

## UN BKK Presentation Talking Points – Sustainable Technologies Panel

- I am representing an interdisciplinary team of academics and practitioners from my Institute and the departments of law, global affairs, and engineering at the University of Notre Dame.
- We have been working with the global mining company BHP for the past 2 years to develop a framework for water-intensive industry actors to better understand the risks associated with the human right to water when they are designing, expanding, or buying projects.
- Given the theme of today's panel, today I want to talk to you all about the mining industry, which is a key contributor to the creation of energy transition technologies like solar panels and wind turbines. The panel today challenges us to think about how the acceleration of clean and sustainable technology shapes "development" and the contribution that development makes to the enjoyment of human rights.
- My talk today reverses that script. Today, I want to explore how the concept of development and human rights needs to step in to shape our understanding of what we mean by clean and sustainable technologies. I will illustrate that the mining industry, which currently faces a myriad of environmental and human rights concerns, prevents sustainable technology from truly being sustainable without a radical shift towards a human rights-based approach to business. I will then talk about one pathway forward, which would be our framework and others like it.
- It is undeniable that increased demand for renewable energy technologies will require the mining market for metals and minerals to expand. The predictions of this expansion are pretty incredible:
  - WB 2019 report: The production of minerals, such as graphite, lithium and cobalt, could increase by over 450% by 2050 (in comparison with 2018).
- Beyond the looming question of whether or not we even have enough supply to meet this demand, a key problem here is that mining can be pretty significantly destructive to the environment and to societies. Challenges include: deforestation, displacement of communities, pollution, land disputes, and high water consumption.
- I want to focus on this last one, water: lithium and copper, two of the most essential metals in making technologies like car batteries, require extremely high volumes of water during mining. Yet, 50% of these metals are located in areas with high water stress levels.
- Moreover, an absolutely astonishing paper published last year predicts that more than half of mineral and metal sources are located on or near the lands of Indigenous and peasant peoples
  - 62% are in high water risk locations
  - 43% (1,516) are in jurisdictions with low governance capacities
- What does all this mean?
- We need energy transition technologies to meet our sustainable development goals. Yet, the materials that constitute the transition technologies are acquired in fundamentally

unsustainable and harmful ways that threaten highly vulnerable communities in particular.

- Now, add increasing time pressures from the climate crisis, and you have the perfect conditions for repeated human rights abuse.
- Now there is a debate to be had over whether mitigating the climate crisis requires us to turn a blind eye to the inevitable realities of mining. However, I think all of us would agree that we cannot sacrifice the rights of some of the most vulnerable populations to save the rights of others.
- And this is in line with the spirit of the right to development, which only credits success when “realization of some rights has improved while no other right has been violated or enjoyment of it has not been reduced.”
- Building from this, to truly achieve Sustainable Development goals via sustainable technologies, we need to find innovative ways of building capacity within the mining industry, and quickly, to center human rights at the heart of the energy transition.
- Of course, improving law is essential for addressing this challenge. But, given how quickly the mining industry is expanding, we need to pursue a variety of pathways.
- Informed by the Guiding Principles on Business and Human Rights as well as recent evolutions in jurisprudence, my team believes that industrial actors have an immediate role to play in human rights implementation, and we should be talking about it.
- We also believe that such actors are open to this, but many are struggling to take effective steps. This is where our framework can come in as one strategy.
- The mining company BHP approached us to better understand what a rights-based approach to water stewardship actually means and why it might help them proactively and constructively address some serious environmental and social concerns.
- Our research eventually led to the creation of a multi-disciplinary tool that focuses on contextualizing human rights risks. We created this because we noticed three critical gaps in the literature.
- First, we found a conceptual gap. Much of the literature on water stewardship tends to be highly siloed into human rights, governance, or hydrological frames. Seldom do we find efforts that work across or blend these disciplinary fields.
- Second, we found a practical gap. While researchers had perhaps clearly defined the problem(s) common to many water-intensive industrial projects, they have not given industry actors the *tools* to evaluate risks *a priori*. There is no good strategy yet for ensuring legal adherence or locating ways in which a company can go above and beyond to expand the enjoyment of the right to water. Most frameworks focus on measuring violation. In our view, what’s needed is a mindset shift that sees advancing equity and rights proactively as good for business and society.
- And third, any framework that incorporates human rights into environmental stewardship practices leans heavily on indicators and checklists. We took problem with this. While convenient, these methods fundamentally dilute human rights into a set of pre-established norms that struggle account for the ways in which rights manifest differently

across contexts. Nor do they capture how rights interact with other interdependent rights and cross-cutting obligations.

- Our team responded to these three gaps by developing a strategy that industry actors can use to holistically prevent abuse. The framework, which we call the Realizing Rights for Water Framework, gives *teeth* to the human right to water by translating abstract and complex human rights considerations into concrete water security, water governance, and legal considerations in a given context.
  - Instead of defining standards for people, our framework flips the script. It produces a set of human rights-informed *questions* that operators can use as they perform their pre-project consultations to more holistically understand the hydrological, social, cultural, and governance conditions across the theater of their operations – all the while taking into account those interdependent rights and cross-cutting obligations.
  - Finally, we built the assessment to be approachable, something that water operators and communities can understand. We also avoided duplicating existing prevention efforts and instead demonstrate how our framework strengthens compliance with established environmental standards.
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- The framework is done but the project is not over
  - My team is searching for opportunities to begin piloting our framework, not just with BHP but ideally with other water-related actors as well
  - We are in the process of writing 15 case studies that demonstrate framework outcomes and its flexibility across contexts. We hope these case studies contribute to our understanding of how the human right to water manifests in industry scenarios.
  - And we are working to expand our framework to consider the broader human right to the environment and therefore link up with the larger water-energy-food nexus.
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- Overall, the belief is that Sustainable Development means inclusive development, which, in the spirit of the focus of this conference, means that no one is left behind. As water-intensive industries expand in the coming years, especially mining, our team wants to put human rights at the center. Hopefully, this framework can support that vision.