee employment... but not any particular job,” combining social protection with skills development opportunities to ensure security and enhance “prospects in the labour market.”²⁴⁰

General Comment 18 specifies duties to respect the right involve not “denying equal access to decent work for all.” Stephenson suggests this obliges “a comprehensive approach to social and economic policies that... include[s] employment opportunity and security.” Protect duties mean states must safeguard against third-party violations. Fulfil duties from the General Comment require “a national policy on the right to work” for economic development that overcomes “unemployment and underemployment, in order to achieve full employment;” such policy does not guarantee everyone work but aims “at ensuring work for all who are available and seeking” it. In total, states “must take a comprehensive approach towards employment policy by taking into account all the necessary measures to ensure the right to work, including work-related security.”²⁴¹ This “comprehensive approach” is often neglected in transition programmes.

²³⁶ Sarkin and Koenig, 2011, pp24-25

²³⁷ ICESCR, Art.2

²³⁸ Sarkin and Koenig, 2011, pp5-6

²³⁹ Ibid, pp24-26

²⁴⁰ Stephenson, 2011, pp168-169

²⁴¹ Stephenson, 2010, pp4-5

Stephenson explicitly recognises obligations for a “just transition” within a “human rights approach” to climate policy.²⁴² He stresses that, in formal legal analysis, states might argue they do not violate respect duties for the right in meeting climate obligations if climate obligations were “implemented... alongside a comprehensive employment policy” that aims to provide “work for all people available... and willing” given “an equal or greater number of jobs will be created in the new green economies;” protect and fulfil duties would be met if “policy is aimed at achieving full employment” and the state “takes all of the necessary measures to ensure the right to work.” However, Stephenson’s more critical, “progressive” legal approach recognises, like JT, that jobs created will be *different* from those lost, require new skills and therefore could lead to some becoming “unemployable in a... green economy.” This creation of insecurity “violates the right to work.” Thus, states must “facilitate a vulnerable workers’ transition between jobs by providing employment services.”²⁴³

ILO standards specifically provide for guaranteeing employment security in transitions. ILO Recommendation No.122 Article 8(b) stresses “selective measures directly connected with the employment of individual workers or categories of workers” should be taken during transitions beyond existing legal requirements; Article 13(1) states measures “should be planned... to prevent the emergence and growth of unemployment or underemployment;” Article 13(3)(b) states initiatives must “protect from financial or other hardship groups and individuals... affected by structural changes;” and Recommendation No.169 Article 10(a) requires measures to “facilitate adjustment to structural change at the global, sectoral and enterprise levels” and “re-employment of workers who have lost their jobs as a result.” Therefore, in “green structural change,” ILO standards require “supplementary” and “specific work-related security measures.” Given few states “have taken into account the effects of climate change on employment,” potential violations are clearly possible.²⁴⁴

Stephenson suggests reconciling climate and HRs obligations requires identifying affected jobs (lost and created) and skills, and initiating “participatory dialogue... for formulating a just transition” given the “in-depth understanding” of those in affected industries about climate measures’ implications. This helps achieve the transition and climate goals by anticipating “skills-gaps” impeding green industries. Long-term, integrating climate

²⁴² Stephenson, 2011, p173-174

²⁴³ Ibid, pp168-169

²⁴⁴ Ibid, p173

agreements and employment policy, and institutionalising dialogue, are required. This also benefits the transition and climate goals by ensuring “political sustainability” of long-term emissions reductions.²⁴⁵ These ideas clearly fit planning and participatory JT aspects.

The right to work’s therefore recognises that even formal comprehensive employment policies can overlook threats to work-related security in the transition; this matches JT’s reframing of the transition from protecting certain *jobs* to protecting certain *workers*. Thus, creating green jobs is insufficient without disaggregated strategies, including regarding skills. The right accordingly gives clear standards for planning JT. During transitions, the right requires supplementary measures for affected workers. Furthermore, new green jobs must be “decent.”²⁴⁶ This provides a normative and legal framework against which to judge JT’s workers’ protection and green jobs programmes, while JT proponents have developed templates for how these will operate. Furthermore, like JT, the right envisages a central role for states in meeting HRs commitments. Finally, the right to free choice of work includes rights not to work and to refuse work where it infringes human dignity.²⁴⁷ This gives a basis for Green Bans and other ecologically-motivated refusals to work.

In terms of contradictions within JT on the state’s role, HRs cannot be neutral on this issue; doing so would be a problem-solving approach, implicitly accepting current neoliberal economic parameters that, as EJ theorists show, drive climate change and ecological degradation and restrict participatory influences on ecological decision-making. Market-based initiatives do not address structural impediments to JT. Even with deep intervention, markets will struggle to deliver a transition as rapidly as required. Climate Risk suggested there is “a window” between 2009 and 2014 for establishing “low-carbon industrial architecture.”²⁴⁸ After 2014, we reach a “point of no return” where market-based mechanisms cannot meet mitigation requirements because “constraints on industrial growth will create a situation where industrial production cannot respond to price signals.”²⁴⁹ Achieving 80 percent emissions reductions by 2050 (from 1990 levels) requires green industries increase 24 percent annually after 2010 – 29 percent annually would be required if delayed until 2014. This is extremely difficult because industries only realistically have a maximum growth rate in markets of around 30 percent given access to labour, capital and other resources. Growth

²⁴⁵ Ibid, pp174-178

²⁴⁶ Stephenson, 2010, pp6-7

²⁴⁷ Sarkin and Koenig, 2011, p10

²⁴⁸ Mallon *et al*, 2009, p.viii

²⁴⁹ Ibid, pp.xi-xiv

beyond 30 percent has only previously been managed through a war-footing.²⁵⁰ War-footings are characterised by active states, a point emphasised by several JT advocates.²⁵¹ States can take a more holistic perspective to industrial growth's limitations, including skills, than numerous private actors reacting independently to potentially-ambiguous market signals.

Furthermore, while setting low carbon prices insufficiently incentivises transitions, setting high prices without addressing distributional effects can have negative consequences. In emissions trading and market schemes, private interests often benefit without significant environmental gains, passing costs onto workers and communities. Designing policy around pollution taxes can also perversely incentivise continuing those practices to maintain revenue. Fundamentally, market incentives are poor substitutes for direct involvement through which states, as primary HRs duty-bearers, can reorganise societal structures for HRs enjoyment.

Beyond the right to work, HRBAs' minimum thresholds share a non-utilitarian approach with JT. Thus, clear standard-setting is key to HRBAJTs as thresholds must not be breached in the transition. Thresholds also give JT a means for defining "dangerous" emissions levels; one of the most important standards to set is therefore emissions reductions. In terms of HRs recognising emissions across borders, JT also acknowledges this given it seeks transitions in carbon-intensive industries that are often export-orientated.

3.4.2.2 Disaggregation, non-discrimination and prioritisation

Refocusing attention from aggregated economic discussions to human impacts is central to both HRBAs and JT. However, HRs have implications for JT by stressing workers have *individual* rights related to the transition regardless of the disposition of *collective* organisations to which they belong, including unions. While HRs are necessarily exercised collectively, they insist on consent to that assembly. Thus, if a union refuses to embrace the transition (such as in protectionist alliances with employers), workers *still have rights* vis-à-vis a transition and may organise on this basis. This reflects EJ critiques – that JT must empower *workers*, not unions *as institutions*.

There is much overlap regarding prioritisation. Where HRBAs focus on historical neglect, so too have EJ proponents, arguing for using JT to expand rights to neglected groups. The notion of HRs' interdependency tessellates with JT's focus on work as key to other

²⁵⁰ Ibid, p.viii-xi

²⁵¹ Ytterstad, 2013, p33

aspects of welfare. HRBAs and JT also share non-retrogression principles. Using participation to elicit priorities in HRBAs is similar to JT visions that stress workers and communities' local, specific knowledge necessary for effective transitions. Finally, HRBAs' expansion of development beyond economics is similar to the EJ tradition's focus on broader transformations beyond workers' economic interests. This avoids defensive JT programmes by stressing the importance of other HRs, including international linkages. Together, HRBAJTs must question "the economic development paradigm, rather than just seeking to make it lower carbon." This avoids what Watts calls "low carbon industrialisation," which is effectively "a subsidy to industry" overlooking structural concerns.²⁵²

3.4.2.3 Participation and empowerment

JT insists workers and communities are central in participatory transition planning. HRBAs ground this participation in non-negotiable rights. This covers workers whose representatives engage in social dialogue, but also those in industries that do not have a social dialogue tradition. JT is premised on workers and communities in carbon-intensive industries actively embracing the transition. HRs insist social dialogue becomes one *means* of a participatory transition, rather than an *end* in itself. Together, the different structural HRs approaches ensure JT, and any dialogue, is based on clear parameters defined by ecological limits, rather than self-defined, parochial conceptions of JT. Consequently, HRs enhance the efficacy *and* equity of JT by ensuring fundamental principles of the transition are non-negotiable.

Both HRs and JT emphasise the integral, not just desirable, role of participation. HRBAs are influenced by Sen's view that development is "thoroughly dependent on... free agency," which is both a "constitutive part" of development and "contributes to strengthening... free agencies of other kinds." Institutional arrangements are themselves influenced by people exercising freedom through participation in social choice and public decision-making.²⁵³ Thus, for Sen, freedoms are development's "principal ends" and "principal means."²⁵⁴ JT also stresses participation's integral role regarding workers' and communities' support (given "fear of job losses could have a paralyzing impact on progress

²⁵² Watts, 2012, p4

²⁵³ Sen, 1999, pp4-5

²⁵⁴ Ibid, pp10-11

toward ... mitigation”),²⁵⁵ and also their local self-knowledge and expertise being necessary for the transition. The integral effectiveness of participation has empirical backing. Within the OECD, electorates “generally attach considerable importance to... distributional consequences of mitigation.”²⁵⁶ Evidence suggests participatory, community-based initiatives are effective at producing positive behavioural change. Successful initiatives depend on ownership and control, local relevance, achieving immediate successes that maintain long-term participation, receiving appropriate responses from relevant authorities, and a trusted and sustained resource base. This helps overcome the “urgency-agency gap,” which is caused by several issues HRBAs and JT address, including inequality of impacts, consumption patterns, neo-liberal practices shifting balances of power between market, state and civil society, and presentation of climate change in technocratic terms that prioritise “technological and market-based response above... social change.” Johnson *et al* suggest “a socially-‘grown’ response” in which “sense of ownership... is high... could more effectively create the conditions for a rapid transition.”²⁵⁷ Ultimately, without cooperative and equitable approaches, competitive exploitation of any resource, including global commons like a liveable climate, “may continue until it is depleted.”²⁵⁸

Participative initiatives tend not to emerge without leadership from “informed and issue-led” organisations, suggesting a role for social movements and civil society groups.²⁵⁹ HRs, as focal points for social movement mobilisation, provide a common language to labour and environmental groups with different traditions and starting points under JT – a positive visions, rather than “sacrifice”²⁶⁰ narratives of ending carbon-intensive societies. Advocates of HRBAs to climate change argue its value-added is both an *analytical framework* and *basis for action*, using legal and political frames to spur the transition.²⁶¹ Ultimately, JT too is analytical frame and basis for action, stressing radical climate action is unsustainable without participation from affected workers and communities. Both HRs and JT seek the transition’s legitimacy and sustainability in local ownership and control, where emphases on decentralisation in HRBAs combine with emphases on economic democracy, localisation and prefigurative projects in JT. Furthermore, both traditions stress empowerment. JT focuses

²⁵⁵ Lee and Card, 2012, p50

²⁵⁶ de Serres *et al*, 2011, pp32-33

²⁵⁷ Johnson *et al*, 2010, pp23-25

²⁵⁸ Shelton, 2010, p124

²⁵⁹ Johnson *et al*, 2010, pp23-25

²⁶⁰ Davidsen et al, 2012

²⁶¹ Nicholson and Chong, 2011, p123

empowerment at workers and communities; HRs highlight meaningful participation can only occur if basic HRs are met, giving a clearer definition for JT's empowerment.

3.4.2.4 Accountability

Accountability is said to be particularly absent in the transition discourse. In critiquing preparatory measures for the Rio+20 Conference, the UN Independent Expert on Solidarity stated HR “normative references that should serve as a system of State accountability” were “sorely missing.”²⁶² HRs, by clearly identifying duty-holders, give JT reference points with which to make demands. International channels offer an opportunity to appeal, morally and legally, beyond recalcitrant employers or states to claim rights.

HRs' internationalism also gives specificity to JT's internationalist urges, ensuring local JTs are accountable for their impacts elsewhere. HRs recognise arguing against climate action given carbon leakage effectively postpones inevitable transitions; compensatory measures do not promote secure HRs enjoyment long-term, leaving affected industries vulnerable to later shocks. Rather than interpreting the international dimension as a zero-sum game pitting 'developed' against 'developing,' HRs give JT a way to reconcile both sets. First, thresholds of those (largely in 'developing' states) threatened by climate change outweigh the right of those in 'developed' countries to continue unsustainable carbon-intensive development. Secondly, HRs of those in carbon-intensive industries are insecure because of climate change and resource depletion. Thus, postponing transitions over fears of carbon leakage does not secure sustainable HRs enjoyment in industrialised nations, or benefit workers and communities elsewhere. Furthermore, HRs provide an impetus for overcoming leakage altogether by recognising both carbon leakage and globalisation's 'race to the bottom' involve use of lower standards by one or more states, creating a free-rider problem. HRBAJTs should therefore work for a “floor of social protection” internationally, giving 'developing' nations space “to improve conditions and stabilize their own social development.”²⁶³ Fundamentally, carbon leakage discussions ignore how unilateral climate action might *inspire* change elsewhere, catalysing international agreement. HRBAJTs specifically seek to avoid industry relocation by supporting industrial transitions; in advocating social transformation, they send clear signals of ambition; they focus on mobilising public support through

²⁶² Dandan, 2012, pp4-5

²⁶³ Regan, 2010, pp268-270

participation and ensuring an equitable transition; and their internationalism promotes cross-national alliances seeking similar transitions globally.

3.5 Summary: A HRBAJT

The following table summarises the role of HRs in a HRBAJT:

	ASPECT	HRs CONTRIBUTION	JT CONTRIBUTION	HRBAJT
Analytical framework	Solidarity rights	Right to ecological space, recognising ecological debt	Right to JT	Right to a JT towards society based on equal ecological space
	Institutional approach <i>How has the state contributed to carbon-intensive structures?</i>	Certain societies morally-obliged to reorganise coercive structures, e.g. carbon-intensive development	Workers/communities in carbon-intensive industries have long-term interest in reorganisation	Workers/communities in industrialised states dependent on carbon-intensive industries have moral/long-term interests in societal reorganisation
	<i>Is HRs access secure?</i>	HRs can be insecure	Workers/communities insecure given climate change/resource depletion	Workers'/communities' HRs can be insecure
	<i>How has the state or groups within it worked to reorganise these structures?</i>	Negative duties (mitigation) paramount	Positive measures	Mitigation and positive plan
		General duty (promote efforts to allocate specific duties)	Planning	Planning and promoting allocation of specific duties
		Duty of rectification and not to benefit from delays	Embracing need for transition	Recognition of workers'/communities' duty of rectification
		Mitigation before and after agreements	Transition as soon as possible	Responsibility for rapid transition

Policy principles	HRBAs <i>Normative standards – right to work</i>	HRs standards guide development	Work's centrality	Work <i>as a right</i>
		Deprivation and capabilities		Recognising work's importance to human dignity
		Comprehensive approach to employment taking all necessary measures to ensure the right, including work-related security (given maximum available resources and progressive realisation)	Protecting certain <i>workers</i> , not certain <i>jobs</i>	Comprehensive green jobs approach and disaggregated measures, e.g. skills
		Supplementary transition measures aimed at specific workers	Workers' protection	Workers' protection as a right
		Green <i>and</i> decent jobs	Green jobs programmes and active state	Green, decent jobs programme
		Right to free choice	Refusing environmentally-damaging work	Right to refuse environmentally-damaging work
		<i>Thresholds</i>	Minimum thresholds overriding other values	Similar non-consequentialism

	“Dangerous” anthropocentric interference causes widespread HRs deterioration	Unclear what is “dangerous”	Clear emissions standards for JT
	Emissions anywhere matter	Transitions for export-orientated carbon-intensive industries	Emissions anywhere matter
<i>Disaggregation and non-discrimination</i>	Disaggregated approach		
	Individuals have rights, even when exercised collectively	Empowering workers, not unions <i>as institutions</i>	Workers/communities have right to a JT – regardless of disposition of unions, employers or states
<i>Prioritisation</i>	Historical neglect	Targeting neglected groups	Targeting historically-neglected groups
	Interdependency	Work central to welfare	Right to work key to broader social transformations
	Non-retrogression		
	Process rights/participation	Workers’/communities’ specific knowledge vital	Workers’/communities’ right to determine priorities
	ESCRs and CPRs	Broader-than-economic societal transformation	HRs extended and deepened in social transformation

<i>Participation and empowerment</i>	Participation non-negotiable	Workers/communities key stakeholders	Workers/communities right to participate, regardless of social dialogue tradition
	Participation's integral value		
	Legitimacy and sustainability through ownership		
	HRs as focal points for mobilisation	Labour-environmental alliances	HRs as common language for labour-environmental alliances
	Decentralisation and democracy	Localisation, economic democracy and prefigurative projects	Decentralisation, localisation and economic democracy
	Empowerment – meaningful participation through economic security and CPRs	Empowerment of workers/communities	Empowerment – clear HRs basis for workers'/communities' participation
<i>Accountability</i>	Identifying rights/duty-bearers	Key stakeholders' involvement	Assigning rights/duties to key stakeholders
	Legal, political, formal and informal accountability	Largely political and informal accountability	Legal and political accountability
	HRs indicators	Lacks indicators	HRs as measures for JT
	Duties of compensation – remedies as a right	Transition on condition that interests are protected	Workers/communities owed transition as a right
	International mechanisms	Commitment to internationalism	International mechanisms

		International obligations		International obligations
		Respecting rights elsewhere		Respecting rights to JT elsewhere
		International floor of social protection		International floor of social protection

Alone, HRs and JT are malleable concepts open to cooption, de-politicisation and abuse; they can be used rhetorically, shallowly or technocratically to obstruct, slow or even avoid the transition necessitated by science. However, critical HRs and JT approaches together provide a framework for analysis and basis for action for ensuring a transition that is both just and effective.

Applying HRBAJTs depends on contextual factors, particularly social movements' relative strength; many details will be decided through participatory processes. However, the above framework can outline central considerations for such processes in particularly contexts by setting the analytical framework and then applying policy principles to assess current action, and outline alternatives. This will be undertaken vis-à-vis Norway.

4 A HRBAJT IN NORWAY

4.1 Analytical framework

Pöyry describe Norway as a “yellow” economy given its oil and gas (generally referred to as ‘petroleum’) industry and “increasing ecological footprint.”²⁶⁴ Its ecological debt is effectively explored using the institutional approach.

Norway has contributed to coercive structures of carbon-intensive development driving climate-related HRs harms in two ways. Firstly, in 2011, Norway was the world’s seventh largest net exporter of oil and second largest net exporter of gas.²⁶⁵ Most oil and gas is exported (just 1.6 percent of gas is sold to Norway).²⁶⁶ While oil production peaked around 2000, gas production has roughly doubled since.²⁶⁷ Secondly, Norway has domestically followed carbon-intensive development. In 2009, it had the 34th highest per capita carbon emissions globally, one of Europe’s highest.²⁶⁸ Domestic emissions have increased around 30 percent since 1990 despite many consumer goods now being imported.²⁶⁹ WWF notes Norway’s “carbon footprint abroad” grew 33 percent from 2001 to 2006;²⁷⁰ some studies suggest this has already surpassed domestic emissions.²⁷¹ Future emissions reductions “may be outweighed by increased emissions abroad” given anticipated growth. Furthermore, imports are shifting towards higher-polluting states and products.²⁷²

Key obstacles to the transition in Norway are, Pöyry suggest, petroleum path dependency, costs, market failure, sector divisions and interest group opposition (especially petroleum interests).²⁷³ In Pogge’s terms, the first four are coercive structures upheld by the

²⁶⁴ Pöyry, 2012, p18

²⁶⁵ OED, 2012, p20

²⁶⁶ Ibid, p46

²⁶⁷ Ibid, p23

²⁶⁸ Boden *et al*

²⁶⁹ Pöyry, 2012, pp20-22

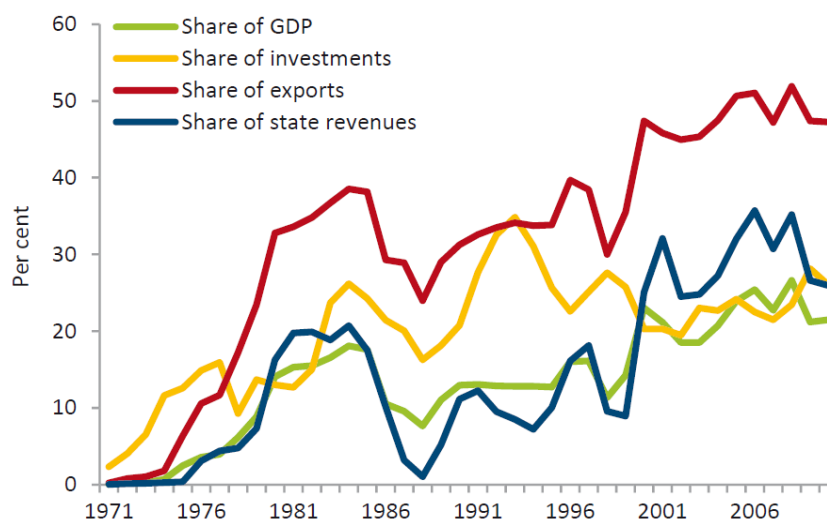
²⁷⁰ Reinvang and Peters, 2008, pp3-5

²⁷¹ Hille, 2012, p59

²⁷² Reinvang and Peters, 2008, pp3-5

²⁷³ Pöyry, 2012, p41

latter in interplay between domestic and international actors. Above all, petroleum is said to exert a pervasive “ideological influence” on society.²⁷⁴ This impacts HRs security. Petroleum contributes to HRs both directly, through jobs, and indirectly, through contributions to the economy. 65,293 are directly employed in petroleum (51,431 in petroleum industries, 13,862 in industries whose products or services “are mainly made use of as a production factor in” petroleum).²⁷⁵ Estimated direct *and* indirect jobs related to petroleum were 206,000 in 2009 (an estimate of “great uncertainty”),²⁷⁶ representing 8 percent of total employment.²⁷⁷ Most of those directly employed live in south-western counties Rogaland (40.90 percent), Hordaland (21.53 percent), and Møre og Romsdal (4.60 percent).²⁷⁸ The industry represents around a quarter of GDP and state revenues²⁷⁹ (taxation, direct ownership and Statoil dividends):²⁸⁰



²⁷⁴ Ryggvik, 2013, p2

²⁷⁵ Sandvik and Johannessen, 2013, pp23-24

²⁷⁶ Ibid, pp7-8

²⁷⁷ Finansdepartementet, 2013b, p70

²⁷⁸ Sandvik and Johannessen, 2013, pp25-26

²⁷⁹ OED, 2012, p20

²⁸⁰ Ibid, p136

The state's net cash flow from petroleum (after covering the structural non-petroleum deficit)²⁸¹ goes into a sovereign wealth fund for investment overseas. Established in 1996, the so-called 'oil fund' (*oljefondet*) exceeds 4 trillion kroner (NOK) today, over NOK 800,000 (US\$137,850) per citizen.²⁸² While relationships between wealth and HRs are contested, evenly-distributed wealth is one proxy for HRs, particularly ESCRs; Norway has topped the Human Development Index (HDI) since 1998,²⁸³ topping inequality-adjusted HDI in 2012.²⁸⁴

Petroleum's contribution to HRs enjoyment is insecure long-term. The Norwegian continental shelf is "a mature region;" most fields are already discovered.²⁸⁵ Official 2011 figures suggest 44 percent of reserves have been sold and delivered.²⁸⁶ Without sizeable discoveries, Norway "will barely be self-supplying" in 2030.²⁸⁷ Furthermore, the industry has increasingly deleterious effects on wider society. While *oljefondet* and other factors (including highly-centralised wage-setting) ensure Norway is considered one of "few exceptions" to side-effects of resource wealth, like 'Dutch Disease',²⁸⁸ the industry increasingly monopolises "financial and human resources to the detriment of" other (including green) industries,²⁸⁹ while inflating wage and cost levels in the wider economy.²⁹⁰ Shrinking production could therefore make Norway "a future case of Dutch disease."²⁹¹ Petroleum-related employment has grown despite falling production, exacerbating dependency and making Norway "extremely vulnerable" to oil prices.²⁹² Meanwhile, extraction costs are expected to rise as climate regulation and technological developments incentivise renewables, making petroleum-related investments today

²⁸¹ Ibid, p22

²⁸² NBIM

²⁸³ UNDP

²⁸⁴ UNDP, 2012

²⁸⁵ Höök and Aleklett, 2008, p4267

²⁸⁶ OED, 2012, p26

²⁸⁷ Höök and Aleklett, 2008, p4267

²⁸⁸ Naím, 2009, p160

²⁸⁹ Pöyry, 2012, pp18-19

²⁹⁰ Hille, 2012, pp18-19

²⁹¹ Sæther *et al*, 2011, pp379-380

²⁹² Ryggvik, 2013, pp16-17

“risky.”²⁹³ HSBC warn “unburnable” reserves (given climate change) could strip 60 percent of petroleum companies’ value, with Statoil particularly exposed.²⁹⁴

The industry is also unsustainable as the single largest contributor to domestic emissions (28.7 percent)²⁹⁵ – despite being considered among the world’s “cleanest.”²⁹⁶ In 2006, emissions were 8kg CO₂-equivalent per barrel oil equivalent (o.e.) compared to global averages nearer 20kg²⁹⁷ given numerous efficiency measures, especially supplying fields with power from land (‘electrification’).²⁹⁸ However, energy-intensiveness is growing with maturing fields, decreasing reservoir pressure, and gas processing and transport being more energy-intensive than liquids.²⁹⁹ 2010 figures already suggested production was no longer world-leading.³⁰⁰

Overall, directly petroleum-dependent workers’ and communities’ HRs are insecure; but petroleum dependence makes general HRs enjoyment vulnerable. Norway is therefore a society in which workers and communities have moral and long-term interests in embracing JT. Regarding whether the state and other groups have worked to reorganise carbon-intensive structures in line with Bell’s duties, Norway has, through the UNFCCC, promoted allocation of more specific climate duties, and been particularly active in adaption financing, climate-related forestry and renewable projects in the South,³⁰¹ which somewhat acknowledges duties of rectification. However, since becoming involved in international climate politics, Norway has actively increased petroleum production,³⁰² without constraining domestic emissions. Norway negotiated a 1 percent emissions *rise* for its first KP commitment period, which does not sit well duties for immediate mitigation. Therefore, Norway has not met vital duties of rectification implied by Bell’s general duty. These duties consequently become more imperative in future policy.

²⁹³ Pöyry, 2011, pp3-4

²⁹⁴ Holm, 2013

²⁹⁵ OED, 2012, p52

²⁹⁶ Pöyry, 2012, pp32-33

²⁹⁷ KonKraft, 2009, p6

²⁹⁸ OED, 2012, pp53-55

²⁹⁹ Pöyry, 2012, p53

³⁰⁰ Ryggvik, 2013, pp5-6

³⁰¹ Miljøverndepartementet, 2012, p24

³⁰² Ryggvik, 2013, p4

4.2 Policy analysis

4.2.1 Normative standards

The Norwegian government aims for “the world’s most ambitious climate policy.”³⁰³ However, Pöyry conclude “despite great ambitions” and numerous initiatives, “there has been little focus on... completing political programmes” for “structural changes.” Current development thus suggests “increasing consumption and emissions.”³⁰⁴

4.2.1.1 Right to work

Norway does not recognise a transition as a right; the government supports a “long-term goal” of a global “right to emit,”³⁰⁵ but this has not had practical consequences. HRs are absent in climate policy. There is no comprehensive policy for fulfilling the right to work alongside climate obligations, meaning Norway risks violating the right under formal analysis (let alone Stephenson’s work-related security analysis). There are no targeted workers’ protection schemes for petroleum’s inevitable decline, and no unified programme for green, decent jobs to replace it. This is the *first contradiction of Norwegian climate policy* – pushing for tougher global climate action that further accelerates petroleum’s decline without offering a positive scheme in its place, thus making Norwegian HRs insecure.

The *Soria Moria* declaration (2009), the current government’s second term programme, states “green jobs within energy production and environmental technology will be a new growth industry.”³⁰⁶ Far from recognising green jobs’ centrality to the right to work in a transition, this does not imply a *transition* at all, but increasing green jobs *alongside* carbon-intensive development. This is the *second contradiction of Norwegian*

³⁰³ Ytterstad, 2013, p17

³⁰⁴ Pöyry, 2011, p8

³⁰⁵ Miljøverndepartementet, 2012, p9

³⁰⁶ Pöyry, 2012, p7

climate policy – lack of integration of industrial, energy and environmental policy means climate initiatives are undermined by concurrent carbon-intensive development. The petroleum industry is exempted in climate policy beyond its domestic emissions. Instead, climate policy is “dominated” by purchasing emission quotas overseas, rainforest conservation, and carbon capture and storage (CCS), beyond which “the impression is... everything can continue as before.”³⁰⁷ A baffling array of climate initiatives gives the appearance of action, but *structural* issues are rarely considered.

This is illustrated in contradictory climate and energy policies. A 2012 climate white paper (*klimamelding*) trailed several measures, formalised by cross-party agreement (*klimaforlik*).³⁰⁸ However, these measures (some of which are explored below) are nullified by concurrent petroleum plans. A 2011 petroleum white paper (*petroleumsmelding*) charted a “long-term production plan”³⁰⁹ and reserve growth of 800 million standard cubic meters (sm³) o.e. by 2015 alone.³¹⁰ According to *Framtiden i våre hender* (Fivh), burning remaining reserves would release emissions 331 times current annual domestic emissions,³¹¹ and much of this is already planned. A 2013 Finance Department *perspektivmelding* (“Long-Term Perspectives” white paper) acknowledged petroleum revenue would decline, but envisioned continued production and export,³¹² while addressing climate vis-à-vis petroleum only regarding higher prices affecting profitability.³¹³ A chapter on the environment and climate focused on international negotiations, carbon pricing and emissions scenarios without addressing petroleum.³¹⁴ Climate issues were therefore downgraded from previous *perspektivmeldinger*, implying, for Bellona, “the government does not believe... *klimaforlik* can be implemented.”³¹⁵ Meanwhile, the industry has co-opted environmental concerns to support continued

³⁰⁷ Davidsen *et al*, 2012

³⁰⁸ Stortinget, 2012

³⁰⁹ OED, 2012, p21

³¹⁰ *Ibid*, p38

³¹¹ Hille, 2011, p1

³¹² Finansdepartementet, 2013a, p148

³¹³ *Ibid*, p73

³¹⁴ *Ibid*, p73

³¹⁵ Vedeld, 2013

production, with KonKraft (a petroleum interests' alliance of government, unions and industry) suggesting gas exports will reduce emissions through replacing European coal use,³¹⁶ while the sector's efficiency expertise should itself be exported.³¹⁷

2012's energy committee (*energiutvalget*) report was expected to initiate an *energimelding* addressing energy and climate policy,³¹⁸ but the government has not written one given existing energy-related *meldinger*.³¹⁹ For Bellona, despite talk of Norway becoming Europe's "green battery" through exporting renewables, this means no coordinated strategy exists.³²⁰ *Energiutvalget* lacked coordination with *klimameldingen* and its mandate excluded broader climate-related implications,³²¹ thus, a minority proposed using gas domestically without CCS, directly contradicting climate policy.³²²

Norway thus has several renewable-related targets (including *elsertifikater*, discussed later, and the EU's renewable energy directive)³²³ but no roadmap for achieving them, leaving its renewable energy potential unfulfilled. For example, Norwegian solar companies have "world class" capabilities;³²⁴ however, global overcapacity means firms risk being bought and moved out of Norway (as has happened already) by companies from states with long-term solar strategies.³²⁵ While hydropower already accounts for 96 percent of electricity production,³²⁶ there are no strategic plans for using estimated technical potential by 2020 of 30 terawatt hours (TWh),³²⁷ 15TWh through upgrading existing projects, or 5TWh from micro-hydropower.³²⁸

³¹⁶ KonKraft, 2009, pp100-101

³¹⁷ Ibid, p10

³¹⁸ Pöyry, 2012, p7

³¹⁹ VG, 2012

³²⁰ Borgen, 2013a

³²¹ Tveit, 2012

³²² Furdal, 2012

³²³ Kaski *et al.*, 2011, p52

³²⁴ Pöyry, 2012, pp48-49

³²⁵ Pöyry, 2011, p29

³²⁶ LO, 2010b

³²⁷ Miljøverndepartementet, 2012, p189

³²⁸ Rødt, 2011, p69

A national offshore renewables strategy was launched in 2009; evaluations of developments were due in 2012,³²⁹ but it is unclear what became of this. Estimated onshore wind physical potential (excluding difficult terrain and protected areas) is 1,874TWh annually.³³⁰ Offshore potential is 13,970TWh, 19 percent of which resides south of 61 degrees latitude (encompassing counties where most petroleum workers live). “Significant” amounts are already technologically-feasible.³³¹ “World-class” research and technical competencies, developed through petroleum, exist for offshore wind.³³² Developing 30,000 megawatts (MW) of the potential 120,000MW identified in 2007 would create an estimated 50-60,000 offshore jobs (initially located in currently petroleum-dependent areas) by 2030 using Greenpeace’s methodology.³³³ Nonetheless, deficient strategic planning aggravates technological limitations, especially lacking grid capacity for increased electricity production. Estimated *technical* potential for onshore wind by 2025 is therefore only 17.4-21.5TWh.³³⁴ Lacking capacity regionally means national agencies de-prioritise license applications from regions despite large physical potential, while developers prepare “less ambitious plans.”³³⁵ Even so, while only 3.2TWh can be developed in North Norway by 2025, applications number 20TWh.³³⁶ Capacity problems are exacerbated by unpredictable subsidy schemes and slow application procedures.³³⁷ Many planned developments will not be ready until 2025 under existing conditions.³³⁸

Offshore, completely new grid connections are required.³³⁹ While connections for electrification of petroleum fields could be used, comprehensive electrification remains uncertain and is likeliest first where water depths are unfavourable to offshore wind.³⁴⁰ Expanding ocean-based energy or integrating with European markets through cross-

³²⁹ Miljøverndepartementet, 2012, p183

³³⁰ Hille, 2011, p9

³³¹ Sandgren *et al*, 2007, p20

³³² Pöyry, 2011, p29

³³³ Steinsholdt, 2013, p3

³³⁴ Miljøverndepartementet, 2012, p191

³³⁵ Norby, 2010, p6

³³⁶ *Ibid*, p44

³³⁷ *Ibid*, p44

³³⁸ *Ibid*, pp34-37

³³⁹ *Ibid*, p13

³⁴⁰ *Ibid*, p61

national cables will have “significant” costs³⁴¹ and environmental impacts on biodiversity and local concerns (which, in the north, could implicate indigenous Samis’ HRs). Protected areas, local demands to keep production away from coastlines, and conflicts with fishing and shipping exacerbate technological limitations. Many coastal waters are too deep given commercially-available technology; while developing turbine foundations for depths of 100m continues, most offshore wind today stops at 20.³⁴² Longer distances from shore reduce conflicts and biodiversity impacts, but require technologically-immature floating arrays.³⁴³ Clear strategies for addressing these problems are missing.

Furthermore, while *klimameldingen* heightened efficiency requirements for new build,³⁴⁴ the government’s promise to deliver clear efficiency targets for existing buildings resulted in a vague pledge of a “long-term goal” for new developments to “be sustainable with a low footprint,” which Bellona considered a “violation” of *klimaforliket*.³⁴⁵ Government estimates of 15TWh savings by 2020 would require 3.5 times current non-residential renovation rates, while no schemes exist for residential buildings.³⁴⁶ Norway has 59.9TWh estimated technical savings potentials in residential and non-residential buildings, and industry, by 2020.³⁴⁷

The Global Subsidies Initiative estimated Norwegian petroleum subsidies at NOK 25bn in 2009, including tax exemption for exploration;³⁴⁸ however, overall government spending is considerably higher. The 2013 budget included NOK 28.32bn for state direct petroleum concerns (SDFIs) alone.³⁴⁹ Zero highlight over NOK 1.3 trillion is invested in petroleum through (largely state-owned) Statoil, with NOK 241bn of *oljefondet* invested in petroleum companies overseas.³⁵⁰ This dwarfs climate-related spending (even including CCS-funding) – the new climate, renewable energy and energy reorganisation fund

³⁴¹ Pöyry, 2012, pp37-39

³⁴² Hofstad and Tallhaug, 2008, p5

³⁴³ Sandgren *et al*, 2007, pp21-22

³⁴⁴ Miljøverndepartementet, 2012, p13

³⁴⁵ Borgen, 2013b

³⁴⁶ Nereng, 2013

³⁴⁷ Miljøverndepartementet, 2012, pp191-192

³⁴⁸ Sandberg, 2012

³⁴⁹ Finansdepartementet, 2013b, p48

³⁵⁰ Holm, 2013

received NOK 10bn in 2013,³⁵¹ while climate and forest-related development funding, and renewables projects in ‘developing’ nations, received NOK 5bn.³⁵² The government does have significant renewables interests through the largely state-owned enterprise Statkraft, Europe’s largest renewable energy producer (mainly given hydropower); Norway increased Statkraft shares to NOK 14bn in 2010, helping Statkraft’s NOK 82bn investment programme domestically and abroad.³⁵³ Another state enterprise, Enova, promotes climate-related energy transitions; it supports full-scale demonstration projects (increased by NOK 30m in *klimameldingen*)³⁵⁴ spending NOK 9bn delivering 16.6TWh in renewables or energy efficiency between 2002 and 2011.³⁵⁵ Other past funding includes a NOK 500m environmental technology programme from 2011 to 2013. In publicly-funded research (R&D), *klimameldingen* claimed renewable R&D was “level” with petroleum³⁵⁶ (tacitly admitting a two-track policy), but this claim is difficult to verify.

Fundamentally, the continued and historical strategic role of the state in building petroleum activities starkly contrast the *laissez-faire*, market-orientated approach of climate policy. Indeed, policy is effectively premised on maintaining carbon-intensive activities to fund compensatory activities – *Norwegian climate policy’s third contradiction*.

4.2.1.2 Thresholds

Without a HRs framework and clear standard-setting, a short-term, cost-benefit approach dominates policy. Focusing on carbon pricing and market mechanisms overlooks structural issues and HRs thresholds. This is *Norwegian climate policy’s fourth contradiction* – given inadequate spending on structural issues, and duplicated spending on carbon-intensive and carbon-reducing activities, its short-term, cost-benefit approach is costlier long-term.

³⁵¹ Finansdepartementet, 2013b, p48

³⁵² Ibid, p24

³⁵³ Pöyry, 2012, p7

³⁵⁴ Miljøverndepartementet, 2012, p183

³⁵⁵ Enova, 2012

³⁵⁶ Miljøverndepartementet, 2012, p183

The government describes setting a global carbon price as the “most important” climate initiative.³⁵⁷ Since 1991, petroleum activities have paid carbon taxes.³⁵⁸ Pre-existing taxes were often reduced to avoid increasing overall tax burdens, with “many exemptions” allowed.³⁵⁹ *Klimameldingen* raised taxes to NOK 200 per tonne CO₂.³⁶⁰ Norway introduced emissions trading in 2005. The second period (2008-2012) included petroleum, coinciding with the KP’s first period and Norway’s entrance into the EU Emissions Trading Scheme (ETS). Land-based industry and energy producers received free allocations corresponding to 87-100 percent of average annual emissions from 1998 to 2001, while the petroleum industry did not.³⁶¹

Norwegian climate policy’s central tenet is that “in areas... subject to general measures, like the emissions trading system, further regulation will, as a general rule, be avoided.”³⁶² ETS reliance limits more ambitious approaches, and is fundamentally failing. For *The Economist*, ETS has “long been a mess.” Its future is unclear after failure to agree measures to arrest falling prices in 2013.³⁶³ A report from 40 international organisations finds emissions reductions in the second period were caused by the economic crisis; ETS has not spurred significant investment; it has failed its own objectives; and enriched private interests at public expense, while encouraging fraud.³⁶⁴

Regarding target-setting, since 2007,³⁶⁵ Norway targets 30 percent emissions reductions on 1990 levels by 2020, increasing to 40 percent “if it can contribute to... an ambitious climate agreement” where “major” emitters accept “concrete” obligations; “carbon neutrality” by 2030 (ensuring “emissions reductions corresponding to Norwegian emissions in 2030,” thus anticipating reductions overseas)³⁶⁶ if multilateral agreement is reached where “other industrialised states” accept “significant” reductions;” and “carbon

³⁵⁷ Ibid, p8

³⁵⁸ OED, 2012, pp53-55

³⁵⁹ Skjelvik *et al*, 2011, p40

³⁶⁰ Miljøverndepartementet, 2012, p11

³⁶¹ KonKraft, 2009, p24-25

³⁶² Miljøverndepartementet, 2012, p10

³⁶³ The Economist, 2013

³⁶⁴ FERN *et al*, 2013, p5

³⁶⁵ KonKraft, 2009, pp23-24

³⁶⁶ Miljøverndepartementet, 2012, p9

neutrality” by 2050 regardless of multilateral agreements. Norway lacks requirements for successive carbon budgeting in the UK Climate Change Act, meaning action on longer-term targets could be delayed. More fundamentally, allocations between domestic and overseas reductions are incompatible with HRBAJTs. It is often reported that two-thirds of the 2020 reductions are intended domestically. However, this ‘two-thirds’ commitment (cutting 15-17Mt CO₂) was calculated using a business-as-usual scenario (59Mt) in 2020, *not* 1990 levels (50Mt) as the goal itself. Cutting 15-17Mt from 59Mt gives 42-44Mt (12-16 percent cuts on 1990 levels), meaning the rest of the 30 percent cut can occur elsewhere.³⁶⁷ This is incompatible with the KP’s flexibility mechanisms, which must only be “supplemental” to domestic reductions.³⁶⁸ Even these domestic targets are too high for the Finance Department.³⁶⁹ Financing overseas reductions has effectively been used to “purchase... the right to continue... emissions” domestically,³⁷⁰ abnegating ecological debt and duties of compensation. Making emission targets contingent on international agreements also ignores *existing* HRs responsibilities.

Ultimately, targeting reductions overseas works from the (correct) observation that global, not national, emissions matter. However, Norway only considers global emissions when avoiding domestic cuts; its unwillingness even to discuss petroleum exports’ global contribution is climate policy’s *fifth contradiction*.

4.2.2 Disaggregation, non-discrimination and prioritisation

No central evaluation of climate-related employment threats *or* opportunities has been undertaken. The *Klimakur* report outlined measures to meet 2020 climate targets, but excluded petroleum extraction³⁷¹ and employment-related consequences, emphasising

³⁶⁷ Naturvernforbundet, 2013

³⁶⁸ KP, Art.6(1)(d)

³⁶⁹ Todal, 2012

³⁷⁰ Davidsen *et al*, 2012

³⁷¹ Fivh, 2011, p8

aggregated, cost-benefit approaches.³⁷² Failure to confront the transition's costs means they are often passed to consumers and workers, blunting positive visions of the transition.

One example of insufficient disaggregated analysis is the *elsertifikat* initiative with Sweden, aiming for 26.4TWh of new renewable production across the countries by 2020.³⁷³ In Norway, this requires a 10 percent increase in electricity production.³⁷⁴ *Elsertifikater* involve energy producers receiving 'certificates' for producing renewables, thereafter selling them on a market as extra income. Certain suppliers must buy certificates, ensuring demand. Certificate costs are paid through increasing energy prices.³⁷⁵ The scheme has been criticised for including hydropower projects feasible without subsidies. Hydropower will likely receive more support than wind. Pricing is not differentiated between renewable energy forms. Furthermore, consumers must pay but industry has certain exemptions,³⁷⁶ suggesting private producers will benefit at consumers expense. Sector actors doubt it will meet targets, while producing an energy surplus without planning how to use it.³⁷⁷

Given aggregated policy approaches, prioritisation towards marginal groups is discounted. Workers and communities have limited avenues for influencing priorities through exercising participatory rights; most initiatives are top-down. Regarding non-retrogression, assumptions climate initiatives will protect or enhance HRs are particularly dubious given lacking analysis of policies' social effects and unwillingness to confront petroleum's decline. A new industry climate fund (*klimafond*) has been established (to reach NOK 50bn by 2016) to assist industrial transitions through technological development, renewables and energy restructuring,³⁷⁸ which could contribute to protecting HRs of those involved in such industries long-term. Measures will be financed through investment returns and funds released by *elsertifikater*, which will go into Enova's energy fund (*energifondet*) and support "full-scale production lines."³⁷⁹ *Klimafond* – a long-term

³⁷² LO, 2010a

³⁷³ Miljøverndepartementet, 2012, pp191-192

³⁷⁴ Kaski *et al.*, 2011, p51

³⁷⁵ NVE, 2012

³⁷⁶ Haugstad, 2012

³⁷⁷ Lie, 2012

³⁷⁸ Stortinget, 2012

³⁷⁹ Miljøverndepartementet, 2012, p12

demand from various organisations – was the best received *klimamelding* proposal.³⁸⁰ However, Zero stress its effectiveness depends on its structure and concrete goals.³⁸¹ While *klimafond* could contribute to greening industries and jobs, more detail is required to avoid simply subsidising ‘low-carbon industrialisation.’

This is problematic regarding CCS. Prime Minister Stoltenberg described the government-sponsored Test Centre Mongstad as Norway’s “moon landing.”³⁸² Nonetheless, projects “have been plagued by... postponements,” with future results “uncertain.”³⁸³ *Klimamelding* predicted the decision-making basis for realising Mongstad would not reach parliament until 2016.³⁸⁴ The 2013 budget gave NOK 3.4bn to CCS.³⁸⁵ *Klimamelding* also insisted all new gasworks use CCS, effectively guaranteeing electricity production comes from renewables until CCS “has found a satisfactory solution.”³⁸⁶

As Fivh highlight, CCS will play an “at best limited” role *after 2020*. CCS operates at large emissions sources, but much global fossil fuel use occurs in transport, homes and businesses. In 2011, CCS projects representing 25Mt CO₂ were *cancelled* globally, while new plans representing 24Mt were launched. World wind production that year represented 300Mt reductions if replacing fossil fuels.³⁸⁷ Beyond incurring high costs for modest mitigation, CCS entrenches carbon-intensive path dependency without developing alternatives, perpetuating deleterious HRs effects globally while ignoring effects of petroleum’s decline on Norwegian HRs.

4.2.3 Participation and empowerment

Worker and community participation is not central to climate policy. For government and unions like LO, social dialogue is promoted without clear parameters, becoming an end in

³⁸⁰ YS, 2012

³⁸¹ Kaski *et al*, 2011, p45

³⁸² Berglund, 2012

³⁸³ Pöyry, 2012, p7

³⁸⁴ Hille, 2012, p12

³⁸⁵ Finansdepartementet, 2013b, p24

³⁸⁶ Miljøverndepartementet, 2012, p196

³⁸⁷ Hille, 2012, p18

itself. Established petroleum interests effectively control many policy areas. Participation beyond established lobbying channels is minimal; consultation with civil society groups is formalistic and centralised, largely through parliamentary *høring* processes. Participation's integral value is underutilised.

Tripartite dialogue on climate change became part of national union-employer agreements in 2009;³⁸⁸ however, pinpointing concrete outcomes is difficult. Some unions have argued workplace representatives and committees should be expanded to cover the “exterior environment” (including climate change), but this was rejected by a 2010 parliamentary committee.³⁸⁹

Many Norwegian unions explicitly support JT. Three confederations – *Unio* (covering university and colleges), *Akademikerne* (the Federation of Norwegian Professional Associations) and YS (the Confederation of Vocational Unions) – have demanded a climate law, green taxation, and “green innovation” strategies towards a JT.³⁹⁰ YS has committed to protect “built-up union rights” and ensure these are transferred to new jobs arising from green investment and skills strategies.³⁹¹ Contrastingly, while LO (the Norwegian Confederation of Trade Unions, Norway's largest workers' confederation) has backed several workplace environmental initiatives,³⁹² and promoted JT internationally,³⁹³ it has opposed meaningful domestic cuts, encouraged (in alliance with employers) a restrictive view of carbon leakage,³⁹⁴ and supported greater oil³⁹⁵ and gas production.³⁹⁶ A European study suggests this reflects LO's difficulties in balancing petroleum industry members' interests with environmental concerns.³⁹⁷ Other unions publicly lament LO's “deficient climate effort.”³⁹⁸

³⁸⁸ Unio, 2012

³⁸⁹ Utdanningsforbundet, 2009, p5

³⁹⁰ Folkestad *et al*, 2012

³⁹¹ YS, p7

³⁹² Unio and LO, 2009

³⁹³ LO, 2011

³⁹⁴ LO *et al*, 2011, p2

³⁹⁵ Hermstad, 2010

³⁹⁶ Hermstad, 2011a

³⁹⁷ Eurofound, 2009, p11

³⁹⁸ WWF-Norge, 2011

LO are often criticised by environmentalists,³⁹⁹ and left outside labour-environmentalist cooperation, including joint petitioning for *klimaforliket*.⁴⁰⁰ Such joint campaigning is relatively rare, perhaps given LO's intransigence, although cooperation is growing in certain areas (including workplace 'greening').⁴⁰¹ Many environmental groups' priorities, like climate policy generally, remain technical, overlooking social effects. For example, Fivh's petroleum de-escalation plan does not analyse distributive consequences or "socioeconomic costs" because they support reduced consumption, therefore opposing increasing GDP or disposable income.⁴⁰² However, simply cutting aggregated consumption is far likelier to impact lowest earning (and consuming) groups. Fundamentally, disbanding petroleum without proposing alternative green jobs does not provide a positive vision of the transition or radical climate initiatives.

Broader social movement mobilisation could be sparked by oil prospecting near the sensitive Lofoten and Vesterålen areas. Such prospecting became official Labour Party (and LO) policy in 2013, meeting unprecedented internal opposition.⁴⁰³ Externally, this has seen oil prospecting "become one of" Norway's "largest conflict issues."⁴⁰⁴ This has yet to expand to oppose oil prospecting generally, although petroleum dependency is increasingly questioned.⁴⁰⁵

Beyond social movements, broader economic democracy is absent from the Norwegian discourse. Decentralisation occurs given local initiatives are often the purview of local municipalities, but major climate initiatives remain centralised. The biggest obstacles to empowerment remain scarce avenues for participation; climate concern among Norwegians is high.⁴⁰⁶

³⁹⁹ Hermstad, 2011b

⁴⁰⁰ Lundberg, 2012

⁴⁰¹ Naturvernforbundet and Utdanningsforbundet, 2011

⁴⁰² Hille, 2012, p65

⁴⁰³ AUF, 2013

⁴⁰⁴ Ryggvik, 2010, p112

⁴⁰⁵ Sørenes, 2013

⁴⁰⁶ Ytterstad, 2013, p24

4.2.4 Accountability

Lacking legislation making climate targets an “absolute requirement” in decision-making,⁴⁰⁷ responsibility for target-related duties is unclear, making it difficult to hold successive governments legally or politically-accountable for distant targets. Governmental departments that “do not have climate targets as their primary mandate” often reject sustainable choices if these contradict “sector targets.”⁴⁰⁸ HRs are not employed for measuring the transition, while seeing the transition as workers’ and communities’ right is overlooked.

Regarding respecting HRs overseas, Norway maintains a high-profile in climate negotiations, pushing for binding agreements at the recent Doha conference.⁴⁰⁹ Development policy promotes climate initiatives, including the state development investment tool NORFUND (strengthened under *klimamelding* to increase commercial renewable investments), while *klimamelding* considered increasing climate-related forestry funding in the South above the NOK 3bn given annually if other countries increased contributions.⁴¹⁰ There have, however, been difficulties using these funds,⁴¹¹ while *oljefondet* has undermined this by investing in logging companies,⁴¹² not to mention Statoil’s foreign tar sands investments.⁴¹³ Ultimately, Norway’s position in international negotiations is increasingly undermined by continued petroleum commitments.

Elsewhere, climate initiatives are often treated as a zero-sum game. A self-defeating conception of carbon leakage dominates, defending short-term interests rather than confronting long-term threats. There is little debate about raising standards abroad to avoid leakage. Regardless, leakage is not relevant to petroleum; leaving one state’s fossil fuel resources alone ensures a share of global carbon reserves remains untouched.

⁴⁰⁷ Pöyry, 2012, pp42-43

⁴⁰⁸ Ibid, pp37-39

⁴⁰⁹ UNFCCC, 2012

⁴¹⁰ Miljøverndepartementet, 2012, p16

⁴¹¹ Salvesen and Gedde-Dahl, 2011

⁴¹² Watts, 2011

⁴¹³ Lindeberg, 2013

4.3 HRBAJT in Norway

Whether Norway requires its own version of Britain's climate law has been much debated. Pöyry stress such regulation is “independent of economic analysis” and “set with... prioritised societal aims in mind.”⁴¹⁴ It could therefore set a HRBAJT's normative standards. As well as formalising targets and consecutive carbon budgets,⁴¹⁵ the British law established a Committee on Climate Change (CCC), giving scientific advice and challenging policies contradicting the Act;⁴¹⁶ and limited flexibility mechanisms use, meaning most cuts must occur domestically.⁴¹⁷ It offers a politico-legal reference for social movement challenges, including defeating airport expansion.⁴¹⁸ However, the Act overlooks HRs; carbon budgeting does not mandate evaluating social impacts.

Instead, a HRBAJT might demand a JT law (*rettferdig omstillingslov*) guaranteeing the right to a JT within equal ecological space, outlining the analytical framework and policy principles. A CCC-equivalent could provide scientific advice on fulfilling the right to JT – tackling climate change while fulfilling all HRs – within Norway's allocated ecological space. The law could set a 2050 target of at least 85 percent domestic emissions reductions from 1990 levels⁴¹⁹ through successive carbon budgets. Norway's climate debt requires further mitigation elsewhere, but *supplementary* to this target.

Enshrining such a right has implications.

4.3.1 Transition from petroleum

Continued petroleum activities are incompatible with ecological limits. Transitioning from petroleum is the “most important individual [climate] measure Norway can take.”⁴²⁰

Fivh suggest a transition through stopping exploration and new developments in existing fields by redeeming extraction permits where developments are yet to begin

⁴¹⁴ Pöyry, 2010, p35

⁴¹⁵ Bjartnes, 2011, p7

⁴¹⁶ Molho and Allott, 2012

⁴¹⁷ UK Climate Change Act, 2008, p7

⁴¹⁸ WWF, 2012

⁴¹⁹ Hille, 2012, p9

⁴²⁰ Hille, 2011, p8

(returning Statoil to full state ownership and waiving its permits would assist this); closing existing fields by buying-out private interests; and limiting production to long-term gas contracts.⁴²¹ With efficiency measures, this would reduce domestic emissions from petroleum by 75 percent by 2020.⁴²² Gas production would remain over 80bn sm³ o.e. in 2020 (compared to 100bn today)⁴²³ given around 80 percent is tied to 10-20 year contracts. Fivh suggest more abrupt stoppages could see importers switch to coal; thus, gas production would not cease until 2030. Oil is not so contractually-constrained.⁴²⁴ Any future oil extraction should be for product production, not energy.⁴²⁵

State enterprise Petero and Statoil (70 percent state-owned) control around 70 percent of the continental shelf. Given share prices in March 2012, Fivh estimate costs of buying-up Statoil at NOK 147bn, with other companies' property on the shelf valuing NOK 300-400bn. One way of buying-out these could be exchanging holdings on the continental shelf with Statoil's international holdings. Thus, a maximum NOK 400-500bn (one tenth of *oljefondet*) would be needed; indeed, many contracts will end regardless before 2020 (and many more before 2030).⁴²⁶ Furthermore, as sole owner, the state would receive all gas-related income⁴²⁷ (NOK 1.7 trillion by 2020 even after production decreases).⁴²⁸ This plan would mean around 16 percent of potential emissions from burning remaining reserves would still be released – over 50 times current domestic emissions. Going further might require breaking contracts, provoking retaliation measures.⁴²⁹ Fivh suggests the government assists importers to *replace* gas with Norwegian renewables;⁴³⁰ *oljefondet* could also invest in renewables in those countries. Reducing oil exports will also reduce emissions elsewhere by increasing oil prices. Using Statistics Norway (SSB) estimates, Fivh's scenario could produce up to 42Mt CO₂ reductions elsewhere by 2020 –

⁴²¹ Ibid, p8

⁴²² Hille, 2012, p26

⁴²³ Ibid, pp72-73

⁴²⁴ Ibid, p26

⁴²⁵ Rødt, 2011, p65

⁴²⁶ Hille, 2012, p21

⁴²⁷ Hille, 2011, p5

⁴²⁸ Hille, 2012, p66

⁴²⁹ Hille, 2011, pp4-6

⁴³⁰ Hille, 2012, p62

dwarfing proposed domestic mitigation – and so long Norwegian gas is not entirely replaced by coal, “very positive” reductions are likely.⁴³¹ Regardless, studies suggest if gas replaced all coal consumption globally, warming would only be 20 percent less than continued coal use. Increasing Norwegian gas production to avoid European coal reliance exacerbates path dependency and is “mistaken” economically given EU renewable targets.⁴³²

Anticipating this transition’s employment effects is crucial. Workers require targeted protection programmes, with early notice and, where necessary, retraining, income support while finding new jobs, and relocation assistance. Based on the Canadian Centre for Policy Alternatives (CCPA) framework,⁴³³ a maximum cost scenario can be calculated that:

- *Assumes every worker participates* – unlikely given many have transferable skills, including for green jobs. Indeed, SSB figures on extraction industry employees show 10.66 percent are leaders or managers, 25.66 percent are professionals, and 21.31 percent are technicians or associate professionals.⁴³⁴ Pöyry quote Sintef estimates that 100,000 offshore petroleum jobs can be directly transferred to offshore wind.⁴³⁵ Sintef’s research is unavailable publicly; given fewer than 100,000 work in petroleum, this number perhaps includes onshore and indirect jobs. Furthermore, certain workers might retire rather than participate;
- *Uses average annual wage and benefits for extraction industries* (NOK 742,800), obscuring disparities between managers (earning on average NOK 1,160,400 annually) and craft workers (earning on average NOK 514,800 annually);⁴³⁶
- *Assumes average programme participation of 1.87 years*, given CCPA’s assumptions workers with post-secondary education require 0.75 years participation

⁴³¹ Hille, 2012, p61

⁴³² Ryggvik, 2013, pp9-10

⁴³³ Marshall, 2002, pp48-49

⁴³⁴ SSB, 2012

⁴³⁵ Pöyry, 2012, p45

⁴³⁶ SSB, 2012

(6 months to 1 year dependent on age), while those with secondary education require 2.5 years (2-3 years based on age). As educational profiles are not provided by age, exact ratios cannot be used. Given employees' educational profile (41,756 with secondary education or non-declaring, 23,537 with post-secondary education), average participation is 1.87 years ($41,756 \times 2.5 = 104390$; $23,537 \times 0.75 = 17,652.5$; $104390 + 17,652.5 = 122,042.75 / 65,293 = 1.87$);

- *Assumes workers find equally well-paid work after participation*, thus not requiring additional income support. This should be green job programmes' goal;
- *Assumes every worker receives full relocation assistance*. CCPA include relocation assistance of C\$15,000 without explaining this figure. Today, C\$15,000 corresponds to NOK 86,000. I have rounded this up to NOK 100,000 in lieu of another methodology. Ultimately, the likelihood of workers relocating is low if accompanied by a green jobs programme. As seen earlier, there is significant potential for renewable energy in petroleum-dependent regions. These regions also have higher property values than elsewhere in Norway – the petroleum hub Stavanger (in Rogaland) has the highest, followed by Agder and Rogaland (excluding Stavanger), with West Norway (excluding Bergen) fifth highest;⁴³⁷
- *Assumes annual retraining costs based on average education costs per student in public universities* (NOK 190,000 annually);⁴³⁸ and
- *Assumes 10 percent administration costs*, covering targeted guidance.

Total costs would be:

Average annual income (742,800) + retraining costs (190,000) = 932,800 + administration (10%) = 1,026,080 x 1.87 years = 1,918,769.6 + relocation assistance (100,000) = 2,018,769.6 per worker x 65,293 workers = 131,811,523,492.8 (131.81bn)

⁴³⁷ SSB, 2013b

⁴³⁸ SSB, 2013a, p31

By comparison, net government petroleum cash flows are expected to reach NOK 373.19bn in 2013.⁴³⁹ It is likely costs would be much lower given aforementioned caveats. It is also worth noting this *replaces* existing welfare entitlements; therefore, it is not an *additional* expenditure. In practice, such programmes will offer more generous support to *some* workers based on identifying needs, including in other industries. Fundamentally, HRBAJTs aim to *avoid* such programmes in future through creating sustainable green jobs and anticipating skills-gaps in advance.

4.3.2 Green jobs programmes

Petroleum's industrial development is instructive for green industries. Norway's petroleum industry is described as "the classic example" of building-up specialist knowledge⁴⁴⁰ as required for green technologies.

After discovering petroleum in the 1970s, parliament agreed the petroleum "ten commandments," establishing "national management and control" to create a domestic industry.⁴⁴¹ To maximise technological and wealth-creating spill-over effects, licenses for foreign developers stipulated establishing onshore activities and using domestic suppliers. 78 percent special corporation taxes recovered costs,⁴⁴² while direct state involvement, through Statoil and later SDFIs, grew through preferential contracting.⁴⁴³ Innovation "would have been impossible without active state policy."⁴⁴⁴ Universities directed research to technological challenges; the Research Council increased its role from the 1990s. Innovations halved costs and opened inaccessible areas. "Co-evolution" between industry, government and research institutions became systematic; entering the 2000s, the Labour Party, LO and regional interests promoted R&D programmes through mobilising political

⁴³⁹ Finansdepartementet, 2013b, p63

⁴⁴⁰ UNIDO, 2009, p84

⁴⁴¹ Austvik, 2011, p8

⁴⁴² Sæther *et al*, 2011, pp377-379

⁴⁴³ Austvik, 2011, p10

⁴⁴⁴ Pöyry, 2012, pp42-43

networks. Furthermore, “symbiotic” relationships exist between companies and suppliers through regional clusters, characterised by specialist labour markets, inter-firm collaboration and increasingly-direct research institution links.⁴⁴⁵

This has ensured Norway has, relative to other petroleum-rich nations, managed petroleum to promote national welfare. Similar approaches could apply to green industries. One state-owned enterprise could, like Statoil for petroleum, drive industry development. Statoil could do this again, especially if returned to state control, which would also facilitate workers’ transitions. Crucially, green industries will not start entirely from scratch. Pöyry estimated “classic” green industries represented 4 percent of GNP in 2008, employing 89,000 (mostly in sustainable transport).⁴⁴⁶ Cluster approaches have already sparked green innovations.⁴⁴⁷ The solar industry is “a global player” thanks to knowledge from the process industry for new petroleum fields and “the same national R&D institutes” that helped develop aluminium.⁴⁴⁸ Environmental R&D programmes already exist, which could be consolidated and targeted towards green industry and job creation.

Petroleum developed as it did because state, capital and labour pulled in the same direction; the crucial process is entangling these social relations and pointing them in a new one. As stressed before, rapid, critical HRBAJTs cannot adopt problem-solving neutrality on states’ role. Duties of rectification and ecological debt insist Norway use part of the wealth it has accrued through not respecting others’ HRs to redress these wrongs. Indeed, *oljefondet* – a near-literal manifestation of ecological debt – was designed to ensure future generations share in petroleum wealth. There is no better way to do this, or repay ecological debt, than by using *oljefondet* to reorganise society, ensuring sustainable HRs enjoyment.

⁴⁴⁵ Sæther *et al*, 2011, pp377-379

⁴⁴⁶ Pöyry, 2012, p23

⁴⁴⁷ Ibid, pp42-43

⁴⁴⁸ Sæther *et al*, 2011, pp379-380

4.3.2.1 Exporting renewables

There is much debate in Norway about exporting renewable energy. Given existing domestic renewables production, for many, renewables only present an opportunity if combined with building international cables.⁴⁴⁹ This might appear, *prima facie*, to tackle climate change while providing green jobs. Nevertheless, there are two deeper issues.

Firstly, generating amounts worth exporting requires large renewable projects and infrastructure across land and sea – threatening other users, aesthetics and *ecology on which HRs themselves depend*, especially biodiversity. Furthermore, as EJ highlights, social injustices often accompany environmental injustices; developments can disproportionately impact already-marginalised communities. Norway would have limited influence over export-related infrastructure abroad. Addressing this involves value judgements. By framing conflicts in human terms, HRBAJTs give a clearer picture of clashing values than cost-benefit approaches (which ignore non-market values) or approaches automatically prioritising local concerns. Principally, HRBAJTs insist on planning development on a broader basis than project-by-project, ensuring a holistic determination of consequences and different forms that developments can take; indeed, costs often cannot “be defended within the framework of individual development[s].”⁴⁵⁰ Local planning through participation can explore how to maximise local benefits (including job creation) of potential developments, shifting debates from *whether* particular *projects* should be built to *how areas* can be developed to enhance HRs. This will not eliminate project-specific conflicts, but HRBAJTs also provide guidance here. Given HRBAJT is based on ecological space, this replaces cost-benefit analyses that judge ecosystems by short-term economic value. Instead, HRBAJTs recognise HRs depend on *globally-interconnected* ecosystems (thus, wider effects of local projects must be considered); furthermore, certain ecosystems and landscapes are protected by cultural and indigenous rights. These must be balanced against HRs improvement engendered by tackling climate change. Prioritisation principles also apply, particularly thresholds (minimum core

⁴⁴⁹ Pöyry, 2010, p6

⁴⁵⁰ Sandgren *et al*, 2007, p22

obligations). One group's thresholds cannot be sacrificed for another's, no matter the contribution made; thresholds give clearer guidance for distinguishing 'trivial' from 'non-trivial' HRs enjoyment.

The second export-related dilemma recognises exported energy *precludes* local production abroad, meaning Norwegian green jobs *prevent* green jobs elsewhere. Local, democratically-controlled energy production can be crucial for long-term, secure HRs access, avoiding energy dependence; decentralisation also reduces transmission wastage and infrastructural intrusions. Localisation envisages people meeting their *own* HRs wherever possible, prioritising provision for need, conforming with equal ecological space, and stressing cooperation over competition. Seeing JT as an opportunity to gain new competitive *advantages* implies this comes at others' *disadvantage*. Norway has already exploited its natural wealth (a geographical accident) at others' expense; repeating this in tackling climate change is incompatible with HRBAJTs.

Norway can create green jobs *without* exporting renewables. 50,000 sustainable transport jobs (through public transport, shifting goods transport from road to rail, and replacing fossil fuels with renewables) could be created over the next 20 years.⁴⁵¹ Energy efficiency is highly labour-intensive, while assisting energy security⁴⁵² and freeing capacity for energy-intensive industries. Government figures show energy efficiency worth 16TWh by 2020 would save NOK 100bn *and* avert controversial power-line projects.⁴⁵³ Renewables should first be directed to domestic energy-intensive industry (with such industry relocating nearer to renewable sources)⁴⁵⁴ or be used in other energy carriers. 10TWh of wind energy can produce solar cells worth 300TWh (Norway's annual energy use).⁴⁵⁵ Regardless, Norway's *potential* comparative advantage could disappear in "a few years" as other states transition quickly.⁴⁵⁶ Exporting renewables should, generally, *assist* others' transitions, prioritising countries incapable of self-sufficiency. Hydropower can also

⁴⁵¹ Ytterstad, 2013, pp40-41

⁴⁵² EC, 2009, pp2-3

⁴⁵³ Rødt, 2011, p23

⁴⁵⁴ Pöyry, 2011, pp30-32

⁴⁵⁵ Norby *et al*, 2011, p53

⁴⁵⁶ Pöyry, 2012, p46

be used to balance fluctuating supply in countries generating wind.⁴⁵⁷ As Fivh suggest, Norway should not be credited for overseas emissions reductions from renewables export;⁴⁵⁸ given ecological debt, the 85 percent target must occur domestically.

Ultimately, exporting renewables goes to the heart of meeting HRs within ecological space, rejecting growth for growth's sake.

4.3.2.2 Overseas emissions

This links to addressing overseas emissions from consumption. WWF has suggested putting an amount equal to Norway's overseas carbon footprint into a fund for climate development initiatives.⁴⁵⁹ This amount could be ring-fenced within *oljefondet*. This meets historical responsibilities through ensuring technological and financial transfers better than border tax adjustments, which could affect HRs in Southern export-dependent industries without necessarily encouraging climate initiatives. However, this is ultimately a problem-solving 'solution.'

From more critical perspectives, reconsideration of a world-system based on trading goods that can be produced locally is required. Fundamental consumption changes are necessary to reduce ecological footprints. However, rather than simply reducing consumers' purchasing power (as Fivh propose),⁴⁶⁰ HRBAJTs should seek positive alternatives to mass consumption. Again, localisation is key, stressing production for need based on local priorities of long-lasting goods with full life-cycle considerations.

4.3.3 Social movements

The above outlines *what* could happen; more important is *how* it happens. HRBAJTs require social mobilisation.

⁴⁵⁷ Ibid, p49

⁴⁵⁸ Hille, 2012, p13

⁴⁵⁹ Reinvang and Peters, 2008, pp3-5

⁴⁶⁰ Hille, 2012, p60

Social movement alliances are gradually developing in Norway. However, it is naïve to suggest are beyond preparatory mobilisation. Nor is the wider context propitious. In September 2013's general election, the current government – responsible for existing deficient policy – is likely to be replaced by a coalition including the climate-sceptical Norwegian Progressive Party.⁴⁶¹ Perhaps, in opposition, current governing parties will adopt more radical policies; with the Labour Party outside government, labour leaders might be more critical of government, including regarding ecology. This could exploit growing divisions within capital and the state – industry and political leaders increasingly question petroleum dependency.⁴⁶² Nonetheless, given required urgency and scale, a HRBAJT appears distant.

Social movement progression often involves small, successive gains, rather than full-scale agenda implementation – in Gramscian terms, more a “war of position” (a “more cultural and informational modality of social transformation”) than “war of manoeuvre.”⁴⁶³ Participants will have different focuses, working separately towards common goals; initial successes occur where mobilisation is advanced. The challenge is ensuring different actors maintain common goals without being sidetracked into narrower campaigns. First steps could see JT proponents unite formally and prioritise mobilising those affected by JT, namely petroleum-dependent workers and communities. This is already happening through ‘Climate Election 2013’ – featuring several unions, environmental organisations and the Norwegian church – intending to make climate change an electoral priority, which has launched the ‘100,000 climate jobs and green workplaces now!’ campaign.⁴⁶⁴ However, social movements must also consider directly building transitions through localised initiatives that improve HRs security while addressing consumption patterns. This is increasingly seen globally, from energy cooperatives⁴⁶⁵ to local food distribution. Such “prefigurative politics”⁴⁶⁶ provide direct participatory experience of sustainable lifestyles,

⁴⁶¹ TV2

⁴⁶² Vermes, 2013

⁴⁶³ el-Ojeili and Hayden, 2006, p181

⁴⁶⁴ Ytterstad, 2013

⁴⁶⁵ Newell *et al*, 2011, pp58-59

⁴⁶⁶ el-Ojeili and Hayden, 2006, p208

cultivate counter-hegemonic constituencies of support and demonstrate the often-abstract vision of a low-carbon future.

5 CONCLUSION

HRs are conspicuously absent from the transition discourse. The HRs and climate change discourse has yet to address counter-hegemonic strands of this discourse, especially JT. JT is a contested normative marker open to problem-solving and critical interpretations. Likewise, a problem-solving, legalistic HRs approach restricts HRs' role in climate and transition discourses, insufficiently addressing climate change's scope and severity. More critical, structural HRs approaches can play a significant role in broadening critical JT strands. Solidarity rights and cosmopolitanist theories reinterpret HRs vis-à-vis changing transnational social forces and institutions, and ecological limits. HRBAs reframe economic development and climate policy in HRs terms, stressing HRs thresholds, disaggregation, participation and accountability. Ultimately, these emphasise that *existing* HRs demand climate action *regardless of other climate agreements*. Thus, HRs' role in JT is to define more clearly what is 'just' in JT, offering clearer normative standards in a broader, internationalist approach that overcomes JT's proneness to vagueness, parochialism and proceduralism; however, where HRs overlook agency, work's centrality, and wider economic structures, JT's critical traditions highlight workers, communities and social movements. Together, HRBAJTs provide a critical analytical framework and basis for action for rapid, effective *and* just transitions.

This framework reveals Norway's contribution to climate-related HRs harms elsewhere, its ecological debt, and how insecure Norway's HRs – dependent on non-renewable resources – are. Climate policy's main contradictions become clear. Firstly, by pushing for stricter climate agreements globally but not confronting petroleum dependency, Norwegian HRs become more insecure. Secondly, Norway is not *transitioning* to a low-carbon society at all; climate initiatives are negated by continued carbon-intensive development. Thirdly, these initiatives are effectively seen as depending on continued petroleum revenues. Fourthly, a short-term, market-orientated, cost-benefit approach ignores structural issues, becoming costlier long-term. Fifthly, recognition that global emissions matter is used to avoid domestic cuts, but ignores global effects of petroleum exports, Statoil and *oljefondet*. Embracing a right to a HRBAJT uses HRs as benchmarks

for societal transformation within ecological limits. This necessitates winding down petroleum while prioritising green jobs. This must confront particular Norwegian dilemmas regarding fundamental economic tenets that sit uncomfortably with the natural realism of equal ecological space. Social movements are currently unprepared for JT, but potential moments for further mobilisation exist, especially through prefigurative projects.

Atmospheric CO2 concentrations passed 400ppm for the first time in human history days before this thesis's completion. The question is not *whether* a new direction is needed, but *what* direction. Combining HRs' normative authority with social movements' muscle could reenergise climate politics. As Hansen suggests, if social movements put Norway "onto a clean energy path, the world would notice."⁴⁶⁷ Current propitious circumstances for reorganising Norwegian society relatively painlessly will not last indefinitely. Delays mean costlier, dramatic transitions. HRBAJTs seek a more positive vision before time elapses. Green jobs provide "a bridge between the immediate needs the majority have" and "the need that every living thing... has to bring down emissions."⁴⁶⁸ Ultimately, the "choice is not jobs or environment, it is neither or both."⁴⁶⁹

As Hansen warns, "there can be no Norwegian exception" to natural realism; renewables "must replace fossil fuels."⁴⁷⁰ It is up to Norwegians whether they do this on their own terms.

⁴⁶⁷ Ytterstad, 2013, p12

⁴⁶⁸ Ibid, p7

⁴⁶⁹ FOE, 1994

⁴⁷⁰ Ytterstad, 2013, p12

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