

## **Submission to the COP30 Presidency Roadmap for Transitioning Away from Fossil Fuels**

10 April 2026

The Global Initiative for Economic, Social and Cultural Rights (GI-ESCR) welcomes the opportunity to contribute to the COP30 Presidency in its effort to develop the Roadmap for Transitioning Away from Fossil Fuels. In response to the call for submissions on the COP30 Presidency Roadmap for Transitioning Away from Fossil Fuels in a Just, Orderly and Equitable Manner, we present the *Guiding Principles for Gender Equality and Human Rights in the Energy Transition*,<sup>1</sup> for these to be embedded into the design and implementation of the Roadmap.

The *Guiding Principles* provide a normative framework to guide the transformation of energy systems in a manner consistent with international human rights law<sup>2</sup> and gender equality. These seek to ensure that the transition away from fossil fuels is not only rapid and effective in addressing climate change, but also fair, inclusive and grounded in respect for human rights. The Principles clarify how States' obligations to respect, protect and fulfil human rights apply to the transformation of energy systems. This includes obligations to prevent foreseeable harms linked to climate change, reduce emissions through the phase-out of fossil fuels, and ensure that mitigation measures do not disproportionately harm marginalised groups.

As countries work to operationalise the commitment under the COP28 outcome to transition away from fossil fuels in energy systems, the Roadmap presents a critical opportunity to ensure that this transformation is grounded in international human rights norms and standards and advances substantive gender equality. Embedding these standards in the Roadmap would help translate the political commitment to a “just, orderly and equitable transition” into clear governance principles that countries can apply when designing transition pathways, helping to identify and address key barriers to the transition, strengthening governance and participation, and ensuring that the shift away from fossil fuels does indeed contribute to equitable, inclusive and sustainable development across diverse national contexts.

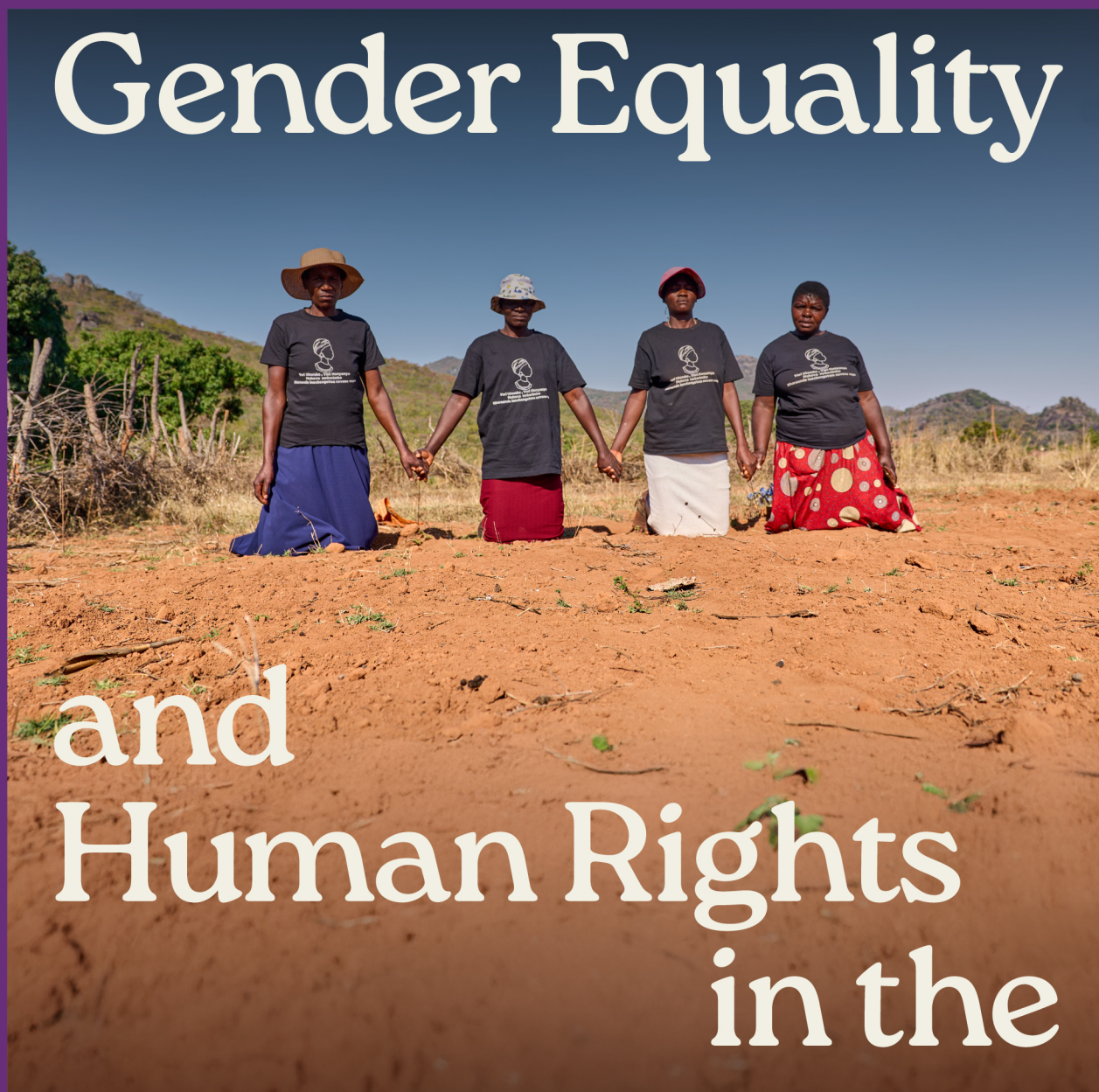
**Contact:** Magdalena Rochi, Programme Officer on Climate and Environmental Justice, [maggie@gi-escr.org](mailto:maggie@gi-escr.org)

---

<sup>1</sup> The Guiding Principles for Gender Equality and Human Rights in the Energy Transition are annexed to this submission.

---

# Principles for Gender Equality



and  
Human Rights  
in the

# Energy Transition



The foregoing Principles for Gender Equality and Human Rights in the Energy Transition are a collective and continued effort spearheaded by the Global Initiative for Economic, Social and Cultural Rights. These were developed between 2024 and 2025 through a series of online consultations, an in-person workshop that took place at the 15th AWID International Forum and rounds of revision with activists, practitioners and experts from around the world. This current version is the third draft of the Principles.

These Guiding Principles must be understood interdependently and in a holistic and systemic manner, avoiding selective application of individual principles or establishing hierarchies among them. Their implementation requires careful attention to power dynamics and context. Moreover, these Principles were designed to guarantee that the energy transition is implemented in a way that respects and advances human rights and gender equality. Thus, their objective must also be considered when interpreting them to avoid any potential weaponisation. These Principles are intended to empower affected communities and support genuine self-determination in energy transitions, with their application guided by the voices and priorities of those most directly impacted rather than serving as instruments for advancing external economic interests.

---

# Index

---

<b>Introduction</b>	<b>1</b>
<hr/>	
<b>Structure and Interpretation Note</b>	<b>3</b>
<hr/>	
<b>Principles for Gender Equality and Human Rights in the Energy Transition</b>	<b>5</b>
<hr/>	
I. States must take effective measures to rapidly and equitably phase out fossil fuels.	5
<hr/>	
II. States must guarantee human rights in the transition to renewable energy in all stages of renewable energy production, development, and operation, with attention to critical minerals and the role of non-State actors.	7
<hr/>	
III. States should provide sustainable energy for all. The energy transition should combat energy poverty and ensure accessible, available, acceptable, quality, and sustainable public energy services.	9
<hr/>	
IV. States must ensure equality and non-discrimination in the energy transition. The energy transition should contribute to combating all forms of discrimination based on gender, race, ethnicity, class, sexual orientation, religion, disability, and other status.	11
<hr/>	
V. States must ensure gender equality in the transformation of energy systems. The energy transition must advance women's rights and substantive gender equality for all.	12
<hr/>	
VI. Mobilising the maximum available resources to finance and invest in a just transition to renewable energy.	14
<hr/>	
VII. States must promote transparency. People have the right to seek and receive accessible, reliable, and adequate information in the energy transition.	15
<hr/>	

---

VIII.	States must promote effective and meaningful participation. People and communities affected by energy policies and projects must be heard and influence energy decision-making.	17
IX.	States must establish proper mechanisms to access justice and remedies for human rights violations committed in the context of the energy transition.	18
X	States must promote international cooperation and assistance to accelerate the just transition to clean, renewable, and efficient energy systems.	19
XI.	States must recognise and implement policies to fulfil their extraterritorial human rights obligations in the energy transition context.	20
XII.	Non-State actors, including business enterprises and financial actors, should comply with human rights obligations in relation to their conduct in the energy transition.	21
XIII.	States must uphold the human rights of local communities and ensure equal distribution of benefits from energy projects, prioritising the most marginalised.	23
XIV.	States must prevent and mitigate the environmental impacts of energy transition policies and projects.	25
XV.	States must realise labour rights in the transition to renewable energy systems.	26
XVI.	States must ensure universal access to social security in the energy transition.	28
XVII.	States must protect human rights defenders advocating for a just energy transition.	29
XVIII.	States must ensure that everyone benefits from science and technology. States must support the development, promotion, and transfer of new technology and its appliances to the energy transition.	30
<b>Endnotes</b>		<b>33</b>

---

## Introduction

The current energy paradigm that underpins energy production, transmission, and consumption—a key essential resource necessary to power our societies and economies—is no longer fit for purpose. It is heavily reliant on fossil fuels, representing the main driver of the climate emergency that is putting all conditions sustaining life on the planet in danger.

In addition, energy systems worldwide are associated with human rights abuses along their energy value chain. From the extraction of the minerals necessary to develop low-carbon technologies to the operation and construction of energy infrastructure to the transmission and final consumption of energy, the energy sector has failed to distribute fairly its costs and benefits and has historically reproduced harmful practices that result in human rights violations, including land grabbing, forced displacement, labour rights violations, and the exclusion of marginalised groups, such as women, Indigenous Peoples, and people with disabilities, among others. Furthermore, it continues to be a male-dominated sector that does not consider the needs of persons of different genders and reproduces harmful gender stereotypes that represent barriers for people other than men to be part of the solution and actively shape new energy systems. As a result, the energy model frequently damages the social fabric of the communities they are meant to serve and the natural environment on which we all depend.

One of the systemic problems that current energy systems still face is energy poverty and inequality. About 1 in 7, or 685 million people across the world, are currently energy poor and are unable to access safe, reliable, and sustainable energy services.<sup>1</sup> Roughly 2.1 billion people continue to rely on polluting solid fuels—such as kerosene, firewood, and biomass—for cooking, heating, and lighting.<sup>2</sup> Meanwhile, the top 10% of income earners consume around 20 times more energy than the bottom 10%.<sup>3</sup> This stark disparity is aggravated by the fact that the ever-increasing energy demands of the highest consumers are one of the main factors overshooting planetary boundaries, while millions of people remain without good quality energy services to ensure a life with dignity.

As energy is at the heart of most human activities, it is fundamental to tackle the systemic failures of energy systems and power new economies and societies where people and planet can flourish. To this end, the international human rights framework provides a set of obligations that States and other stakeholders need to comply with

that ultimately tackle uneven power relations, including structural conditions of gender inequality. It furthermore provides substantive and procedural guidance to conduct the energy transition, prioritising the needs and voices of the most marginalised. It establishes norms to hold decision-makers accountable and guide the transformation of energy systems to ensure that the energy infrastructure of the future realises the rights of present and future generations within planetary boundaries. In this line, these Guiding Principles establish a human rights approach to the energy transition that is normatively based on international human rights law and is directed to respect, protect and fulfil human rights in practice as the main conceptual framework for the transformation of current energy systems.



## Structure and Interpretation Note

The Principles for Gender Equality and Human Rights in the Energy Transition envisage **18 Principles** organised in two chapters. The first chapter contains the Overarching Principles for a just transition, which provide the main basis and general guidelines grounding all the other principles. The second chapter enshrines the General Principles that further unpack the overarching principles, clarifying States' human rights obligations applicable to the energy transition.

Each principle briefly provides contextual information, elements of the normative basis, and the duties of States and other stakeholders in their implementation. Some principles may overlap on specific issues. Still, each one will address these differently and highlight specific State obligations. For instance, the principle concerning the meaningful participation of all sectors of society in energy decision-making and the one focused on ensuring the equal distribution of benefits both refer to the right to free, prior, and informed consent (FPIC). However, both principles address FPIC with a different focus and approach.

The interpretation of the Guiding Principles must be holistic and systemic. There is no hierarchy between the principles, and they should all be interpreted as interdependent and mutually reinforcing and complementing each other.

Additionally, in these principles, it is recognised that the concept of gender extends beyond a binary framework. When we refer to 'women,' we aim to encompass women in all their diversity, acknowledging the limitations of traditional binary categorisations. Currently, much of the available data is collected in binary terms, which we utilise in some parts of this document due to the absence of more inclusive datasets. However, we underscore that gender is not synonymous with biological sex, and our analysis considers the impact of an androcentric energy system—one historically shaped by men and for men, often excluding those who do not conform to its

gendered expectations. This includes women, non-binary individuals, and men taking on nontraditional roles, such as caregiving. We also view energy transition and human rights through an intersectional lens, recognising how overlapping identities shape experiences within these systems. By applying an intersectional framework, we seek to highlight the differentiated impacts of energy policies on individuals across diverse gender identities and backgrounds.

Finally, these principles are drawn from the international human rights framework that enshrines the civil, political, economic, social, cultural, and environmental rights that all human beings shall enjoy. These rights are contained in the Universal Declaration of Human Rights, adopted by the UN General Assembly in 1948 and are further unpacked in international and regional human rights treaties, which confer their legal nature. The Guiding Principles essentially establish a human rights approach as a framework for the transformation of energy systems. They are accompanied by a comprehensive Annex with international human rights treaty standards and relevant interpretive sources. The principles have also drawn inspiration from relevant developments in regional human rights law practice and the literature.<sup>4</sup>



# Principles for Gender Equality and Human Rights in the Energy Transition

## OVERARCHING PRINCIPLES

### I. States must take effective measures to rapidly and equitably phase out fossil fuels.

- Currently, fossil fuels—namely coal, oil, and gas— account for over 80% of the global energy supply.<sup>5</sup> However, the combustion of fossil fuels for energy production releases greenhouse gases into the atmosphere that are unequivocally the primary driver of the climate crisis.<sup>6</sup> Additionally, fossil fuels significantly contribute to local air pollution and other environmental impacts throughout their lifecycle, including during extraction, processing, transportation, and use.<sup>7</sup> For instance, fossil fuels are linked to biodiversity loss, toxic pollution, and water scarcity, leading to millions of premature deaths,<sup>8</sup> forced displacements, and loss of livelihoods. These impacts extend to a wide range of human rights, particularly affecting those segments of the population already marginalised or in vulnerable situations who, due to structurally established inequalities and discrimination, have fewer resources, decision-making power, and capabilities to cope with the degradation of their natural environment. This includes women and gender-nonconforming people, especially those facing historical, structural, intersectional disadvantages, such as Indigenous or rural women who rely more on local ecosystems to sustain their livelihoods and those of their families. Delaying effective action to reduce global dependency on fossil fuels results in higher cumulative greenhouse gases and greater foreseeable harm to human rights for present and future generations. As several UN Special Rapporteurs have recognised, fossil fuels are at the heart of the planetary ecological crisis.<sup>9</sup>
- International human rights law establishes that the obligation of States to respect, protect and fulfil human rights entails the duty

to take measures to prevent foreseeable harm caused by climate change.<sup>10</sup> States must take immediate action to decarbonise their economies and equitably phase out fossil fuels to tackle the root causes of the global environmental crisis. Mitigation measures must lead to absolute emission reductions and the phasing out of fossil fuels.<sup>11</sup>

- Additionally, transitioning to a low-carbon economy risks negatively affecting communities and individuals whose livelihoods and job opportunities still rely on fossil fuels. Women, children, persons with disabilities, indigenous populations, racialised individuals, and other marginalised groups suffer more intensely from the consequences of the reliance on fossil fuels and of climate change. This includes especially the use of traditional solid fuels for cooking, heating, and lighting, predominantly affecting women, leading to high levels of indoor air pollution and a broad range of negative health consequences.<sup>12</sup> Therefore, it is crucial to ensure that the phasing out of fossil fuels is accompanied by measures that ensure the shift away from polluting energy sources is guided by principles of non-discrimination and equality and does not harm those already marginalised. A transition to a low-carbon economy should ensure that these communities are protected and that the new low-carbon economies do not reproduce systemic inequalities but help advance societies that ensure human and planetary wellbeing.
- This includes providing training and education for workers of all genders in the fossil fuel industries, preventing potential increases in the cost of living due to reduced reliance on fossil fuels, diversifying the economy away from fossil fuel-dependent industries, and reallocating fossil fuel subsidies towards climate action, gender-responsive public services, and robust social security systems.
- Furthermore, an equitable phase out of fossil fuels can only be achieved with developed countries delivering on their obligation to provide finance, technology, and capacity building to developing countries according to their indirect emissions and the principle of common but differentiated responsibilities. Current and historic responsibilities in the overuse of fossil fuels driving the climate emergency must be considered to help developing countries phase out fossil fuels.

- The transition away from fossil fuels must also avoid “false solutions” that perpetuate environmental harm and fail to achieve genuine decarbonisation. States must ensure that the phase-out of fossil fuel infrastructure does not lead to problematic conversions that maintain or create new forms of pollution and greenhouse gas emissions.<sup>13</sup> Such false solutions not only fail to address the root causes of climate change but can also perpetuate environmental injustices in affected communities. States have an obligation to ensure that the transition represents a genuine progress toward clean, renewable energy sources rather than superficial changes that maintain dependence on polluting technologies.

**II. States must guarantee human rights in the transition to renewable energy in all stages of renewable energy production, development, and operation, with attention to critical minerals and the role of non-State actors.**

- It is crucial to swiftly transition to clean, renewable, and efficient energy sources, such as wind and solar, to replace fossil fuels in energy systems. However, the shift to renewable energy should not just be a technical change from one energy source to another but rather a more profound transformation of energy systems to ensure that new low-carbon energies do not replicate the harmful practices of their fossil fuel predecessors. Therefore, States must guarantee human rights in all stages of the renewable energy life cycle, from the extraction of the critical transition minerals necessary for the development of renewable energy technologies to the generation, transmission, and final consumption of energy resources. Although the energy transition is urgent and requires great speed to achieve the stabilisation of the climate, all types of human rights violations, including violent displacement, associated with the construction of renewable energy projects, including wind or solar farms, or in the mining sector, are contrary to international human rights law.
- In particular, the urgent need to reduce emissions and address the climate crisis has significantly increased the demand for minerals necessary for the development of renewable energy technologies. As governments commit to expanding renewable energy and doubling energy efficiency by 2030, securing a steady supply of transition minerals—such as lithium, cobalt, nickel, copper, graphite, and rare earth elements—becomes crucial

for building, producing, distributing, and storing renewable energy.<sup>14</sup> This has led to an unprecedented expansion of mining activities in mineral-rich regions, especially in the Global South. However, both small- and large-scale mining often come with severe environmental consequences and frequent human rights abuses, including the deepening of structural conditions of gender inequality. The extraction of critical transition minerals is frequently linked to the dispossession and exploitation of Indigenous Peoples, women, and local communities.

- Against this background, States have a responsibility to design, implement, and monitor energy transition policies in alignment with their obligations to respect, protect, and fulfil human rights. This means that, as they transform their energy systems, States must respect human rights by avoiding actions that could lead to violations—such as making energy costs prohibitively expensive or constructing energy projects that harm the rights of local communities. Additionally, States must protect human rights by preventing violations by third parties, including non-state actors, through measures like due diligence regulations for energy companies that consider all stages of renewable production, development, and operation, and across the entire value chain, with attention to the assessment of gendered impacts. Lastly, they must fulfil human rights by adopting concrete measures that ensure these rights are realised, such as enacting legislation to combat energy poverty and address gender and racial discrimination in the energy sector. In this line, States may be required to adopt policies on gender-responsive procurement and the diversification of supply schemes across value chains to expand economic opportunities for women and non-gender conforming people and promote their economic empowerment.
- In the same vein, human rights standards must guide every stage of the critical transition minerals' life cycle—from extraction and refining to manufacturing, use, and end-of-life processing.<sup>15</sup> In this context, States, as well as businesses, must identify and assess potential human rights risks across the entire critical mineral value chain and implement measures to prevent and mitigate those risks.
- In addition, States should implement measures according to the precautionary approach to protect the environment against the harmful activities of the mining and energy sectors.

- Moreover, States should guarantee that essential mining activities contribute to environmental and socioeconomic well-being by ensuring equitable benefit sharing from mineral exploration, adding value to sustainable national industries, and facilitating economic diversification into emerging green industrial sectors. These initiatives can enhance job opportunities and foster economic prosperity at both the national and local levels.
- Finally, States must ensure that all the institutions and authorities engaged in energy transition policies are aware of and act consistently with human rights obligations and gender equality principles.

**III. States should provide sustainable energy for all. The energy transition should combat energy poverty and ensure accessible, available, acceptable, quality, and sustainable public energy services.**

- Energy is an essential factor for various human rights, including the right to a decent standard of living, health, education, water, sanitation, work, and a clean, healthy, and sustainable environment.<sup>16</sup> Understood as the resource used to generate various forms of power for human use, energy is essential for leading a dignified life. Energy powers the technology and appliances that produce essential goods and services, such as clothing, food, and housing, which sustain livelihoods. It also supports personal and domestic activities like cooking, cleaning, heating, cooling, and lighting—critical for ensuring wellbeing. Additionally, energy is vital to most employment and income-generating opportunities, especially as global societies transition to more technologically advanced economies. It enables the mobility of people and goods within and across borders and is fundamental to delivering public services that secure human rights, including health, education, water, and sanitation. Finally, having access to clean, renewable, and efficient energy sources is crucial for reducing greenhouse gas emissions and protecting the environment.
- Yet about 2.1 billion people worldwide rely on unhealthy solid fuel cooking, and around 685 million people were without basic access to electricity.<sup>17</sup> In a world where energy is increasingly becoming a critical resource to ensure basic conditions of dignity and the realisation of rights, the lack of energy or restricted

access to this service is identified as a cause and consequence of multiple forms of poverty and marginalisation. As energy managers of the household, women are particularly affected by the consequences of energy poverty, which increase the care and domestic responsibilities that they carry and expose women to mental and physical health risks.

- Given the importance of energy in ensuring adequate socio-economic living standards, the importance of accessing energy for the realisation of rights is recognised in Article 14 of the International Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW). This CEDAW provision enshrines rural women's rights, including their right to enjoy adequate living conditions, particularly access to electricity. In its General Recommendation No. 34, the CEDAW Committee explains this obligation further. It notes that beyond electricity, women may have other energy needs, such as cooking, heating, lighting, and transport.<sup>18</sup>
- Other human rights monitoring bodies have recognised the provision of electricity as being necessary for the protection of the right to life,<sup>19</sup> the right to benefit from scientific progress,<sup>20</sup> and as an underlying determinant of the right to health.<sup>21</sup> Access to sustainable energy is also part of the 2030 Agenda for Sustainable Development, specifically enshrined in SDG7.<sup>22</sup>
- In line with human rights norms, States should strive for energy services to comply, at minimum, with principles of accessibility, availability, acceptability, sustainability, and of good quality without discrimination. Accordingly, States must ensure that enough energy is provided to guarantee the well-being of all, including the prohibition of disconnections of energy services by private or public actors due to non-payment in times of extreme heat or cold, where they could pose a threat to the rights to life or health. This obligation also involves regulating energy systems to ensure the affordability of energy services, especially for people at risk of energy poverty. States must also ensure energy is produced through low-carbon sources, promote sustainable consumption, guarantee the fair distribution of energy resources among different sectors of society, with priority given to access to energy for domestic consumption and households, as well as access to adequate energy efficiency for all.

- Lastly, States should recognise the significance of energy in upholding a dignified life by acknowledging it as a common public good rather than just a commodity or economic good. This implies that States should implement policies and other effective measures to ensure accountable ownership and sustainable management of energy resources in the public interest, rather than treating them solely as market commodities to be bought and sold.

### GENERAL PRINCIPLES

**IV. States must ensure equality and non-discrimination in the energy transition. The energy transition should contribute to combating all forms of discrimination based on gender, race, ethnicity, class, sexual orientation, religion, disability, and other status.**

- Equality and non-discrimination are core elements of the international human rights framework and constitute an immediate and cross-cutting human rights obligation. In the transition to renewable energy and improved energy efficiency, States must take measures to prevent any differential treatment that nullifies or impairs the recognition, enjoyment, or exercise of human rights.<sup>23</sup> This means that States must ensure that all actors engaged in the energy transition avoid direct or indirect discrimination of any kind as to race, colour, class, gender, language, religion, political or other opinion, national or social origin, property, birth, legal status, or other status.<sup>24</sup>
- States must take effective measures to eliminate all forms of discrimination, either in law or in practice, that might be reproduced during the energy transition. This entails ensuring that policies and legal frameworks relevant to the energy transition do not directly or indirectly discriminate against any group, including people living in poverty, women, Indigenous Peoples, African descent, people with disabilities, gender-non-conforming people, and others who have been historically marginalised in the energy sector. As in other sectors, energy systems must mirror the diversity of the communities they serve, which, among other measures, can be assured through collective forms of ownership and democratic control.
- States must also take adequate measures to ensure everyone has access to energy resources, including by adopting affirmative

actions to prioritise groups facing barriers to accessing energy services. This is in line with the obligation of States to adopt special measures to achieve substantive equality by suppressing or attenuating conditions of discrimination.<sup>25</sup> In this line, States must also abstain from undertaking any unjustified differential treatment that may result in discrimination, such as allowing energy projects that provide employment opportunities only to male workers, approving energy projects that may disproportionately affect a particular group, or fostering an energy system that privileges corporate interests at the expense of marginalised segments of society.

- To avoid unintentional discriminatory impact, States must evaluate the potential consequences of energy transition processes on different groups and peoples, including women and gender non-conforming people, and adopt effective measures to prevent any direct or indirect discriminatory effect.

**V. States must ensure gender equality in the transformation of energy systems. The energy transition must advance women's rights and substantive gender equality for all.**

- For the last 200 years, the energy sector has reproduced gender stereotypes, ignored women's voices and needs, and created barriers that have prevented them from entering the energy workforce and participating in energy decision-making.<sup>26</sup> For instance, women only account for 16% of the workforce in the traditional energy sector.<sup>27</sup> Furthermore, today, at least 3.2 million people across the globe, most of whom are women and children, die annually from indoor air pollution as a result of using unclean energy for cooking, lighting, and heating.<sup>28</sup> Women are also more adversely affected by energy poverty as they tend to spend more time at home performing care and domestic work. Furthermore, they are often excluded from the development of energy solutions. In the context of large-scale energy infrastructure developments, women tend to be disproportionately impacted by land purchase and land dispossession due to systemic discrimination that hinders them from owning or acquiring titles to land.<sup>29</sup> The extraction of critical transition minerals necessary for developing low-carbon energy technologies degrades local ecosystems, on which rural women are highly dependent to sustain their livelihoods. Overall, structural underlying conditions of gender inequality have

resulted in uneven power relations between persons of different genders in all stages of the energy transition.

- In this context, persons from different genders may face intersectional discrimination on more than one of the prohibited grounds, for example, women belonging to an ethnic or religious minority and living in poverty. Such cumulative grounds of discrimination have a unique and specific impact on individuals that may exacerbate inequality and merit particular consideration and remedy.<sup>30</sup> Simply treating people of different genders equally may not be enough to address gender disadvantages.<sup>31</sup> Advancing substantive gender equality requires taking measures that not only aim to combat gender-based discrimination but are also effective in removing existing barriers and have positive results in reducing gender hierarchies.<sup>32</sup> This may involve adopting special measures to support a particular person or group in order to facilitate their participation and access to rights.<sup>33</sup>
- In this line, States must set clear objectives to advance substantive gender equality and contribute to the realisation of women's rights in energy transition policies and frameworks that consider this intersectionality. For example, the shift towards clean, efficient, and renewable energies should offer equal employment opportunities for everyone, regardless of their gender. It should also create opportunities for women to contribute to energy solutions and ensure that people of all genders are involved in decision-making processes. Additionally, energy systems should prioritise providing sustainable energy to persons of all genders to ensure the realisation of their rights. Most importantly, energy services are essential to reduce care responsibilities at the household level that hinder women's rights to health, education, work, and leisure. States must eliminate all discrimination based on gender and discard and avoid gender stereotypes during the energy transition. In this line, all actors in the transition to renewable energy must combat long-standing social practices and ideas that consider men more suitable than any other gender to participate in the energy sector and prevent reinforcing male-dominated energy systems.
- The energy transition must also take into account gender differences in energy policymaking. Given that individuals of different genders may have unique needs and may be affected differently by energy policies and projects, States need

to conduct gender-responsive impact assessments, collect gender-disaggregated data by group as appropriate to national contexts to reveal intersectional disparities, and develop energy policies, including governance mechanisms, that consider these differences. The aim is to eliminate any barriers that may prevent individuals of different genders from accessing their rights in the context of the energy transition.

#### **VI. Mobilising the maximum available resources to finance and invest in a just transition to renewable energy.**

- The global investments in energy transition technologies have reached new records and continue to grow annually. However, it is estimated that yearly investments must quadruple to over 5 trillion USD to decarbonise the global economy and keep the global average temperature below 1.5 °C, as stated in the Paris Agreement.<sup>34</sup> The scale, scope, and speed of the economy-wide transformations needed represent unprecedented challenges in the mobilisation of resources. To overcome these challenges, policies must tackle government resource allocations being diverted to secure the revenue stream of business enterprises at the expense of a transition for the benefit of the broader public, women and minorities in particular.
- All major climate treaties, including the UN Framework Convention on Climate Change and the Paris Agreement, establish obligations for developed countries to provide financial resources to assist developing countries with their mitigation and adaptation commitments.<sup>35</sup>
- These obligations recognise that countries are equally obligated, but differently positioned to address the climate crisis, and thus should take different steps to address it. Developed countries bear a greater share of the responsibility to address the climate emergency. The expectation that more developed countries should lead in mobilising resources responds to their current and historic contributions to the climate crisis, as well as their capabilities to pay for the transformation towards low-carbon societies.
- The legal foundations of this core climate finance obligation are found in two principles of international environmental law: the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) and the polluter pays principle.<sup>36</sup>

- The first principle emphasises States' differentiated capacities and abilities to address the climate crisis, considering different countries' levels of development, while the second principle focuses on States' responsibility to mobilise finance to respond to their current and historic polluting activities and to hold third parties accountable to pay for their pollution. Funding should be new and additional rather than shifted from other climate or development aid.
- The international human rights framework also establishes the obligation of States to mobilise the maximum available resources to progressively realise economic, social and cultural rights.<sup>37</sup> This duty entails States' human rights obligation to mobilise the maximum available resources to prevent foreseeable human rights harms caused by climate change.<sup>38</sup> This includes investing in the deployment and development of renewable energy technologies<sup>39</sup> and adequately contributing to the loss and damage fund.
- This core obligation also encompasses States' duty to undertake measures to explore all potential resources, including more progressive tax systems, and address public resource diversion (such as illicit financial flows, tax evasion, and corruption). In that line, States that tolerate resource diversion cannot claim they have insufficient resources to comply with their human rights obligations and effectively combat the climate emergency.
- Furthermore, States have a responsibility to invest in renewable energy projects that support livelihoods, realise rights, strengthen climate-resilience, and advance substantive gender equality. An intersectional gender perspective must be integrated into relevant international, regional, and national finance mechanisms directed to invest in the deployment of renewable energy technologies and the diversification of the energy matrix.

**VII. States must promote transparency. People have the right to seek and receive accessible, reliable, and adequate information in the energy transition.**

- Historically, the energy sector, both public and private, has failed to provide information and be transparent. This has fundamentally influenced the development of energy systems, which often fail

to meet the needs of the people they serve, especially neglecting marginalised communities and individuals, including women and non-gender conforming people. Guaranteeing the right to access information is essential to ensure people can make adequate decisions and have an active participation in society. Relying on false, inadequate, or the lack of available information does not allow any person to participate effectively in energy decision-making.

- Access to information from public authorities is essential for people to have reliable evidence and data to form their opinions and make informed decisions. This is a precondition for rights-holders to meaningfully and effectively participate in decision-making and in the development of energy solutions, as well as to ensure authorities are open, transparent, and working for the public interest. The effective exercise of the right to access information in energy matters leads to the sharing of knowledge among decision-makers, local communities, and other stakeholders affected by energy policies. This enhances the abilities of a wide range of stakeholders to address energy issues.
- The international human rights framework recognises the rights to access information and to participate meaningfully and effectively in decision-making, which applies to the energy sector.<sup>40</sup> It is also recognised by the Aarhus Convention and the Escazú Agreement, both of which encompass the right to access information in environmental matters.<sup>41</sup>
- Governments should openly share reliable information about energy policies and projects with the people affected to promote a fair transition to sustainable energy. This means creating accessible channels for the public to get information about energy policies, following the principle of maximum disclosure so that anyone interested can learn about any measures that may impact them. Providing this information should be proactive and in formats that are easy to understand, taking into account the needs of all people, especially those who are marginalised, including women and non-gender conforming people.

**VIII. States must promote effective and meaningful participation. People and communities affected by energy policies and projects must be heard and influence energy decision-making.**

- The energy sector is characterised by a lack of effective mechanisms to ensure social dialogue and wide stakeholder engagement in all stages of energy decision-making during the design, implementation, and monitoring of energy policies and projects, including in the licensing or permitting phase.
- The right to participation is guaranteed in various international human rights agreements, which state that everyone has the right to be involved in public affairs.<sup>42</sup> In this line, States should ensure that all sectors of society, especially those affected by energy measures or projects, are involved in energy decision-making at every stage. The participation of individuals and groups should have a real impact on energy ownership, governance and policy development, and tokenistic participation should be avoided.
- Several international environmental instruments have also enshrined the right to participation. Paradigmatically, Principle 10 of the Rio Declaration states: “Environmental issues are best handled with participation of all concerned citizens, at the relevant level... Each individual shall have... the opportunity to participate in decision-making processes.” This principle is also the basis of international agreements envisaging procedural environmental rights, including access to participation in environmental affairs as recognised in the Aarhus Convention<sup>43</sup> and the Escazú Agreement.<sup>44</sup>
- Public officials should actively seek the meaningful involvement of all affected parties, removing any barriers that prevent certain groups from participating due to discrimination or structural conditions. It is important to prioritise the independence and diversity of decision-making actors, and to enact laws and policies that enable public officials to guarantee the right to participate in energy decision-making for everyone. Article 14(2)h of CEDAW specifically reiterates the right of rural women to participate in the elaboration and implementation of development planning at all levels, which includes decision-making about the expansion of new renewable energy infrastructure to villages for improved access to energy, and decision-making on the construction and distribution of burdens and benefits of new renewable energy

projects, such as wind farms or hydro-electric facilities. Women's rights to inclusive and equal representation in decision-making have also been elaborated further in CEDAW General Recommendation No. 40 (2024).

- The right to participate encompasses the obligation of States to ensure the right of Indigenous Peoples and African descent to give free, prior, and informed consent when developing and carrying out energy policies or projects that may impact them.<sup>45</sup> The process should respect their customs, culture, language, and decision-making procedures in accordance with international human rights standards. According to the Regional Escazú Agreement, States must ensure that all processes for public participation in environmental decision-making are adapted to the social, economic, cultural, geographical, and gender characteristics of the public.

**IX. States must establish proper mechanisms to access justice and remedies for human rights violations committed in the context of the energy transition.**

- The violation of human rights in the energy sector is widespread; thus, the right to access effective remedies is fundamental to the concept of a just energy transition. It enables individuals to exercise their right to allege, prosecute, and obtain redress for human rights violations resulting from the continued use of fossil fuels and those resulting from the transition to clean, renewable, and efficient energy systems that reproduce injustice. People's access to justice is protected under civil and political rights, including within the International Covenant on Civil and Political Rights. Women's rights to access to justice, specifically, have been elaborated in some detail in CEDAW General Recommendation No. 33 on Women's Access to Justice.
- The right to access justice allows anyone whose human rights have been violated to seek redress in court and use impartial and fair mechanisms to challenge or appeal decisions regarding actions or omissions that affect the exercise of their rights.<sup>46</sup> As is the case with the rights to information and participation discussed before, its application has been strengthened by the Aarhus Convention and the Escazú Agreement, both of which encompass the right to access to justice in environmental matters.<sup>47</sup>

- In this line, States must set up fair judicial and non-judicial systems accessible to all victims of human rights abuses related to the energy sector. This includes addressing barriers faced by individuals and groups who are marginalised and ensuring that effective remedies are provided. CEDAW Comment No. 33 notes that women are prevented from gaining access to justice due to range of factors, including concentration of courts and quasi-judicial bodies in the main cities and their non-availability in rural and remote regions; lack of time and resources to gain access; complexity of proceedings; physical barriers for women with disabilities; and poor access to high-quality, gender-competent legal advice, including legal aid. More generally, justice systems may grapple with deficiencies, such as gender-insensitive judgements or lack of training, delays and/or excessive length of proceedings, corruption. It stresses that access to justice must be available, accessible and of good quality. Women should have unhindered access to claim their rights in case of violations.
- States must make additional efforts to ensure that business-related abuses are effectively redressed. In this line, transnational corporations and other businesses also have the responsibility to establish the necessary grievance mechanisms to remedy the human rights abuses committed in the course of their operations.

**X. States must promote international cooperation and assistance to accelerate the just transition to clean, renewable, and efficient energy systems.**

- International assistance and cooperation are fundamental to enable a swift and just transition to clean, renewable, and efficient energy systems. High-income States must support efforts in developing countries to decarbonise and transition to low-carbon and efficient energy systems. This includes providing resources, contributing to capacity building, knowledge sharing, exchange of promising practices, and technology transfers. States parties, separately and in cooperation with others, should take effective steps to equitably manage shared natural resources, including by limiting carbon emissions, fossil fuel use, and protecting the shared climate system.
- The United Nations Framework Convention and the Paris Agreement both recognise that developed countries should

lead in the provision of effective assistance to help developing countries achieve their mitigation objectives and transform their energy matrix.<sup>48</sup> Furthermore, the human rights framework establishes States' duty to "undertake steps, individually and through international assistance and co-operation, especially economic and technical, (...) with a view to achieving progressively the full realisation of the rights recognised in the ICESCR".<sup>49</sup> This latter obligation also encompasses high-income States' responsibility to intensify efforts to ambitiously reduce greenhouse gas emissions in line with Nationally Determined Contributions under the Paris Agreement, as well as support effective climate action in developing countries, including cooperating to transfer green technologies and contributing to international financial funds.<sup>50</sup> Low-income States may be entitled to seek international support and assistance in this regard.

- From these obligations, countries should work together in good faith to create international mechanisms for grant-based and low interest financing, gender-responsive, democratic and accountable governance structure, and exchanging lessons learned and promising practices to speed up a fair shift to low-carbon energy systems and facilitate energy solutions that are customised to local circumstances and do not depend only on market forces.

**XI. States must recognise and implement policies to fulfil their extraterritorial human rights obligations in the energy transition context.**

- The production, transmission, and distribution of energy too often have impacts on human rights beyond the borders of a State. For instance, many transnational corporations operating in the energy value chain are typically headquartered in developed countries but conduct their operations in multiple countries, including in the territory of developing countries. This dynamic can lead to serious human rights violations that can remain unpunished. Operating in different jurisdictions, especially in developing countries that may lack the political will or the capacity to enforce their regulatory power, resources, or technical capacity to supervise the implementation of energy projects, is a common practice that can leave victims of human rights abuses without legal protection.

- Under international human rights law, States have obligations both within and outside their territory.<sup>51</sup> These extraterritorial obligations refer to acts or omissions that may impair human rights beyond their territories.<sup>52</sup> In this line, States must take proactive measures to respect, protect, and fulfil human rights within and beyond their territories while advancing the transition to low-carbon energy systems. This includes the obligation to conduct assessments on risks and potential impacts of energy laws, policies, and practices that may have adverse human rights and gender implications in advancing the energy transition in third countries.
- The extraterritorial human rights obligations of States also include their responsibilities to ensure national regulations do not cause harm abroad. This includes, for example, avoiding tax regulations that would encourage capital flight or tax evasion in other countries. States should also enhance cooperation in terms of illicit financial flows and tax avoidance. Furthermore, States with greater voting powers at International Financial Institutions should take their extraterritorial obligations into account when adopting their positions within these institutions.
- States must also regulate and influence the activities of non-State actors within their jurisdiction, such as transnational corporations and other business enterprises, so they do not impair or nullify human rights when they operate abroad along the energy value chain. The extraterritoriality of their obligations also implies that States need to strengthen their international cooperation and assistance.
- Finally, States must create an enabling environment that will lead to the fulfilment of human rights extraterritorially in the energy transition context, including by developing, implementing, applying, and reviewing existing energy laws and policies at the international and national levels.<sup>53</sup>

**XII. Non-State actors, including business enterprises and financial actors, should comply with human rights obligations in relation to their conduct in the energy transition.**

- Non-State actors, such as transnational corporations, financial actors, and other business enterprises, have a significant impact across the energy value chain. These corporations are

involved in all stages and at various levels of energy production, transmission, distribution, and the development of energy technologies. Additionally, corporations are among the main drivers of the climate emergency. More than 70% of global CO<sub>2</sub> emissions can be traced back to just 78 private and State-owned enterprises and other corporate entities.<sup>54</sup>

- Enterprises in the energy sector have also been associated with human rights abuses related to environmental damage, land dispossession, violation of labour rights, and abuses of marginalised communities, including the exclusion of women, Indigenous Peoples, African descent, people living in poverty, among other groups. States must therefore ensure that the business activities performed by these private and public entities align with human rights laws and standards.
- In this respect, the UN Guiding Principles on Business and Human Rights establishes a three-pillar framework for respecting, protecting, and remedying human rights in the context of business activities.<sup>55</sup> This Framework is further complemented by the Gender Dimensions of the Guiding Principles on Business and Human Rights.<sup>56</sup> Under these instruments, States have a duty to regulate businesses and ensure they contribute to phasing out fossil fuels and advance the transition to low-carbon energy systems in a manner consistent with human rights norms.<sup>57</sup> This involves the States' duty to enact and enforce legislation and set clear expectations for businesses to develop their activities according to human rights law across the entire energy value chain.<sup>58</sup>
- Business enterprises are also obligated to respect human rights and advance gender equality. This obligation exists independently of States' abilities and/or willingness to fulfil their own human rights obligations.<sup>59</sup> Businesses are expected to identify, prevent, mitigate, and account for adverse human rights and environmental impacts while conducting their activities.<sup>60</sup> Businesses should adopt human rights due diligence policies and act responsibly, including avoiding promoting unsustainable energy consumption and production practices or seeking corporate influence in the energy sector's political and regulatory sphere.<sup>61</sup>
- States and business enterprises must also provide appropriate and effective remedies regarding human rights and

environmental business-related abuses. In that line, States should ensure all judicial and non-judicial mechanisms can hear claims on human rights abuses conducted in the energy sector, removing all barriers and providing effective remedies.<sup>62</sup> In addition, businesses should develop and effectively implement grievance mechanisms to provide redress for the human rights and environmental impacts of their activities in the context of the energy transition.

- Business-related activities have differentiated impacts on women and non-gender-conforming people. Therefore, the business and human rights framework must adopt gender-transformative measures to ensure their rights are respected, protected, and fulfilled in the course of business activities. According to the UN Working Group on Business and Human Rights, specific attention is needed for women's rights and gender equality to ensure a just transition.<sup>63</sup> The human rights and environmental impacts of mining activities often result in greater and differential burdens on women, which in turn require redress measures that address intersecting inequalities. Women, in particular Indigenous women, may be susceptible to abuses in the mining sector and its value chain, whilst being less likely to benefit from the energy transition. Therefore, 'women's experiences in the extractive sector must be made visible, so that policies and programmes can effectively address gaps through a gender-responsive approach'.<sup>64</sup>

### **XIII. States must uphold the human rights of local communities and ensure equal distribution of benefits from energy projects, prioritising the most marginalised.**

- The deployment and operation of large-scale renewable energy infrastructure projects are associated with the violation of the rights of local communities, including engaging in unfair negotiation practices, land grabbing, dispossession, enforced displacement, and abuses to Indigenous Peoples' rights to free, prior, and informed consent. Indigenous Peoples are one of the groups most disproportionately affected by the energy transition, as studies indicate that more than half of the world's resources that are indispensable to the energy transition are located in Indigenous territories.<sup>65</sup> Furthermore, the dominant energy transition model has systematically failed to equitably share the costs and benefits of transforming energy systems. The energy

produced and resources generated by the energy sector are all too often concentrated in a few people and corporate entities. In contrast, local communities and the most marginalised bear the social and environmental costs of the phase-out of fossil fuels and the deployment of renewable energies without receiving the benefits.

- Energy systems must comply with human rights standards to ensure that energy transition programs fairly distribute the benefits and burdens of energy policies and projects to local communities. They must prioritise the needs of populations already facing discrimination and marginalisation, who tend to be more severely affected by the impacts of energy transition policies. This may encompass community or impact benefit agreements, contracts between communities and energy developers that enshrine the benefits that should be distributed as part of energy transition programmes and projects, or even co-ownership models.<sup>66</sup> These arrangements may include clauses to foster employment opportunities; transfer technology, knowledge, and capacity building; develop local public services and community development projects, programmes for women empowerment, and revenue-sharing.<sup>67</sup>
- States are required to respect, protect, and fulfil the rights of local communities, including women, gender-diverse groups, African descent, Indigenous Peoples, and peasants living in or near areas affected by energy transition projects. This involves ensuring that participatory gender-responsive social and environmental impact assessments are conducted to identify and mitigate potential adverse effects on their human rights. It is also crucial to ensure social dialogue, democratic control, and meaningful participation in decision-making processes, and to promote the fair and sustainable management of land and natural resources in coordination with local communities. Consultations must be conducted in a timely, systematic, and transparent manner, with appropriate representation of the affected people. In the case of Indigenous Peoples, this dialogue must be culturally appropriate and in their traditional language. The CEDAW Committee highlights that effective participation of Indigenous women in economic activities, including as related to extraction, mining and climate mitigation and adaptation affecting indigenous lands and women's natural resources, requires particular attention, with 'full respect for their right to free, prior and informed consent

and the adequate consultation processes'.<sup>68</sup> This Committee also recommends ensuring that national legal frameworks and procedures, including those applied to extractive industries, require agreements on 'adequate benefit-sharing', including for affected women and minority groups.<sup>69</sup> Such procedures should be preceded by 'a thorough gender impact assessment involving rural and indigenous women, recognising their leadership in those processes, in line with General Recommendation No. 34 (2016) on the rights of rural women'.<sup>70</sup>

#### **XIV. States must prevent and mitigate the environmental impacts of energy transition policies and projects.**

- Energy transition programs and projects are indispensable to reducing emissions and combating the climate emergency. However, these projects can often have negative environmental impacts if proper measures are not taken to prevent and mitigate harm to local ecosystems throughout the energy production process. This includes everything from extracting raw materials for low-carbon energy technologies to building and operating large-scale energy infrastructure and overusing energy resources. Despite being clean and renewable, new energy systems can still contribute to environmental damage through deforestation, pollution of land and water, loss of habitat for plant and animal species, land degradation, and noise pollution. Over 17% of large-scale renewable energy projects globally operate within important nature conservation areas.<sup>71</sup> As the world moves forward with a rapid energy transition, it is essential to consider not only the carbon footprint but also how the overall transformation of energy systems impacts nature at all levels.
- This environmental damage has human rights implications and is felt by individuals and communities around the world, but the consequences are felt most acutely by women and girls and those segments of the population that are already in vulnerable situations, including Indigenous Peoples, children, older persons, and persons with disabilities.
- Against this background, energy transition programs and projects should prioritise protecting the right to a clean, healthy, and sustainable environment. This can be achieved by implementing comprehensive environmental safeguards, including measures

to carefully plan the location of energy projects away from natural habitats, supporting renewable energy sources with minimal impact on nature, and implementing relevant mitigation measures to avoid, reduce, and restore potential adverse effects on ecosystems.

- Additionally, States must enact regulations to adopt a circular economy approach to the energy transition that prioritises material reuse, promotes environmentally safe end-of-use processes of energy technologies, and reduces energy consumption and production patterns to ensure the systemic and long-term sustainability of new green energy systems.
- These efforts should be complemented by promoting and supporting environmental stewardship of women, Indigenous Peoples, and communities who play a critical role in the preservation of local ecosystems. CEDAW General Recommendation No. 39 (2022) recognises that Indigenous women possess technical knowledge of biodiversity conservation and restoration which are essential to environmental decision-making, and that Indigenous peoples may 'refer to "Mother Earth", a concept that reflects the vital link that they have with a healthy environment and their lands, territories and natural resources'.<sup>72</sup>

#### **XV. States must realise labour rights in the transition to renewable energy systems.**

- The shift to renewable energy systems creates job and economic challenges in fossil fuel-dependent communities while offering new opportunities in the renewable energy sector. The transformation of energy systems thus opens opportunities for the reskilling of the workforce and to improve working conditions in the energy sector. According to the International Labour Organisation, currently 60% of the workforce remains engaged in informal and precarious working conditions, with 2 billion people working informally.<sup>73</sup> The energy sector must provide long-term solutions for workers to transition to green, safe, and formal employment opportunities in line with international human rights standards, such as the right to unionise and collective bargaining, and that addresses a bigger audience of all genders to acquire new skills.

- Under international human rights law and labour rights, three different rights are essential: the right to work, the right to just and favourable working conditions, and the right to join and participate in trade unions.<sup>74</sup> In the context of the energy transition, the obligation to respect, protect, and fulfil labour rights must be complied with by ensuring workers' training and reskilling, particularly in developing countries where there is a larger share of unskilled and informal workers in the energy sector. The energy workforce is mostly male-dominated, and workers in the renewable energy sector are often in precarious working conditions and non-unionised. Efforts to transition essential stakeholders to the renewable energy sector should include a gender-inclusive approach, partnering with trade unions, and addressing human rights concerns such as labour exploitation, child labour, and workers in the informal economy.
- The energy transition should be managed in such a way that it does not create negative effects on women's rights to work, and may also be seized as an opportunity to improve access to work and working conditions. Rural women, especially, are disproportionately represented in the informal sector, with limited access to paid employment opportunities. According to CEDAW General Recommendation No. 34 (2016), rural women tend to work long hours in low-skilled, part-time, seasonal, low-paid and/or unpaid jobs, home-based activities, and subsistence farming.<sup>75</sup> In many contexts, they are also responsible for day-to-day household chores such as collecting firewood and other energy resources or cooking. States should invest in employment and strengthen rural economies, for example, 'through the promotion of social and solidarity economies' and 'the creation of local employment opportunities and livelihoods for rural women in the context of sustainable development'.<sup>76</sup> Women could be employed in green jobs and in the renewable energy sector, including as solar entrepreneurs or facilitators for the uptake of cleaner cook stoves. CEDAW General recommendation No. 39 (2022) on Indigenous women and girls additionally notes that reskilling and public employment programmes, as well as systems offering payments for ecosystem services, should follow a gender-sensitive approach to ensure that women benefit from the transformation of work in the greening of the economy.<sup>77</sup>

**XVI. States must ensure universal access to social security in the energy transition.**

- The transition to renewable energy will increase social risks for workers and communities worldwide, who are still dependent on the fossil fuel industry for accessing social security. This is compounded by the fact that in the countries most vulnerable to the climate crisis, 91.3% of the population continues to lack any form of social security. This problem is more acute among women who have less access to social security systems than men due to their overrepresentation in informal work and their care responsibilities at the household level, which precludes their ability to access formal employment and thus contributory social security systems.
- The right to social security is recognised in several human rights treaties, including in Articles 9 and 10 of the International Covenant on Economic, Social and Cultural Rights and Article 11 of the Convention on the Elimination of All Forms of Discrimination Against Women. The General Comment No. 19 of the UN Committee on Economic, Social and Cultural Rights establishes that social security must be available, adequate, accessible, and non-discriminatory for all.<sup>78</sup>
- In this line, States must work to create robust social security systems to tackle the root causes of climate vulnerability by preventing poverty and social exclusion and reducing inequality. Social security systems protect people's incomes, health, and jobs, as well as enterprises, from the impacts that the transition to renewable energy might imply.<sup>79</sup> This includes building a universal social security system that balances between contributory and non-contributory schemes and adopts an intersectional gender lens to ensure the most marginalised are also protected from risks and contingencies derived from the energy transition. Social security should be adequate in amount and duration to enjoy relevant economic, social, and cultural rights, including vulnerable households being able to afford the necessary goods and services to realise rights, including essential energy services to meet basic needs.

**XVII. States must protect human rights defenders advocating for a just energy transition.**

- It is essential to protect the individuals and groups who are actively working to defend their rights, land, resources, and territories from energy transition projects and policies that have adverse impacts on their livelihoods and local ecosystems. Environmental human rights defenders are highly vulnerable in many parts of the world, facing increasing assaults, harassment, stigmatisation, and threats due to their critical activities.<sup>80</sup> Their work is crucial for identifying and addressing the systemic human rights abuses caused by the dominant energy transition model. Additionally, they play a vital role in promoting alternative solutions that can lead to more democratic, sustainable, and reliable energy systems. Their knowledge of the land and their community is essential for designing and implementing renewable energy solutions.
- Under international human rights law and standards, the UN Declaration on Human Rights Defenders establishes the standards for the protection of human rights defenders.<sup>81</sup> In this line, States must respect, protect, and fulfil the rights of human rights defenders in the energy transition, including their rights to association, assembly, freedom of speech, access to information, participation, access to justice, and effective remedies.
- Although all human rights defenders are subjected to human rights abuses, women human rights defenders tend to be specially targeted and face additional risks, obstacles and abuses which are shaped by their identity, who they identify with and are part of and the work that they do as they challenge traditional gender norms and practices. In this line, States have the obligation to ensure an enabling and safe environment for all human rights defenders and adopt gender-responsive measures to protect women human rights defenders from risks and attacks.<sup>82</sup> Certain women are more disproportionately targeted, including indigenous women and girls and their representative organisations. States parties should therefore adopt immediate gender-responsive measures to publicly recognise, support, and protect the rights of these human rights defenders, and ensure they have access to enabling environments and safe conditions to carry out their advocacy work. States must also act with due diligence to prevent, investigate, and punish all forms of political

violence against women human rights defenders and activists at the national, local, and community levels. Women human rights defenders must be free from discrimination, racism, killings, harassment, and violence.

**XVIII. States must ensure that everyone benefits from science and technology. States must support the development, promotion, and transfer of new technology and its appliances to the energy transition.**

- To achieve the energy transition goals, it is essential to ensure everyone has access to the science and technology necessary to phase out fossil fuels and benefit from renewable energy sources. Marginalised communities, especially in countries in the Global South, lack the resources, tools, and capacities to benefit from scientific and technological advancements and actively promote the shift to low-carbon economies. Furthermore, technical solutions to advance the energy transition often ignore the local and traditional knowledge of Indigenous Peoples, African descent, women, gender-nonconforming people, and other communities in developing energy solutions.
- The human right to enjoy the benefits of the progress of science and its applications (the right to science), enshrined in the Universal Declaration of Human Rights (UDHR)<sup>83</sup> and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), is a critical right in energy transition processes.<sup>84</sup> This right includes States' obligations to ensure access to scientific results and outcomes, scientific processes, and scientific methods and tools, and the practical 'applications' of scientific progress, such as solar products or other (low-cost) clean and safe forms of renewable energy.<sup>85</sup> For instance, the UN Committee on Economic, Social and Cultural Rights (CESCR) has stated that "States should use the maximum of their available resources to overcome hurdles that any person may face to benefit from new technologies or other forms of applications of scientific advancements".<sup>86</sup>
- Accordingly, States have a duty to provide technical assistance to tackle the climate emergency, to transfer technology and scientific knowledge for the same purpose, and to prioritise the needs of the most disadvantaged and marginalised. In that line, they must support the development, promotion, and transfer

of scientific knowledge, technology, and its applications to advance the energy transition in their territories and contribute to achieving the same goals in developing countries.

- Furthermore, States should foster the active engagement of Indigenous Peoples and their traditional knowledge in different phases of energy policymaking. Indigenous peoples, women, and African descent have acquired traditional knowledge of their land, natural resources, and ecological cycles across generations, which provides an indispensable pool of information for the articulation of environmental and energy policy. Moreover, Indigenous Peoples and African descent have developed methods for organising and preserving ecosystems, which can be adapted for social and environmental policy innovation, strengthening community ties and collective environmental stewardship. States and other stakeholders participating in the energy transition must integrate traditional knowledge with Western science and other knowledge systems to achieve fair, effective, and sustainable energy solutions.
- Policies supported by gender equality in access to and use and control of science and technology, and formal and informal education and training, are necessary to tackle climate change and accelerate the transition. However, women are too often unable to gain access to necessary technology, applications, and training opportunities or information due to gender-based biases in relation to technology use and gender-based inequalities. As noted in CEDAW General Comment No. 34, providing better access to infrastructure and technological innovation will be vital to improving women's lives and realising their rights.<sup>87</sup> Such access can reduce women's time, labour, and effort and reduce the burden of unpaid domestic and productive work.
- States should ensure that 'labour-saving and environmentally sound technology' is made available and accessible to women in all their diversity. They should create enabling environments that improve women's access to technology, including electricity, ICTs, and the Internet. Women should be consulted in the development of such technology, contribute to research and development of appliances, and ensure their access to innovative technological solutions that will support the reduction and redistribution of care, improve health conditions and promote their productive activities in both rural and urban areas.

CEDAW General Comment No. 34 specifically recommends that women's rights to adequate standards of living can be ensured by providing access to 'sustainable and renewable sources of energy', extending on-grid energy access, and 'developing solar energy and other sustainable energy sources with low-cost technology'.<sup>88</sup>

## Endnotes

<sup>1</sup> IEA, IRENA, UNSD, World Bank, WHO. 2024. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. World Bank. License: Creative Commons Attribution—Non-commercial 3.0 IGO (CC BY-NC 3.0 IGO).

-  
<sup>2</sup> World Bank Group, “Progress on Energy Access reverses for the first time in a decade”, 2024, available on 27 November 2024 at: <https://www.worldbank.org/en/news/press-release/2024/06/11/progress-on-basic-energy-access-reverses-for-first-time-in-a-decade>; also see World Health Organisation, WHO publishes new global data on the use of clean and polluting fuels for cooking by fuel type, (2022), available on 27 November 2024 at: <https://www.who.int/news/item/20-01-2022-who-publishes-new-global-data-on-the-use-of-clean-and-polluting-fuels-for-cooking-by-fuel-type>

-  
<sup>3</sup> Oswald, Y., Owen, A. & Steinberger, J.K. Large inequality in international and intranational energy footprints between income groups and across consumption categories. *Nat Energy* 5, 231–239 (2020). <https://doi.org/10.1038/s41560-020-0579-8>

-  
<sup>4</sup> Hesselman, M. (2023). *Human rights and access to modern energy services*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.632731138>.

-  
<sup>5</sup> International Energy Agency. Energy Mix. 2021. Available at: <https://www.iea.org/world/energy-mix>.

-  
<sup>6</sup> Ibid.

-  
<sup>7</sup> Ibid.

-  
<sup>8</sup> Karn Vohra, Alina Vodonos, Joel Schwartz, Eloise

A. Marais, Melissa P. Sulprizio, Loretta J. Mickley, *Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem*, Environmental Research, Volume 195, 2021, 110754, ISSN 0013-9351, <https://doi.org/10.1016/j.envres.2021.110754>.

-  
<sup>9</sup> Mr. David Boyd, Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; Mr. Pedro Arrojo Agudo, Special Rapporteur on the human rights to safe drinking water and sanitation; Mr. Marcos A. Orellana, Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes; Mr. Livingstone Sewanyana, Independent Expert on the promotion of a democratic and equitable international order; Mr. Surya Deva, Special Rapporteur on the right to development; and Mr. Olivier De Schutter, Special Rapporteur on extreme poverty and human rights. *Fossil fuels at the heart of the planetary environmental crisis: UN Experts*. 2023. Available on 17 July 2024 at: <https://www.ohchr.org/en/press-releases/2023/11/fossils-fuels-heart-planetary-environmental-crisis-un-experts>.

-  
<sup>10</sup> UN Office of the High Commissioner for Human Rights (OHCHR). *Five UN human rights treaty bodies issue a joint statement on human rights and climate change*. 2019. Available on 17 July 2024 at: [https://www.ohchr.org/en/statements/2019/09/five-un-human-rights-treaty-bodies-issue-joint-statement-human-rights-and#\\_edn1](https://www.ohchr.org/en/statements/2019/09/five-un-human-rights-treaty-bodies-issue-joint-statement-human-rights-and#_edn1); UN Committee on the Elimination of All Forms of Discrimination Against Women (CEDAW Committee). *General recommendation No. 37 (2018) on the gender-related dimensions of disaster risk reduction in the context of climate change*. CEDAW/C/GC/37. Paras. 14 and 43. UN Committee on Economic, Social and Cultural Rights (CESCR). *General comment No. 26 (2022) on land and*

*economic, social and cultural rights*. E/C.12/GC/26. Para. 56. UN Committee on the Rights of the Child (CRC). *General comment No. 26 (2023) on children's rights and the environment, with a special focus on climate change*. Para. 65(d).

-

<sup>11</sup> Ibid.

-

<sup>12</sup> World Health Organisation. Household Air Pollution. 2024. Last accessed 6 May 2025 available at: <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>

-

<sup>13</sup> See, for instance, Kas Ingeniería Consultores. *Estimación de Emisiones por Co-Combustión de Carbón-Amoniaco en la Central de Energía de Guacolda Energía - Huasco*. Fundación Chile Sustentable, 2024. <https://chilesustentable.net/wp-content/uploads/2025/03/co-co-carbon-amoniac-marzo-25-3.pdf>.

-

<sup>14</sup> UN Secretary General's Panel on Critical Energy Transition Minerals. *Resource the Energy Transition: Principles to Guide Critical Transition Minerals Towards Equity and Justice*. Last accessed 6 May 2025 available at: [https://www.un.org/sites/un2.un.org/files/report\\_sg\\_panel\\_on\\_critical\\_energy\\_transition\\_minerals\\_11\\_sept\\_2024.pdf](https://www.un.org/sites/un2.un.org/files/report_sg_panel_on_critical_energy_transition_minerals_11_sept_2024.pdf)

-

<sup>15</sup> Office of the United Nations High Commissioner for Human Rights. *All action on critical energy transition minerals must respect human rights: UN Experts*. 18 September 2024. Last accessed 6 May 2025 available at: <https://www.ohchr.org/en/statements/2024/09/all-action-critical-energy-transition-minerals-must-respect-human-rights-un>

-

<sup>16</sup> Hesselman, M. (2023). *Human rights and access to modern energy services*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.632731138>; Hesselman, M. (2022). Right to Energy. In C. Binder, M. Nowak, J. Hofbauer, & P.

Janig (Eds.), *Elgar Encyclopedia of Human Rights* (pp. 62-69). Edward Elgar Publishing. <https://doi.org/10.4337/9781789903621.energy.right.to>

-

<sup>17</sup> IEA, IRENA, UNSD, World Bank, WHO. 2024. *Tracking SDG 7: The Energy Progress Report*. World Bank, Washington DC. World Bank. License: Creative Commons Attribution—NonCommercial 3.0 IGO (CC BY-NC 3.0 IGO).

-

<sup>18</sup> UN Committee on the Elimination of All Forms of Discrimination Against Women (CEDAW). *General Recommendation No. 34 on the rights of rural women*, CEDAW/C/GC/34. 2016. paras. 54 (d), 61, 84, and 85 (c)

-

<sup>19</sup> UN Committee on Human Rights (CCPR). *General Comment No. 6 on the right to life*. 2018. CCPR/C/GC/36

-

<sup>20</sup> UN Committee on Economic, Social and Cultural Rights (CESCR). *Concluding observations on the initial and second periodic reports of Djibouti*. 2013. E/C.12/DJI/CO/1-2. Last accessed 17 August 2023 available at: <https://documents-ddsny.un.org/doc/UNDOC/GEN/G13/499/93/PDF/G1349993.pdf?OpenElement>

-

<sup>21</sup> UN Special Rapporteurs on Extreme Poverty and Human Rights and on adequate housing as a component of the right to an adequate standard of living. *Communication to Nigeria*. 2013. NGA5/2013. Last accessed 17 August 2023 available at: <https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gId=21073>

-

<sup>22</sup> United Nations Statistical Division. *Goal 7: Ensure Access to affordable, reliable, sustainable and modern energy for all*. Last accessed 6 May 2015 available at: <https://unstats.un.org/sdgs/report/2016/goal-07/>; See also: International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Statistics Division (UNSD), the

World Bank, and the World Health Organisation (WHO). *Tracking The Energy Process Report*. 2024. Last accessed 6 May 2025 available at: <https://trackingsdg7.esmap.org/>

-

<sup>23</sup> Several UN treaties guarantee the right to equality and non-discrimination. They include the International Covenant on Civil and Political Rights (ICCPR, articles 2, 3 and 26); the International Covenant on Economic, Social and Cultural Rights (ICESCR, articles 2(2) and 3); and the Convention on the Rights of the Child (CRC, articles 2 and 28). In addition, specialised treaties prohibit discrimination on the grounds of race, sex, and disability: The International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and the International Convention on the Rights of Persons with Disabilities (CRPD).

-

<sup>24</sup> CESCR (2009). *General Comment No. 20: Non-discrimination in economic, social, and cultural rights (article 2, para. 2, of the International Covenant on Economic, Social and Cultural Rights)*. E/C.12/GC/20, p. 5.

-

<sup>25</sup> Ibid.

-

<sup>26</sup> International Energy Agency (IEA). *Energy and Gender: a critical issue in energy employment and access*. Last accessed 6 May 2025 available at: <https://www.iea.org/topics/energy-and-gender>

-

<sup>27</sup> Ibid.

-

<sup>28</sup> World Health Organisation. *Household Air Pollution (2023)*. Available on 7 October 2024 at <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>

-

<sup>29</sup> International Renewable Energy Access. *Renewable Energy: A Gender Perspective*.(2019) IRENA, Abu Dhabi.

-

<sup>30</sup> Crenshaw, Kimberlé, *Why Intersectionality Can't Wait*, Washington Post, September 24, 2015. See also: UN Women and UN Partnership on the Rights of Persons with Disabilities. *Intersectionality Resource Guide and Toolkit: An Intersectional Approach to Leave No One Behind*. Available on 7 October 2024 at: <https://www.unwomen.org/sites/default/files/2022-01/Intersectionality-resource-guide-and-toolkit-en.pdf>

-

<sup>31</sup> Ibid. See also: CEDAW. *General recommendation No. 25, on article 4, paragraph 1, of the Convention on the Elimination of All Forms of Discrimination against Women, on temporary special measures*. Para. 8 and 9

-

<sup>32</sup> Ibid,

-

<sup>33</sup> CEDAW (2004). Article 4 (1); CEDAW. *General Recommendation No. 24 on temporary special measures*.p. 18.

-

<sup>34</sup> IRENA. *Investment Needs USD 35 Trillion by 2030 for a successful energy transition*. 2023. Last accessed 6 May 2025 available at: <https://www.irena.org/News/pressreleases/2023/Mar/Investment-Needs-of-USD-35-trillion-by-2030-for-Successful-Energy-Transition>

-

<sup>35</sup> Paris Agreement. Article 9.1; UN Framework Convention on Climate Change. Articles 4.3 and 4.4.

-

<sup>36</sup> Yamineva, Y. (n.d.). *A legal perspective on climate finance debates: How constructive is the current norm ambiguity?* Cambridge University Press. <https://doi.org/10.1017/9781108879064.027>

-

<sup>37</sup> ICESCR. Art. 2

-

<sup>38</sup> CESCR. *Statement on Climate Change and the International Covenant on Economic, Social and Cultural Rights*. 8 October 2018. Last accessed 6

May 2025 available at: <https://www.ohchr.org/en/statements/2018/10/committee-releases-statement-climate-change-and-covenant>

-

<sup>39</sup> Ibid.

-

<sup>40</sup> International Covenant on Civil and Political Rights (ICCPR). Article 19.2.

-

<sup>41</sup> UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). Article 9; Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement). Article 8.

-

<sup>42</sup> The instruments containing the right to participation include the Universal Declaration of Human Rights (arts. 21 and 27), the International Covenant on Civil and Political Rights (Art. 25), the International Covenant on Economic, Social and Cultural Rights (Arts. 13.1 and 15.1), the Convention on the Elimination of All Forms of Discrimination Against Women (Arts. 7, 8, 13(c) and 14.2), the International Convention on Elimination of All Forms of Racial Discrimination (Art. 5(e)(vi)), the Convention on the Rights of the Child (Arts. 12 and 31), the Convention on the Rights of Persons with Disabilities (Arts. 3(c), 4.3, 9, 29 and 30), the International Convention on the Rights of All Migrant Workers and Members of their Families (Arts. 41 and 42.2), the United Nations Declaration on the Right to Development (Arts. 1.1, 2 and 8.2) and the United Nations Declaration on the Rights of Indigenous Peoples (Arts. 5, 18, 19 and 41).

-

<sup>43</sup> Aarhus Convention. Articles 4, 5, 6, 7, and 8.

-

<sup>44</sup> Escazú Agreement. Articles 5, 6, and 7.

-

<sup>45</sup> Office of the United Nations High Commissioner for Human Rights (OHCHR). *Guidelines for States*

*on the Effective Implementation of the Right to Participate in Public Affairs*. Last accessed 22 September 2024 available at: [https://www.ohchr.org/sites/default/files/2021-12/GuidelinesRightParticipatePublicAffairs\\_web.pdf](https://www.ohchr.org/sites/default/files/2021-12/GuidelinesRightParticipatePublicAffairs_web.pdf)

-

<sup>46</sup> The right to access to justice is guaranteed by most universal and regional human rights instruments. It is recognised in ICCPR Article 2(3); and ICESCR, Article 2(1).

-

<sup>47</sup> Aarhus Convention. Article 9; Escazú Agreement. Article 8.

-

<sup>48</sup> Paris Agreement. Articles 4.4, 9, and 11; United Nations Framework Convention on Climate Change. Article 4.

-

<sup>49</sup> ICESCR. Article 2.1.

-

<sup>50</sup> CESCR. Statement on Climate Change and the International Covenant on Economic, Social and Cultural Rights. 8 October 2018. Last accessed 6 May 2025 available at: <https://www.ohchr.org/en/statements/2018/10/committee-releases-statement-climate-change-and-covenant>

-

<sup>51</sup> Inter-American Court of Human Rights. *Advisory Opinion OC-23/17 of November 15, 2017: The Environment and Human Rights (State Obligations in Relation to the Environment in the Context of the Protection and Guarantee of the Rights to Life and to Personal Integrity – Interpretation and Scope of Articles 4(1) and 5(1) in relation to Articles 1(1) and 2 of the American Convention on Human Rights)*. San José, Costa Rica: Inter-American Court of Human Rights, 2017. See also: Wouter Vandenhoe. *Beyond Territoriality: The Maastricht Principles on Extra-Territorial Obligations in the Area of Economic, Social and Cultural Rights*. 2011. 29 Netherlands Quarterly of Human Rights 429.

-

<sup>52</sup> Ibid.

<sup>53</sup> ETO Consortium. *Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights*. Maastricht: ETO Consortium. 2011. Last accessed 6 May available at <https://www.etoconsortium.org/nc/en/ma>

-

<sup>54</sup> Carbon Majors. *The Carbon Majors Database: Launch Report*. 2024. Last accessed 6 May 2025 available at: <https://carbonmajors.org/briefing/The-Carbon-Majors-Database-26913>

-

<sup>55</sup> *United Nations Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*". 2011. Last accessed 6 May 2025 available at: [https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\\_en.pdf](https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf); See also: UN Working Group on the issue of human rights and transnational corporations and other business enterprises. *Information Note on Climate Change and the Guiding Principles on Business and Human Rights*. 2023. Last accessed 6 May 2025 available at: <https://www.ohchr.org/sites/default/files/documents/issues/business/workinggroupbusiness/Information-Note-Climate-Change-and-UNGPs.pdf>

-

<sup>56</sup> UN Working Group on Business and Human Rights. *Gender dimensions of the Guiding Principles on Business and Human Rights. Report of the Working Group on the issue of human rights and transnational corporations and other business enterprises*. A/HRC/41/43. 2017. Last accessed 6 May 2025 available at: <https://documents.un.org/doc/undoc/gen/g19/146/08/pdf/g1914608.pdf>

-

<sup>57</sup> Ibid.

-

<sup>58</sup> Ibid.

-

<sup>59</sup> Ibid.

-

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

-

<sup>62</sup> Ibid.

-

<sup>63</sup> UN Working Group on Business and Human Rights. *Human rights and transnational corporations and other business enterprises*. A/78/155. 2023. Last accessed 6 May 2025 available at: <https://docs.un.org/en/A/78/155>

-

<sup>64</sup> Ibid.

-

<sup>65</sup> John R. Owen et.al. *Energy transition minerals and their intersection with land-connected peoples*. Nature Sustainability. vol. 6. 2023.

-

<sup>66</sup> UN Working Group on Business and Human Rights. *Report of the Working Group on the issue of human rights and transnational corporations and other business enterprises Extractive sector, just transition and human rights*. A/78/155. 2023. Last accessed 6 May 2025 available at: <https://documents.un.org/doc/undoc/gen/n23/202/46/pdf/n2320246.pdf>

-

<sup>67</sup> Ibid

-

<sup>68</sup> CEDAW. *General recommendation No. 39 (2022) on the rights of Indigenous women and girls*. CEDAW/C/GC/39. 2002.para. 46(f), 57(e).

-

<sup>69</sup> CEDAW. *Concluding observations on the tenth periodic report of Canada*. 2024. CEDAW/C/CAN/CO/10. Last accessed 6 May 2025 available at: <https://www.ohchr.org/en/documents/concluding-observations/cedawccanco10-concluding-observations-tenth-periodic-report>

-

<sup>70</sup> CEDAW. *General recommendation No. 34 (2016) on the rights of rural women*. CEDAW/C/GC/34. 2016. Last accessed 6 May 2025 available at: <https://digitallibrary.un.org/record/835897/?v=pdf>

-

<sup>71</sup> The Biodiversity Consultancy and WWF. *Nature-Safe Energy: Linking Energy and Nature to Tackle the Climate and Biodiversity Crises*. World Wide Fund for Nature. 2023. Last accessed 6 May 2025 available at: [https://wwfeu.awsassets.panda.org/downloads/cleanaction\\_nature\\_safe\\_energy\\_report.pdf](https://wwfeu.awsassets.panda.org/downloads/cleanaction_nature_safe_energy_report.pdf)

<sup>72</sup> CEDAW. General recommendation No. 39 (2022) on the rights of Indigenous women and girls. CEDAW/C/GC/39. 2022. Last accessed 6 May 2025. Last accessed 6 May 2025 available at: [tbinternet.ohchr.org/\\_layouts/15/treatybodyexternal/Download](https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download).

<sup>73</sup> OHCHR and the International Labour Organisation (ILO). *Human Rights and Just Transition*. 2023. Last accessed 6 May 2025 available at: <https://www.ohchr.org/sites/default/files/documents/issues/climatechange/information-materials/v4-key-messages-just-transition-human.pdf>

<sup>74</sup> ICESCR. Articles 6, 7, and 8.

<sup>75</sup> CEDAW. *General recommendation No. 34 (2016) on the rights of rural women*. CEDAW/C/GC/34. 2016. Last accessed 6 May 2025 available at: <https://digitallibrary.un.org/record/835897/?v=pdf>

<sup>76</sup> Ibid.

<sup>77</sup> CEDAW. General recommendation No. 39 (2022) on the rights of Indigenous women and girls. CEDAW/C/GC/39. 2022. Last accessed 6 May 2025 available at: [tbinternet.ohchr.org/\\_layouts/15/treatybodyexternal/Download](https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download).

<sup>78</sup> CESCR. General Comment No. 19 The Right to Social Security (Art. 19). E/C.12/GC/19 . 2008. Last accessed 6 May 2025 available at: <https://digitallibrary.un.org/record/618890?v=pdf>

<sup>79</sup> ILO. *World Social Protection Report 2024-2026: Universal social protection for climate action and a just transition*. 2024. Last accessed 6 May 2025

available at: [https://www.ilo.org/sites/default/files/2024-09/SOCPRO\\_WSPR\\_2024\\_Executive\\_Summary\\_EN\\_Web.pdf](https://www.ilo.org/sites/default/files/2024-09/SOCPRO_WSPR_2024_Executive_Summary_EN_Web.pdf)

<sup>80</sup> Global Witness, More than 2,100 land and environmental defenders killed globally between 2012 and 2023 (2024), available on 8 October 2024 at: <https://www.globalwitness.org/en/press-releases/more-2100-land-and-environmental-defenders-killed-globally-between-2012-and-2023/>

<sup>81</sup> UN General Assembly. *UN Declaration on the Right and Responsibility of Individuals, Groups, and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms (UDHR)*. UNGA resolution 53/144 (1998). Last accessed 6 May 2025 available at: <https://www.ohchr.org/en/civic-space/declaration-human-rights-defenders>

<sup>82</sup> OHCHR. *Women Human Rights Defenders*. OHCHR and women's human rights and gender equality. Last accessed 6 May 2025 available at: <https://www.ohchr.org/en/women/women-human-rights-defenders>

<sup>83</sup> Universal Declaration on Human Rights (UDHR). Article 27 (2).

<sup>84</sup> ICESCR. Art. 15; CESCR. *General Comment No. 25 on the right to science and economic, social, and cultural rights*. 2020. E/C.12/GC/25. para. 47.

<sup>85</sup> Ibid.

<sup>86</sup> CESCR. *General Comment No. 25 on the right to science and economic, social and cultural rights*. 2020. E/C.12/GC/25, para. 47.

<sup>87</sup> CEDAW. *General recommendation No. 34 (2016) on the rights of rural women*. CEDAW/C/GC/34. 2016. Last accessed 6 May 2025 available at: <https://>

[digitallibrary.un.org/record/835897?v=pdf](https://digitallibrary.un.org/record/835897?v=pdf)

-

<sup>88</sup> Ibid.

The foregoing Principles for Gender Equality and Human Rights in the Energy Transition are a collective and continued effort spearheaded by the Global Initiative for Economic, Social and Cultural Rights. These were developed between 2024 and 2025 through a series of online consultations, an in-person workshop that took place at the 15th AWID International Forum and rounds of revision with activists, practitioners and experts from around the world. This current version is the third draft of the Principles.

These Guiding Principles must be understood interdependently and in a holistic and systemic manner, avoiding selective application of individual principles or establishing hierarchies among them. Their implementation requires careful attention to power dynamics and context. Moreover, these Principles were designed to guarantee that the energy transition is implemented in a way that respects and advances human rights and gender equality. Thus, their objective must also be considered when interpreting them to avoid any potential weaponisation. These Principles are intended to empower affected communities and support genuine self-determination in energy transitions, with their application guided by the voices and priorities of those most directly impacted rather than serving as instruments for advancing external economic interests.