

JUST TRANSITION FOR HEALTHY PEOPLE ON A HEALTHY PLANET



Health Care

Without Harm

ACKNOWLEDGEMENTS

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Andrea Hurtado Esptein, Health Care Without Harm

Antonella Risso, Health Care Without Harm

Azeeza Rangunwala, groundWork South Africa

Jess Beagley, Global Climate and Health Alliance

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Design and Layout: Subhashish Roy

Cover Photo:

Indigenous women workers carrying coal from Jharia mines in Eastern India.

📷 Amirtharaj Stephen

December 2022

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JUST TRANSITION FOR HEALTHY PEOPLE ON A HEALTHY PLANET

The definition of Just Transition in recent years has been shaped by the political and ideological leanings of multiple stakeholders.¹ Labor movements look at a Just Transition that secures workers' rights and jobs; environmental justice groups include whole communities impacted by fossil fuel in their description; multilateral institutions, investors and transnational corporations see it through lenses of economics, financial support, and investment. However, a perspective on health is missing in all these approaches.

The COVID-19 pandemic has established the importance of health-based planning, making evident the co-dependence of ecological health and human well-being. The debilitating post-pandemic economic crisis has reiterated the interlinkage between economics, public health, and the environment.

The convergence speaks to the need for an urgent, deeper conversation that weaves health into the Just Transition fabric, in a way that centers protecting and improving people's health in a post-fossil fuel society. This document posits that health is the overlapping but missing link between the different movements' dream for Just Transition into an equitable world, and to heal people and the planet damaged by fossil fuels. We need Just Transition that has holistic health systems and accessible health care services at its core.

*Silhouette of children running on
cool ash pond in Korba, Central India.*

© Healthy Energy Initiative, India

¹ Srestha Banerjee, "Defining and Framing Just Transition for India," *International Forum for Environment, Sustainability & Technology (IFOREST)*, November 2021. <https://iforest.global/wp-content/uploads/2021/11/Working-paper-1.pdf>

EVOLUTION AND UNDERSTANDING OF THE CONCEPT OF JUST TRANSITION

The phrase Just Transition comes from the workers' movement in the late 1970's when the U.S. Oil, Chemical, and Atomic Workers Union, led by Anthony Mazzocchi sought support for workers whose jobs were threatened by environmental regulation.² The idea spread rapidly to unions across the West. In the 1990s the union pleaded for a 'superfund' to provide financial support and higher education opportunities for workers in affected industries. By 1997, several U.S. and Canadian unions had endorsed the Just Transition principle(s).

As it began to forge alliances with the labor movements, the environmental justice (EJ) movement took on the concept of Just Transition. The EJ movement's participation ensured that by the late 1990's Just Transition became a foundational concept in the articulation of climate justice.

“ *A Climate Justice approach to solving the global warming problem would, at its core, develop solutions that promoted economic and environmental justice between communities and between nations. Central to this approach is the principle of Just Transition, which would set aside funds to finance the transition for workers and communities dependent on the fossil fuel industry. Such a transition would promote investment, worker training, and community development based on sustainability and justice.* ³



Coal Ash deposits on Buckingham Canal in the Ennore Industrial Cluster, Tamil Nadu.
© Healthy Energy Initiative, India

Beginning with the Kyoto Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in 1997, trade unions and the International Trade Union Confederation (ITUC) started to include Just Transition in their stakeholder statements at global climate and sustainability conferences. In 2002, an international coalition of environmental justice groups gathered at Johannesburg for the Earth Summit and released a set of principles aimed at 'putting a human face' on climate change.

These are known as the *Bali Principles of Climate Justice*.⁴ They intended to redefine climate change from a human rights and environmental justice perspective and included references to Just Transition:

“ *Climate Justice affirms the need for solutions to climate change that do not externalize costs to the environment and communities and are in line with the principles of a Just Transition.*

² Dr. Ajay Gambhir, Fergus Green, and Prof. Peter JG Pearson, "Towards a Just and Equitable Low-Carbon Energy Transition" (Imperial College London Grantham Institute, August 2018), <https://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/26.-Towards-a-just-and-equitable-low-carbon-energy-transition.pdf>.

³ Kenny Bruno, Joshua Karliner, and China Brotsky, "Greenhouse Gangsters vs. Climate Justice" (Transnational Resource and Action Center, November 1999), <https://www.corpwatch.org/sites/default/files/Greenhouse%20Gangsters.pdf>.

⁴ "Bali Principles of Climate Justice" (International Climate Justice Network, August 28, 2002), <https://www.corpwatch.org/article/bali-principles-climate-justice>.

In the past decade, the phrase has been adopted formally by many transnational labor, environmental justice, and climate organizations. In 2013, the International Labour Organization (ILO) adopted a *Resolution concerning sustainable development, decent work and green jobs* which refers to Just Transition.⁵ The ILO, in 2015, published *Guidelines for a Just Transition towards environmentally sustainable economies and societies for all* as a follow up to the resolution.⁶ A 2021 paper published by the World Bank Group refers to these as a set of guidelines that look at labor market policies and cover social protections for a Just Transition.⁷

The concept of Just Transition first made it into an official decision at the UN climate conference at COP16 in 2010 in Cancun.⁸ Countries acknowledged that a vision for long-term cooperative action, among other things,

“Realizes that addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs⁹”

The Preamble to the 2015 Paris Agreement made a commitment to overseeing the requirements of the workforce for a Just Transition and creating jobs in line with the development priorities of nations.¹⁰ At COP24 in 2018 in Poland, the *Solidarity and Just Transition Silesia Declaration* was adopted.¹¹ During COP26 in November 2021 in Glasgow, 14 governments and the European Commission adopted an ambitious Just Transition declaration¹² which aims to provide the framework for an equitable transition to a climate-resilient future. The declaration

“Recognizes that the effects of climate change and of decarbonizing the economy will fall disproportionately on those in poverty or insecure work, those in carbon-intensive industries, and those in fossil-fuel dependent countries and that it risks exacerbating gender, racial, age and other inequalities. It aims to ensure that no one is left behind as the world transitions to a climate-friendly economy.¹³”

5 “Resolution Concerning Sustainable Development, Decent Work and Green Jobs” (International Labour Organization, October 2013), https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_223785.pdf.

6 “Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All” (International Labour Organization, 2015), https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf.

7 Wendy Cunningham and Achim Schmitten, “The Coal Transition: Mitigating Social and Labor Impacts” (World Bank Group, May 2021), <https://doi.org/10.1596/35617>.

8 ACTRAV Bureau for Workers’ Activities, “Just Transition towards Environmentally Sustainable Economies and Societies for All” (International Labour Organization, 2018), https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_647648.pdf.

9 “Report of the Conference of the Parties on Its Sixteenth Session, Held in Cancun from 29 November to 10 December 2010” (United Nations Framework Convention on Climate Change, March 15, 2011), <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>.

10 “The Paris Agreement” (United Nations Framework Convention on Climate Change (UNFCCC), 2016), https://unfccc.int/sites/default/files/resource/parisagreement_publication.pdf.

11 United Nations Framework Convention on Climate Change, “Solidarity and Just Transition Silesia Declaration,” 2018, <https://cop24.gov.pl/presidency/initiatives/just-transition-declaration/>.

12 United Nations Framework Convention on Climate Change, “Supporting the Conditions for A Just Transition Internationally,” ukcop26, 2021, <https://ukcop26.org/supporting-the-conditions-for-a-just-transition-internationally/>.

13 ibid 12.

At COP27 in November 2022 in Sharm-el-Sheikh a decision “to establish a work programme on just transition for discussion of pathways to achieving the goals of the Paris Agreement outlined in Article 2...” was taken and it was also decided “to convene, as part of the work programme on just transition, an annual high- level ministerial round table on just transition, beginning at its fifth session”.

The “Sharm el-Sheikh Implementation Plan” asserts that Just Transition is founded on Social Dialogue. It

“ *Emphasizes that just and equitable transition encompasses pathways that include energy, socioeconomic, workforce and other dimensions, all of which must be based on nationally defined development priorities and include social protection so as to mitigate potential impacts associated with the transition, and highlights the important role of the instruments related to social solidarity and protection in mitigating the impacts of applied measures.*¹⁴



Tractor seen leveling a coal ash pond of the thermal power plant cluster in Korba, Central India.

© Healthy Energy Initiative, India

The ambit of a Just Transition has evolved in recent years to acknowledge its macroeconomic impacts beyond direct and indirect job losses. A report by the Just Transition Centre, initiated in 2016 by ITUC and partners, stresses that Just Transition is a deliberate effort to plan for and invest in a transition to environmentally and socially sustainable jobs, sectors, and economies.¹⁵ In the context of developing countries, ITUC’s framing of Just Transition is also helpful:

“ *An economy-wide process that produces the plans, policies, and investments that lead to a future where all jobs are green and decent, emissions are at net zero, poverty is eradicated, and communities are thriving and resilient.*¹⁶

Similar definitions come from the Labour Network for Sustainability, which emphasizes that

“ *Those most vulnerable to change will be protected. It means that the process of change will increase social justice for workers, women, the poor, and all oppressed groups.*¹⁷

Environmental and climate justice groups today insist that Just Transition should entail a host of strategies

“ *To transition whole communities, to build thriving economies that provide dignified, productive and ecologically sustainable livelihoods, and increase democratic governance and ecological resilience.*¹⁸

¹⁴ United Nations Framework Convention on Climate Change. https://unfccc.int/sites/default/files/resource/cma4_auv_2_cover_decision.pdf.

¹⁵ Samantha Smith et al., “Just Transition: A Report for the OECD” (Just Transition Centre, May 2017), <https://www.oecd.org/environment/cc/g20-climate/collapsecontents/Just-Transition-Centre-report-just-transition.pdf>.

¹⁶ “Just Transition - Where Are We Now and What’s next” (International Trade Union Confederation, 2017), https://www.ituc-csi.org/IMG/pdf/ituc_climate_justice_frontline_briefing_2017.pdf.

¹⁷ *ibid* 1.

¹⁸ *ibid* 1.

Multilateral institutions such as the World Bank, on the other hand, have articulated a vision for a Just Transition through the economic lens that includes measures from mine closure and land reclamation to financial support and diversification.¹⁹ A 2021 analysis of this stance by the International Forum for Environment, Sustainability & Technology (iFOREST) suggests that the World Bank's

“ *Observations are more focused on what is needed for facilitating a Just Transition, and not much on outputs and impacts.*²⁰

Many governments and financial institutions have started actively integrating Just Transitions into their climate policies. In 2020, 450 public development banks, as part of their strategy to build back better, pledged to take note of the importance of a transition that is just, inclusive and rights-based.²¹ However, critics find such adoption superficial, given that post-pandemic economic recovery plans are primarily focused on increasing fossil fuel production and engaging in processes that are highly destructive to the environment and communities.²²

The burning of fossil fuels is the largest contributor to climate change. With extreme temperatures, heat stress, water scarcity, rainfalls and floods and droughts that are being experienced globally it is undeniable that the climate crisis is the single largest threat to all life forms. As it affects air, water, food, shelter, and security – all the basics on which the human life depends, the climate crisis is also a health crisis, and one that affects all stakeholders demanding the transformation into a post-fossil fuel society. Measures to avert the ensuing crisis can only be achieved with every effort at Just Transition integrating public health into its demands.



Boiler area of Tamil Nadu's Neyveli thermal power plant in the evening light.
© Amirtharaj Stephen

¹⁹ “Managing Coal Mine Closure: Achieving a Just Transition for All,” Working Paper (World Bank Group, 2018), <https://documents1.worldbank.org/curated/en/484541544643269894/pdf/130659-REVISED-PUBLIC-Managing-Coal-Mine-Closure-Achieving-a-Just-Transition-for-All-November-2018-final.pdf>.

²⁰ *ibid* 1.

²¹ Nick O'Donohoe, “Developing a Finance Roadmap for the Just Transition in South Africa and India,” *Grantham Research Institute at LSE* (blog), February 10, 2021, <https://www.lse.ac.uk/granthaminstitute/news/developing-a-finance-roadmap-for-the-just-transition-in-south-africa-and-india/>.

²² Fiona Harvey, “Revealed: Covid Recovery Plans Threaten Global Climate Hopes,” *The Guardian*, November 9, 2020, <https://www.theguardian.com/environment/2020/nov/09/revealed-covid-recovery-plans-threaten-global-climate-hopes>; People gather before a coal power plant in Meulaboh, Indonesia's Aceh province on Sep 5, 2021. (Photo: AFP/ Chaideer Mahyuddin), Denny Gunawan, and Elisa Wahyuni, “Commentary: Indonesia's COVID-19 Recovery Plan Relies on Dirty Energy,” *Channel News Asia*, August 22, 2022, <https://www.channelnewsasia.com/commentary/indonesia-energy-fossil-fuel-subsidy-renewable-climate-change-2891186>; Charlotte Howes, “G20 Backtracks on Fossil Fuel Funding Phase-Out in COVID-19 Recovery,” ODI, n.d., <https://odi.org/en/press/g20-backtracks-on-fossil-fuel-funding-phase-out-in-covid-19-recovery/>; Inger Andersen and Måns Nilsson, “Production Gap Report 2021” (United Nations Environment Programme, October 20, 2021), <https://productiongap.org/2021report/>.

PRINCIPLES OF JUST TRANSITION FOR HEALTHY PEOPLE ON A HEALTHY PLANET

It is essential to ensure that the socially and economically unjust patterns of a fossil fuel-powered economy are not repeated while envisioning a Just Transition to a low-carbon economy. Integrating public health into this framework can contribute to a democratized vision of a Just Transition that is tightly bound to community health, social equity, and planetary survival. To accomplish this, Just Transition needs to be examined from a service systems perspective – one that emphasizes health care and wellbeing. This will ascertain the interlinkages between human health and planetary health, social well-being, prosperity, justice, and equity.

Based on this approach, Health Care Without Harm proposes six principles and a set of accompanying positions for Just Transition that focus on public health. At Health Care Without Harm, we believe that these are key issues to address and by framing conversations around both human and environmental health, we can help bring communities and workers together.

1. A Just Transition provides alternative employment and adequate training and assures rate retention and the right to unionize for all workers migrating from polluting industries.

- a. Value chains and local economies:** From extraction, production, transportation, and disposal, the fossil fuel sector provides direct and indirect employment to many throughout its value chain. The fossil fuel industry also directly or indirectly supports many aspects of the local economy. The shutting down of fossil fuel-based industries disrupts local economies, causes the loss of contracted and permanent employment, and leaves the dependent community in limbo. Even if the current jobs in the fossil fuel sector are often high-risk and exploitative, with low wages, insufficient training, and minimal social coverage, a transition puts workers, including their health, at risk due to the lack of alternatives. Contracted workers, who do not enjoy the same benefits as the permanent workforce, are even more vulnerable to the transition. A shift away from fossil fuels would impact local economies, cause the loss of significant formal and informal jobs, and affect small enterprises.



Position: Any strategy for Just Transition of workers must take into consideration its impact across the value chain and on local informal economies. It should include the creation of alternate employment opportunities, provision of skills training, restoring local environments, renewing sustainable practices, and reviving traditional livelihoods such as farming or fishing.

Young women from the local community engaged in handling fly ash for making fly ash bricks without protective equipment in Korba, Central India.

📷 Healthy Energy Initiative, India

b. Workers' health: In addition to the usual conversation about alternatives to fossil fuel-based jobs, it is imperative to bear in mind that such economies have a massive impact on workers' health. For example, according to the existing data for coal mine workers,

“Exposure to coal mine dust causes various pulmonary diseases, including coal workers' pneumoconiosis (CWP) and chronic obstructive pulmonary disease (COPD). Coal miners are also exposed to crystalline silica dust, which causes silicosis, COPD, and other diseases. These lung diseases can bring about impairment, disability, and premature death.”²³

Similarly, workers engaged in refineries are at risk of a variety of physical and chemical occupational hazards. According to a new report by the International Agency for Research on Cancer (Banerjee 2021), part of the World Health Organization (WHO),

“People working in the petroleum industry or living near petroleum facilities are at increased risk of developing several different cancer types.”²⁴

Scientists in the Environment and Lifestyle Epidemiology Branch of the agency carried out 41 cohort studies, 14 case-control studies, and two cross-sectional studies to compile their review.

“The review identified an increased risk of mesothelioma, skin melanoma, multiple myeloma, and cancers of the prostate and urinary bladder, and conversely, decreased risk of cancers of the oesophagus, stomach, colon, rectum, and pancreas. Offshore petroleum work was associated with an increased risk of lung cancer and leukemia.”²⁵



Position: Any strategy for creating jobs in a low-carbon economy must factor in the current employment's health impacts on the workers. This will help plan suitable retirement and compensation packages for those who may not be able to retrain or reskill to switch jobs owing to poor health.

Environmental organisations protest in front of Pretoria High Court on the first day of the Deadly Air case hearing – 17 May 2021.

© Daylin Paul for Centre for Environmental Rights, South Africa

²³ Department of Health and Human Services, Centers for Disease Control and Prevention, and National Institute for Occupational Safety and Health, “Coal Mine Dust Exposures and Associated Health Outcomes: A Review of Information Published Since 1995,” April 2011, <https://www.cdc.gov/niosh/docs/2011-172/pdfs/2011-172.pdf>.

²⁴ Felix M Onyije et al., “Cancer Incidence and Mortality among Petroleum Industry Workers and Residents Living in Oil Producing Communities: A Systematic Review and Meta-Analysis,” *International Journal of Environmental Research and Public Health* 18(8):4343 (April 2020), <https://doi.org/10.3390/ijerph18084343>.

²⁵ Health, “Increased Cancer Risk for Petroleum Industry Workers and People Living near Plants: New UN Study,” *United Nations News* (blog), April 29, 2021, <https://news.un.org/en/story/2021/04/1090912>.

2. A Just Transition protects people's right to health, recognizing that adequate wage and social support but even more so, a clean environment is integral to realizing this right.

a. Restoration of community health: Most fossil fuel reserves are under rich forests and in the watershed regions, where activities like mining and land dispossession produce profound inequalities within Indigenous communities, eroding traditional egalitarian values. Communities living in and around coal mines, oil and gas wells, and coal plants pay the social, ecological, and economic costs of our addiction to fossil fuels – in the last few years, opposition from residents to fossil fuel projects has intensified due to land seizures²⁶ air pollution impacts, fly ash contamination of groundwater, the effect of thermal discharges on fisheries, displacement of communities, and debilitating health impacts.²⁷

Communities dependent on fossil fuel-based assets bear the brunt of the associated health hazards.²⁸ The toxic discharges from the petrochemical industries, too, are highly detrimental to human health. Several studies have shown that communities living in the vicinity of such facilities suffer from several adverse health impacts including cancers, endocrine, and reproductive disorders, congenital disabilities, etc.^{29,30}

Numerous studies show that “there is consistent evidence of the association of coal mining with a wide spectrum of diseases in populations resident or in the proximity of the mining activities.”³¹

Position: *As part of a Just Transition, long-term community health and environment monitoring, and mitigation measures accessible to all must be put in place at a cost to the polluting companies.*

b. Remediation of the environment: The fossil fuel economy significantly impacts natural resources such as land, water, and air. For example, coal mining, particularly open-cast mining adversely changes the landform by creating large pits and overburden mounds. Loss of forests and biodiversity is also commonly seen with coal-related projects; the combustion of coal in thermal power plants causes emissions and affects the air quality of the surrounding

²⁶ Leah Temper et al., “Movements Shaping Climate Futures: A Systematic Mapping of Protests against Fossil Fuel and Low-Carbon Energy Projects,” *Environmental Research Letters*, 123004, 15, no. 12 (December 2020): 23, <https://doi.org/10.1088/1748-9326/abc197>.

²⁷ US Scientists, “Hundreds of Scientists Tell Biden: Halt Fossil Fuel Development Now,” October 7, 2021, https://www.biologicaldiversity.org/programs/climate_law_institute/pdfs/An-Open-Letter-from-US-Scientists-Imploring-President-Biden-to-End-the-Fossil-Fuel-Era.pdf.

²⁸ “Mining Operations Put Chattisgarh Tribals at High Risk of Respiratory Infection: Study,” *The Hindu*, November 21, 2020, <https://www.thehindu.com/news/national/other-states/mining-operations-put-chattisgarh-tribals-at-high-risk-of-respiratory-infection-study/article33146161.ece>.

²⁹ Chu-Ling Yu et al., “Residential Exposure to Petrochemicals and the Risk of Leukemia: Using Geographic Information System Tools to Estimate Individual-Level Residential Exposure,” *American Journal of Epidemiology* 164, no. 3 (August 1, 2006): 200–207, <https://doi.org/10.1093/aje/kwj182>; “Human Health in Areas with Industrial Contamination” (World Health Organization Regional Office for Europe, 2014), <https://apps.who.int/iris/bitstream/handle/10665/144490/9789289050050-eng.pdf?sequence=1&isAllowed=y>.

³⁰ Felix M Onyije et al., “Cancer Incidence and Mortality among Petroleum Industry Workers and Residents Living in Oil Producing Communities: A Systematic Review and Meta-Analysis”, <https://pubmed.ncbi.nlm.nih.gov/33923944/>.

³¹ Cortes-Ramirez, J., Naish, S., Sly, P.D. et al. Mortality and morbidity in populations in the vicinity of coal mining: a systematic review. *BMC Public Health* 18, 721 (2018). <https://doi.org/10.1186/s12889-018-5505-7>.

regions, also resulting in the creation of large ash ponds. Coal mining and its usage in thermal power plants, and other ancillary processes, also depletes and pollutes water sources. Studies have shown toxic contamination of regions around coal mines and power plants as well as the contamination of air, water, and soil from toxins emitted from oil and gas facilities.³² These toxins remain in the environment for decades after mine closure and continue to contaminate the air, water, soil, lakes, and rivers and adversely affect human health.

Position: *A Just Transition plan must include demands for remediation of contaminated sites around mines, power plants, and refineries, redressal of health impact caused, and cleanup of the local environment at the cost of the polluter.*

3. A Just Transition prioritizes people's social, physical, and mental well-being and leaves no one behind.

a. Social investment and public infrastructure:

'Development' and 'Industrialization to create employment' are usually the guises under which companies set up shop in mineral rich areas historically owned by marginalized communities. Infrastructure such as schools, hospitals, roads, water supply, etc., to improve quality of life are promises made by industries to populations that often live outside the orbit of government services. In many such communities, the industry takes over the state's responsibility to provide such services, and in cases become the largest contributors to state revenue as income from royalties on mining, coal pensioners, direct and indirect employment, and charitable spending. The loss of such revenue could impact existing state finances and public spending and worsen regional inequities and a Just Transition should be managed so that the social and physical infrastructure created by the industry is maintained, used, and upgraded.



27 year old Lefa Terrance Pelican Mnisi from Witbank, Emalahleni in the Mapulanga region of South Africa suffers from chronic asthma since moving to the locality near the mines. Smoke and dust due to explosions the mine continue to maim him, and thousands of residents in the vicinity.

📷 Daylin Paul for Centre for Environmental Rights, South Africa

Position: *Just Transition provides an opportunity to assess existing public spaces and social infrastructure. This must translate into upgradation to match emerging needs, securing the funds required for upkeep, enabling access, encouraging usage, community ownership, and participatory management of facilities.*

³² Fang Li et al., "Impact of the Coal Mining on the Spatial Distribution of Potentially Toxic Metals in Farmland Tillage Soil," *Scientific Reports* 8 (2018), <https://doi.org/10.1038/s41598-018-33132-4>; "Environmental Impact of the Petroleum Industry," *Hazardous Substance Research Centers/South & Southwest Outreach Program.*, June 2003, <https://cfpub.epa.gov/ncer/abstracts/index.cfm/fuseaction/display/files/fileID/14522>.

b. Gender equity and pay parity: The marginalization of communities and the disruption of social systems caused by the fossil fuel industry has a multiplier impact on women, making gender justice a casualty in fossil fuel-led economic projects.³³ Although contentious, it is a fact that the social role of women in communities across the world has mainly been pre-defined as caregivers, nurturers, and providers (of services). The ILO also estimates that women continue to be overrepresented in unpaid household and care work, often working longer hours per day than men when paid and unpaid work are considered.³⁴ The increased competition over deteriorating resources like food and water in fossil fuel-impacted communities has translated into the further marginalization of women, who, as providers, are also expected to sacrifice their share for the betterment of the family unit.

According to the Gender Policy Report 2021 - “a growing body of scientific research and women’s first-hand accounts document a myriad of links between the fossil fuels and threats to the health and safety of African American/Black/African Diaspora, Indigenous, Latina/Chicana, and low-income women. These effects include environmental racism, breaches to Indigenous rights, pollution, heat islands, fertility issues, ‘man camps’ and mental health impacts, as well as the unequal caretaking role that women play across the United States, Canada and globally.”³⁵ Similarly, experts and organizations across India note that “wherever mining operations take place, there is an uptick in cases of sexual violence against women and trafficking.”³⁶

IndustriALL’s first global network meeting for women in mining, held in 2021, noted that

*The abuse of women working in the mines is driven by a toxic masculinity culture. Gender-based violence, both physical and verbal, is prevalent. Women face sexism and sexual harassment on a daily basis; 40 percent of women mine workers surveyed in Canada had experienced unacceptable behavior like sexist remarks or unappropriated touching; women miners have been raped and killed in South African mines. Although some mining companies have developed policies, little action is taken to protect women workers, with some companies turning a blind eye to the reported cases.*³⁷

Position: A Just Transition framework must challenge power structures, contest gender norms, ensure social and sexual health protection, involve historically marginalized constituencies in decision making processes and ensure pay parity.

³³ Isabell Braunger and Paula Walk, “Power in Transitions: Gendered Power Asymmetries in the United Kingdom and the United States Coal Transitions,” *Energy Research & Social Science* 87 (May 1, 2022): 102474, <https://doi.org/10.1016/j.erss.2021.102474>.

³⁴ Rishabh Kumar Dhir, “Gender, Labour and a Just Transition towards Environmentally Sustainable Economies and Societies for All” (International Labour Organization, November 7, 2017), https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/publication/wcms_592348.pdf.

³⁵ Swift J. Fossil Fuel Extraction Endangers Women’s Health and Safety. Who Is Accountable? [Internet]. Gender Policy Report. 2021 [cited 2022 Aug 26]. Available from: <https://genderpolicyreport.umn.edu/fossil-fuel-extraction-endangers-womens-health-and-safety-who-is-accountable/>.

³⁶ Mayank Aggarwal. Ignored and invisible: The burden of mining on women [Internet]. Mongabay-India. 2021 [cited 2022 Aug 26]. Available from: <https://india.mongabay.com/2021/01/ignored-and-invisible-the-burden-of-mining-on-women/>.

³⁷ “Women Miners Confronting Gender Inequality Together” (IndustriALL Global Union, May 28, 2021), <https://www.industrialunion.org/women-miners-confronting-gender-inequality-together>.

c. Social disruptions and mental health: Poor mental health in workers of fossil fuel industries, especially coal mining is commonplace.³⁸ This stems often from the precarity of their jobs and chronic illness that set in because of the nature of work. For those dispossessed of their land, livelihoods, and resources, the social and economic disruption caused by industries negatively impacts mental health.³⁹ Though industries and policymakers rarely acknowledge this, researchers have a term for environmentally induced distress and disenfranchisement from traditional ways of life – solastalgia.⁴⁰ While a Just Transition should enable ways to tackle the mental ill-health in polluted impacted communities,⁴¹ it also needs to prepare for the mental health crisis that may be the outcome of severing or moving away from long-term associations that communities have with industries - transition can cause an economic disruption that could go much beyond job losses and result in a myriad of mental health issues among residents leading to increased cases of alcoholism, substance abuse and domestic violence.⁴²

Position: *A Just Transition must address the mental health impact of extractive and polluting industries as well as that of transformative change ensuring that adequate health infrastructure, mechanisms for care, community support and means of recovery are available to all.*

4. A Just Transition must include a transition in the health care sector and invests in low-carbon, climate-resilient public health care infrastructure and services that are anchored by communities and accessible to all.

The health care sector, which is 10% of the world GDP, will have to prepare for the dislocation and migration that will result from a Just Transition. It becomes important then, to prepare for a Just Transition while keeping in mind that the health care sector too will have to step up - there will be challenges that come with such a major change despite the positive health outcomes of transitioning to a fossil-free economy.⁴³

³⁸ Drew Harris et al., “Characterization of Mental Illness Among US Coal Miners,” *JAMA Network Open*, e2111110, 4, no. 5 (May 2021), <https://doi.org/10.1001/jamanetworkopen.2021.11110>.

³⁹ Paige Cordial, Ruth Riding-Malon, and Lips Hilary, “The Effects of Mountaintop Removal Coal Mining on Mental Health, Well-Being, and Community Health in Central Appalachia,” *Ecopsychology* 4 (September 2012): 201–8, <https://doi.org/10.1089/eco.2012.0032>.

⁴⁰ Glenn Albrecht et al., “Solastalgia: The Distress Caused by Environmental Change,” *Australasian Psychiatry* 15, no. sup1 (January 1, 2007): S95–98, <https://doi.org/10.1080/10398560701701288>.

⁴¹ Clayton Aldern, “Mountaintop Removal Country’s Mental Health Crisis,” *Grist*, February 17, 2016, sec. Climate + Climate & Energy, <https://grist.org/climate-energy/mountaintop-removal-countrys-mental-health-crisis/>.

⁴² Ken Silverstein, “Coal-Dependent States Lose Jobs And Gain Drug Addiction. What To Do?,” *Forbes*, January 3, 2016, sec. Energy, <https://www.forbes.com/sites/kensilverstein/2016/01/03/coal-dependent-states-lose-jobs-and-gain-drug-addiction-what-to-do/?sh=5a095b72645f>; Katy Bennett, “A Time for Change? Patriarchy, the Former Coalfields and Family Farming,” *Sociologia Ruralis* 44, no. 2 (April 1, 2004): 147–66, <https://doi.org/10.1111/j.1467-9523.2004.00268.x>; Jane H. Roberts, “Structural Violence and Emotional Health: A Message from Easington, a Former Mining Community in Northern England,” *Anthropology & Medicine* 16, no. 1 (April 1, 2009): 37–48, <https://doi.org/10.1080/13648470802425948>.

⁴³ Health and Climate Network, “A Just Energy Transition for a Healthy Fossil Fuel Free World,” September 2022, <https://healthandclimatenetwork.org/a-just-energy-transition-for-a-healthy-fossil-fuel-free-world/>.

Just Transition is possible when we change the current systems that place profit over ecological sustainability, health, and well-being. We must build systems that benefit everyone, especially the vulnerable and the poor. We must recognize the political, social, and economic factors that dictate how health and illnesses move through communities as part of the transition. Communities impacted by fossil fuel industries not only suffer a disproportionate burden of diseases⁴⁴ but also have limited access to adequate health infrastructure to mitigate their health impacts.⁴⁵ In addition, the uncertainty of climate-related extreme weather events adds another layer of complexity to health care access in fossil fuel industrial regions. A Just Transition in the health care sector needs to bear the above in mind while itself moving away from its dependence on fossil fuels, cutting down emissions, and becoming climate resilient.



A community health centre in the village of Katghora that is near the coal mines and thermal power cluster in Korba, Central India.

© Healthy Energy Initiative, India

Position: A Just Transition must prepare the health care sector for transitioning so it can cater to many people in a low-carbon economy who are likely to be dislocated or migrated. The health sector can reduce its greenhouse gas emissions by decarbonizing its facilities and supply chain, thereby making significant contributions to a healthy climate. A Just Transition sees investment in local solutions such energy-efficient, climate-friendly cold chains for vaccine delivery, microgrids that run on clean, renewable energy, and sustainable and healthy food production.

A Just Transition must work toward the ‘Health in All Policies’ approach which prioritizes the health and well-being of people and communities, by taking note of existing health inequities among populations, and developing strong health systems and climate-resilient health infrastructure. A Just Transition must ensure that the health sector, together with a series of preventative health protection and promotion measures, helps foster community health and become a pillar holding up the transition.

⁴⁴ Marina Wetzlmaier, “Cultural Impacts of Mining in Indigenous Peoples’ Ancestral Domains in the Philippines,” *ASEAS - Austrian Journal of South-East Asian Studies* 5 (2) (2012): 335–44, <https://doi.org/10.4232/10.ASEAS-5.2-9>.

⁴⁵ Srestha Banerjee, “Korba: Planning a Just Transition for India’s Biggest Coal and Power District” (International Forum for Environment, Sustainability & Technology (iFOREST), 2022), <https://iforest.global/wp-content/uploads/2022/02/Korba-Report.pdf>.

5. A Just Transition revises the distortions of the fossil fuel industry on culture and history especially those of racial or ethnic minority peoples, resources the rebuilding of that which was destroyed by its grip and repairs historical injuries.

Indigenous peoples and other rural or remote populations often bear a social and cultural cost in the form of the loss of community and cultural identities, in addition to the environmental and health cost of extractive industries. In a recently held Permanent Forum on Indigenous Issues, speakers highlighted the irreparable harm to indigenous cultures, languages, lives caused by extractive projects.⁴⁶ Studies in the Philippines on the cultural impacts of mining on the indigenous people highlight that

“Mining is a source of conflict that affects indigenous ancestral domains, the protection of cultural heritage, and of natural resources. Traditional concepts and values of indigenous communities tend to erode when socio-economic realities force people to look for alternative sources of livelihood and when power relations within communities change.”⁴⁷

Position: A Just Transition to a low-carbon system must address the historical and cultural injustices of the fossil fuel sector on the communities, especially the Indigenous Peoples, and must account for preserving cultural identity, repairing forests, fisheries, and agricultural economies, and handing back power to affected communities to manage and make decisions about their local environments.

Aerial view of the abandoned houses in the village of Seppakam, located near the 1000 acre large ash pond of North Chennai thermal power station in the Ennore Industrial cluster in Tamil Nadu.

📷 Ishaan Tankha


⁴⁶ SDGs, “Extractive Projects Cause Irreparable Harm to Indigenous Cultures, Languages, Lives, Speakers Tell Permanent Forum,” *United Nations News* (blog), April 25, 2022, <https://news.un.org/en/story/2022/04/1116902>

⁴⁷ Marina Wetzlmaier, “Cultural Impacts of Mining in Indigenous Peoples’ Ancestral Domains in the Philippines.”

6. A Just Transition recognizes the pitfalls of extractive culture, providing means to explore decentralized, diverse, low-carbon, climate-resilient economies centered around population health and health care.

The fossil fuel industry thrives on existing socio-economic divisions and benefits by further marginalizing impoverished communities. Regions rich in fossil reserves have seen the least amount of social and economic progress even though fossil fuel industries established their operations with promises of growth, development, and employment. The fossil fuel-based economy has primarily resulted in the centralized control of resources, exclusion of the pollution impacted communities from decision-making, and their further marginalization. Globally, the fossil fuel economy has thrived at the cost of other indigenous livelihood-generating activities such as farming and fishing. The local community and vulnerable sections of society, such as the indigenous peoples, landless workforce, and women, often suffer the impacts along the fossil fuel value chain but accrue minimal benefits from it and are not part of the Just Transition conversations.

Position: *The Just Transition conversation must build leadership among marginalized and vulnerable populations most affected by the fossil fuel industry. The conversation deliberately creates space for marginalized communities to lead the discussion and explores decentralized and distributive ownership models of renewable energy generation and low-carbon economic options.*



Coal ash and rubble near Waya Waya - an informal settlement in Phola, Mpumalanga, South Africa.

📷 Daylin Paul for Centre for Environmental Rights, South Africa

SNAPSHOT OF THE PRINCIPLES AND POSITIONS

1. **A Just Transition provides alternative employment and adequate training and assures rate retention and the right to unionize for all workers migrating from polluting industries**

Position:

- a. Any strategy for Just Transition of workers must take into consideration its impact across the value chain and on local informal economies. It should include the creation of alternate employment opportunities, provision of skills training, restoring local environments, renewing sustainable practices, and reviving traditional livelihoods such as farming or fishing.
- b. Any strategy for creating jobs in a low-carbon economy must factor in the current employment's health impacts on the workers. This will help plan suitable retirement and compensation packages for those who may not be able to retrain or reskill to switch jobs owing to poor health.

2. **A Just Transition protects people's right to health, recognizing that adequate wage and social support but even more so, a clean environment is integral to realizing this right.**

Position:

- a. As part of a Just Transition, long-term community health and environment monitoring, and mitigation measures accessible to all must be put in place at a cost to the polluting companies.
- b. A Just Transition plan must include demands for remediation of contaminated sites around mines, power plants, and refineries, redressal of health impact caused, and cleanup of the local environment at the cost of the polluter.

3. **A Just Transition prioritizes people's social, physical, and mental well-being and leaves no one behind.**

Position:

- a. Just Transition provides an opportunity to assess existing public spaces and social infrastructure. This must translate into upgradation to match emerging needs, securing the funds required for upkeep, enabling access, encouraging usage, community ownership, and participatory management of facilities.
- b. A Just Transition framework must challenge power structures, contest gender norms, ensure social and sexual health protection, involve historically marginalized constituencies in decision making processes and ensure pay parity.
- c. A Just Transition must address the mental health impact of extractive and polluting industries as well as that of transformative change ensuring that adequate health infrastructure, mechanisms for care, community support and means of recovery are available to all.

4. A Just Transition must include a transition in the health care sector and invests in low-carbon, climate-resilient public health care infrastructure and services that are anchored by communities and accessible to all.

Position:

A Just Transition must prepare the health care sector for transitioning so it can cater to many people in a low carbon economy who are likely to be dislocated or migrated. The health sector can reduce its greenhouse gas emissions by decarbonizing its facilities and supply chain, thereby making significant contributions to a healthy climate. A Just Transition sees investment in local solutions such energy-efficient, climate-friendly cold chains for vaccine delivery, microgrids that run on clean, renewable energy, and sustainable and healthy food production.

A Just Transition must work toward the ‘Health in All Policies’ approach which prioritizes the health and well-being of people and communities, by taking note of existing health inequities among populations, and developing strong health systems and climate-resilient health infrastructure. A Just Transition must ensure that the health sector, together with a series of preventative health protection and promotion measures, helps foster community health and become a pillar holding up the transition.

5. A Just Transition revises the distortions of the fossil fuel industry on culture and history especially those of racial or ethnic minority peoples, resources the rebuilding of that which was destroyed by its grip and repairs historical injuries.

Position:

A Just Transition to a low-carbon system must address the historical and cultural injustices of the fossil fuel sector on the communities, especially the Indigenous Peoples, and must account for preserving cultural identity, repairing forests, fisheries, and agricultural economies, and handling back power to affected communities to manage and make decisions about their local environments.

6. A Just Transition recognizes the pitfalls of extractive culture, providing means to explore decentralized, diverse, low-carbon, climate-resilient economies centered around population health and health care.

Position:

The Just Transition conversation must build leadership among marginalized and vulnerable populations most affected by the fossil fuel industry. The conversation deliberately creates space for marginalized communities to lead the discussion and explores decentralized and distributive ownership models of renewable energy generation and low-carbon economic options.

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