

## 7 AFFORDABLE AND CLEAN ENERGY



### Issue Brief SDG 7: **Hydropower and the Right to a Clean, Healthy, and Sustainable Environment**



**This Issue Brief concerns Sustainable Development Goal 7 (SDG 7) - affordable, reliable, sustainable and modern energy for all by 2030. The brief focuses on hydropower and the right to a clean, healthy and sustainable environment as well as a just energy transition in Asia and the Pacific.**

#### **Key messages:**

- **SDG 7 and the right to a clean, healthy and sustainable environment are closely interlinked.** Energy is derived from nature and is essential for the enjoyment of many human rights as well as for gender equality. At the same time, energy development, including hydropower, can have environmental impacts and pose risks to human rights such as rights to life, health, food, water and sanitation, alongside rights to information, participation and access to justice. Unsustainable energy development can threaten food security, and result in loss of biodiversity, and pollution, severely affecting the exercise and enjoyment of human rights.
- For hydropower to play its role in the just energy transition, **it must be developed sustainably and in a way that respects human rights, including the right to a clean, healthy and sustainable environment and the rights of Indigenous Peoples and environmental human rights defenders.**
- **A just energy transition should ensure equal access to energy services and benefits generated from hydropower,** focusing on the needs of people and groups in vulnerable situations, in order to leave no one behind.
- **A just energy transition can not be achieved without also ensuring sustainable consumption and production patterns (SDG 12),** including in the energy sector.
- **If not done correctly, the energy transition can pose environmental and human rights threats particularly for groups in vulnerable situations,** including women, children, the poor, ethnic, sexual and gender minorities, Indigenous peoples, older persons, and persons with disabilities.



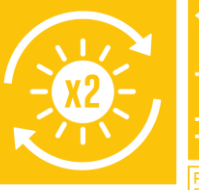


### **SDG 7 and the right to a clean, healthy and sustainable environment**

At the core of the 2030 Agenda lies a clear understanding that human rights and sustainable development are deeply interlinked and mutually reinforcing. SDG 7 provides a framework for a just transition to affordable, reliable, sustainable and modern energy.<sup>1</sup> Energy drives

<sup>1</sup> United Nations (UN) (2023). *SDG 7 on Affordable and Clean Energy*. Available at: <https://sdgs.un.org/topics/energy>. (Accessed 2 March 2023).

economies and sustains societies and is essential for many human rights as well as for gender equality. SDG 7 supports the inclusion of groups and individuals in vulnerable situations in the just energy transition, regardless of gender, ethnicity, age, functionality, and sexual orientation, among others, through the principle of ‘leaving no one behind’ (LNOB).<sup>2</sup>

SDG 7 has the following targets:<sup>3</sup>

TARGET 7-1	TARGET 7-2	TARGET 7-3	TARGET 7-A	TARGET 7-B
				
UNIVERSAL ACCESS TO MODERN ENERGY	INCREASE GLOBAL PERCENTAGE OF RENEWABLE ENERGY	DOUBLE THE IMPROVEMENT IN ENERGY EFFICIENCY	PROMOTE ACCESS TO RESEARCH TECHNOLOGY AND INVESTMENTS IN CLEAN ENERGY	EXPAND AND UPGRADE ENERGY SERVICES FOR DEVELOPING COUNTRIES

The right to a clean, healthy, and sustainable environment was recognized by the General Assembly in 2022 (A/RES/76/300). Energy and the right to a clean, healthy and sustainable environment are strongly interlinked. The environment provides renewable and non-renewable energy.<sup>4</sup> However, energy production and use is also the single biggest contributor to global warming and linked to nature degradation and pollution.<sup>5</sup> Global energy needs are rising rapidly with growing global population, wealth and consumption resulting in rising greenhouse gas emissions from the energy sector accounting for about two-thirds of global greenhouse gas emissions attributed to human activity.<sup>6</sup> Energy production and use thereby contributes to accelerating the triple planetary crisis of climate change, biodiversity loss, and pollution, threatening the right to a clean, healthy and sustainable environment.

Increased use of renewable energy such as hydropower can contribute to climate change mitigation as well as to economic development and poverty reduction.<sup>7</sup> However, the development of renewable energy has been linked to violations of human rights, such as infringing on land rights and Indigenous peoples’ rights, causing food insecurity, limiting participation in decision making, as well as being linked to threats to and killings of environmental human rights defenders (EHRDs).<sup>8</sup>

<sup>2</sup> United Nations Sustainable Development Group (UNSDG) (2023.) *Leave No One Behind*. Available at: <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind>. (Accessed 2 March 2023).

<sup>3</sup> United Nations (UN) (2023). *Ensure access to affordable, reliable, sustainable and modern energy for all*. Available at: <https://sdgs.un.org/goals/goal7>. (Accessed 2 March 2023).

<sup>4</sup> United Nations Environment Programme (UNEP) (2023). *Goal 7: Affordable and clean energy*. Available at: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-7>. (Accessed 2 March 2023).

<sup>5</sup> United Nations Environment Programme (UNEP) (2023). *Why does energy matter?* Available at: <https://www.unep.org/explore-topics/energy/why-does-energy-matter>. (Accessed 2 March 2023).

<sup>6</sup> Ibid.

<sup>7</sup> United Nations Environment Programme (UNEP) (2023). *Goal 7: Affordable and clean energy*. Available at: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-7>. (Accessed 2 March 2023).

<sup>8</sup> Business and Human Rights Resource Centre (n.d.). *Investor Snapshot: Hydropower & Human Rights*. Available at: [https://media.business-humanrights.org/media/documents/files/Hydro\\_-\\_Investor\\_snapshot\\_0.pdf](https://media.business-humanrights.org/media/documents/files/Hydro_-_Investor_snapshot_0.pdf). (Accessed 2 March 2023).

## Hydropower and human rights in Asia and the Pacific

By 2025 Asia will for the first time use half of the world's electricity.<sup>9</sup> Across Asia and the Pacific there is significant divergence in energy access and the majority of the economies in the region are heavily reliant on fossil fuels to meet their energy needs.<sup>10</sup> In order to lower emissions while meeting growing energy demand, the opportunity of hydropower expansion in Asia and the Pacific is substantial.<sup>11</sup>

According to the World Commission on Dams, "dams have made an important and significant contribution to human development, but in too many cases an unacceptable price has been paid, especially in social and environmental impacts, mainly by riparian communities".<sup>12</sup> Hydropower plants and reservoirs can have significant impacts on freshwater ecosystems, biodiversity, fisheries, and flood dependent agriculture.<sup>13</sup> Even if the impacts are lower than of fossil fuels, large reservoirs of hydropower dams have been shown to contribute to greenhouse gas emissions.<sup>14</sup> The environmental harm caused can have negative implications, both direct and indirect, for the effective enjoyment of all human rights, including the right to food and land.

Examples of human rights risks related to hydropower dams include:<sup>15</sup>

- Displacement and loss of livelihoods for local populations
- Violation of Indigenous Peoples' rights, including free, prior, and informed consent (FPIC)
- Violence, intimidation and threats particularly towards local communities and EHRDs
- Infringing on land rights
- Violating labour rights

Hydropower must be developed sustainably and in a way that respects human rights to ensure a just energy transition. This includes both substantive environmental rights, such as the right to land and food, and procedural rights, such as the right to access information, participation and remedy.<sup>16</sup> Hydropower projects in Asia and the Pacific should ensure that local

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<sup>9</sup> International Energy Agency (IEA) (2022). *World Energy Outlook 2022*. Available at: <https://www.iea.org/reports/world-energy-outlook-2022>. (Accessed 2 March 2023).

<sup>10</sup> Fair Finance Asia (2022). *Financing the Just Transition: Powering Asia's Sustainable Energy Future*. Available at: <https://fairfinanceasia.org/blog/2022/12/06/fair-finance-asia-launches-financing-the-just-energy-transition-in-asia/>. (Accessed 2 March 2023).

<sup>11</sup> International Hydropower Association (IHA) (2022). *Hydropower Status Report*. Available at: <https://www.hydropower.org/status-report>. (Accessed 2 March 2023).

<sup>12</sup> World Commission on Dams (WCD) (2022). *Dams and Development A New Framework for Decision-making - The Report of the World Commission on Dams*. Available at: <https://www.routledge.com/Dams-and-Development-A-New-Framework-for-Decision-making--The-Report-of-Dams/p/book/9781853837982>. (Accessed 2 March 2023).

<sup>13</sup> World Wildlife Fund (WWF) (n.d.). *Hydropower in a changing world*. Available at: <https://wwfasia.awsassets.panda.org/downloads/hydropowerfacts.pdf>. (Accessed 2 March 2023).

<sup>14</sup> Almeida, R.M., Shi, Q., Gomes-Selman, J.M. et al. (2019). Reducing greenhouse gas emissions of Amazon hydropower with strategic dam planning. *Nat Commun* 10, 4281. Available at: <https://doi.org/10.1038/s41467-019-12179-5>. (Accessed 21 March 2023); International Hydropower Association (IHA) (2022). *Carbon emissions from hydropower reservoirs: facts and myths*. Available at: <https://www.hydropower.org/blog/carbon-emissions-from-hydropower-reservoirs-facts-and-myths>. (Accessed 21 March).

<sup>15</sup> Business and Human Rights Resource Centre (n.d.). *Investor Snapshot: Hydropower & Human Rights*. Available at: [https://media.business-humanrights.org/media/documents/files/Hydro\\_-\\_Investor\\_snapshot\\_0.pdf](https://media.business-humanrights.org/media/documents/files/Hydro_-_Investor_snapshot_0.pdf). (Accessed 2 March 2023).

<sup>16</sup> United Nations Environment Programme (UNEP) et al. (2023). *What is the Right to a Healthy Environment: Information Note*. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/41599/WRHE.pdf?sequence=1&isAllowed=y>. (Accessed 2 March 2023).

communities receive adequate compensation for loss of access to land, resources and territories. Local communities should also be provided with adequate housing and services at resettlement sites, and be given training or assistance to secure new livelihoods.<sup>17</sup> In order to facilitate this, governments should ensure independent Environmental Impact Assessments (EIA) and reviews of hydropower dams as well as promote and protect local communities' right to participate in decision-making, and their access to justice and remedy.<sup>18</sup> In some cases, hydropower has been shown to facilitate corruption as resettlement funds and compensation packages are vulnerable to corruption.<sup>19</sup> In order for the energy transition to be just, hydropower projects in Asia and the Pacific need to be transparent and its developers and financiers held accountable for violations of relevant rights. Businesses involved in hydropower projects have a responsibility to respect human rights, including the right to a clean, healthy and sustainable environment.<sup>20</sup> Hydropower projects should respect labour rights, and address risks of injuries and death for the workers at construction sites as well as continuously conduct Human Rights Due Diligence (HRDD).<sup>21</sup>

As of 2021, renewable energy is the sector with the third most frequent allegations of attacks and intimidation of business related attacks against human rights defenders worldwide (behind mining and agribusiness) and within renewable energy, hydropower is the sub sector with the highest number of allegations.<sup>22</sup> In Asia and the Pacific, hydropower and dam projects were the 8th most dangerous sector for human rights defenders based on data collected from 2015 to 2021.<sup>23</sup> Environmental human rights defenders who contribute to the protection and promotion of the right to a clean, healthy and sustainable environment and the achievement of SDG 7 must be protected and supported.

If not done correctly, the energy transition in Asia and the Pacific has the potential to pose threats to groups in vulnerable situations,<sup>24</sup> such as women, children, the poor, ethnic, sexual and gender minorities, Indigenous peoples, local communities, older persons, and persons with disabilities. Hydropower projects must take power dynamics and inequalities into consideration in order to leave no one behind, including applying a gender equality approach

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<sup>17</sup> United Nations Environment Programme (UNEP) et al. (2023). *What is the Right to a Healthy Environment: Information Note*. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/41599/WRHE.pdf?sequence=1&isAllowed=y>. (Accessed 2 March 2023).

<sup>18</sup> In 2022 the Mekong River Commission launched two sets of guidelines for developers to make their projects more sustainable: *the Preliminary Design Guidance for Proposed Mainstream Dams* (known as the PDG) and *the Guidelines for Transboundary Environmental Impact Assessment* (or TbEIA). Available at: <https://www.mrcmekong.org/resource/ajutqi>; <https://www.mrcmekong.org/assets/Publications/TbEIA-Guidelines-Final-version-25-9-2018.pdf>. (Accessed 20 March 2023).

<sup>19</sup> Sovacool, B.K. & Walter, G. (2018). *Internationalizing the political economy of hydroelectricity: security, development and sustainability in hydropower states*. Available at: <https://doi.org/10.1080/09692290.2018.1511449>. (Accessed 2 March 2023); World Commission on Dams (WCD) (2022). *Dams and Development - A New Framework for Decision-making - The Report of the World Commission on Dams*. Available at: <https://www.routledge.com/Dams-and-Development-A-New-Framework-for-Decision-making---The-Report-of/Dams/p/book/9781853837982>. (Accessed 2 March 2023).

<sup>20</sup> United Nations Development Programme (UNEP) (2022). *Guiding Principles on Business and Human Rights*. Available at: <https://www.undp.org/laopdr/publications/guiding-principles-business-and-human-rights>. (Accessed 2 March 2023).

<sup>21</sup> United Nations Official High Commissioner on Human Rights (OHCHR) (2023). *Mandatory human rights due diligence (mHRDD)*. Available at: <https://www.ohchr.org/en/special-procedures/wg-business/mandatory-human-rights-due-diligence-mhrdd>. (Accessed 2 March 2023).

<sup>22</sup> Business and Human Rights Resource Centre (2022). *Human Rights Defenders & Civic Freedoms Programme*. Available at: <https://www.business-humanrights.org/en/from-us/human-rights-defenders-database/>. (Accessed 20 March 2023).

<sup>23</sup> Business and Human Rights Resource Centre (2022). *Business and Human Rights defenders in Asia-Pacific*. Available at: [https://media.business-humanrights.org/media/documents/2022\\_HRDs\\_in\\_AP.pdf](https://media.business-humanrights.org/media/documents/2022_HRDs_in_AP.pdf) (Accessed 20 March 2023).

<sup>24</sup> Fair Finance Asia (2022). *Financing the Just Transition: Powering Asia's Sustainable Energy Future*. Available at: <https://fairfinanceasia.org/blog/2022/12/06/fair-finance-asia-launches-financing-the-just-energy-transition-in-asia/>. (Accessed 2 March 2023).

to avoid putting a disproportionate share of social costs on women and girls and to ensure an equitable allocation of the generated benefits and decision-making.<sup>25</sup> Hydropower projects should respect the rights of Indigenous peoples to their lands, territories, resources, governance, and cultural integrity and their right to free, prior informed consent (FPIC).<sup>26</sup> Finally, in order to ensure the rights of future generations, the energy transition should take place within planetary boundaries and a just energy transition can not be achieved without also ensuring sustainable consumption and production patterns (SDG 12).

<b>Recommendations to achieve SDG 7 in relation to hydropower, the right to a clean, healthy and sustainable environment and a just transition in Asia and the Pacific</b>	
1.	To achieve a just energy transition, hydropower must be developed sustainably and respect human rights - including the right to a clean, healthy and sustainable environment.
2.	A just energy transition should ensure equal access to services and benefits generated by hydropower, focusing on the needs and rights of people and groups in vulnerable situations, in order to leave no one behind.
3.	A just energy transition should address gender-based discrimination and hydropower projects must include a gender equality approach.
4.	Governments should ensure independent Environmental Impact Assessments (EIA) and reviews of hydropower dams to ensure fair compensation for affected people and guarantee human rights.
5.	Businesses and corporations involved in hydropower projects have a responsibility to respect human rights, including the right to a clean, healthy and sustainable environment.
6.	Hydropower projects should ensure the protection of the rights of workers and mainstream Human Rights Due Diligence (HRDD).
7.	Hydropower projects should ensure active and meaningful engagement and participation, including a process of free, prior, and informed consent with local communities and Indigenous Peoples, that is responsive to concerns and transparent.
8.	Environmental human rights defenders (EHRDs) who contribute to the protection and promotion of the right to a clean, healthy and sustainable environment and the achievement of SDG 7 must be protected and supported.
9.	Hydropower projects should ensure gender-responsive and inclusive access to justice and remedy as well as accountability for environmental harms caused by hydropower projects.
10.	A just energy transition can not be achieved without also ensuring sustainable consumption and production patterns (SDG 12), including in the energy sector.

<sup>25</sup> International Rivers (2020). *Transforming Power: A gender guide for organisations campaigning on dams and for rivers*. Available at: <https://www.internationalrivers.org/wp-content/uploads/sites/86/2020/09/Gender-Guide-English-single-pages.pdf>. (Accessed 23 February 2023).

<sup>26</sup> United Nation (UN) (2023). *United Nations Declaration on the Rights of Indigenous Peoples*. Available at: <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>. (Accessed 23 February 2023).