

# Integrating Climate Change, Decarbonization, and Just Transition Considerations into Extractive Contracts



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The relevance of climate change to the mining, oil, and gas sectors reaches well beyond the physical risks and impacts of climate change on business operations and the resulting need to plan accordingly. Extractive industries, including their value chains, [contribute significantly to global anthropogenic emissions](#) of carbon dioxide and other greenhouse gases (GHG) causing global warming. The science-based policy imperative to reduce GHG emissions substantially by 2030 and achieve net-zero emissions by 2050, in line with the Paris Agreement goal, weighs heavily on extractive industries: they must shift their operations [away from fossil energy and toward renewables](#).

For oil, gas, and coal mining, the implication is even more profound: since they produce the fossil fuels causing the global climate emergency, they need to [transition swiftly to a zero-carbon business model](#), and they may need to decommission assets earlier than originally planned. For mining other than coal—in particular, for the mining of [critical minerals](#) increasingly needed to build [renewable energy generation systems, grids, storage, and other green technologies](#) of the zero-carbon world—decarbonization efforts may represent not only challenges, but also opportunities fueled by increased demand.

Successful governance of extractive industries in the context of a just zero-carbon energy transition could benefit all stakeholders. Communities could reap sustainable development co-benefits of the transition, including access to affordable renewable energy and to sustainable, climate-resilient infrastructure to help them adapt to climate impacts; reduced poverty and inequality; and [realized human rights](#). Workers could benefit from upskilling and re-skilling opportunities allowing them access to decent work and income to support their families in the zero-carbon economy. Resource-rich states could benefit from sustained revenue flows that would allow them to fund investment in public goods. And while fossil fuel companies argue that they stand to lose from decarbonization, those that reinvent themselves and embark on the zero-carbon energy transition [could thrive](#).

Realizing this vision of extractives governance depends on putting in place conducive [legal frameworks](#). Domestic laws are the ideal legal instruments to regulate the extractive industries' contribution to climate action, on both the mitigation and adaptation fronts. In the absence of relevant laws to advance climate goals, governments may consider using [climate-related provisions](#) in investor-state [oil, gas, and mining contracts](#) or models and [community development agreements \(CDAs\)](#) to advance climate goals in the extractive industries.

# Suggested Climate-Related Provisions for New or Amended Extractive Contracts

## 1 Adaptation Provisions

- Require climate risk assessments and community vulnerability assessments.
- Require companies to support and comply with national adaptation plans (NAPs) and climate adaptation guidelines where such instruments have been developed by the host country.
- Incorporate companies' climate change adaptation strategies into CDAs.
- Regulate water use, by conditioning the grant of water rights to companies on [stringent obligations regarding water use efficiency](#), including penalties for water overuse or release of non-treated waste water, and providing for a grievance mechanism for downstream communities whose water rights are impacted.
- Require companies to create shared-use opportunities to increase the [access to water for communities](#), particularly those who are in increasing water stress.
- Preserve the government's ability to alter water allocation to extractives operations based on fluctuations in the amount of available water and the number of users reliant on the water source.
- Integrate climate risks and just transition aspects into closure or decommissioning plans by requiring companies to set aside resources and plan in advance for the end of the extractive project, the climate-resilient rehabilitation of the project site, the re-skilling of the workforce, and the economic diversification of the project-affected community, and other associated socioeconomic and environmental risks and impacts.

## 2 Mitigation Provisions

- Require extractive companies to use renewable energy sources.
- Require companies to [estimate and disclose GHG emissions](#) and to [adopt absolute GHG emission reduction targets and strategies aligned with science-based climate goals](#), for scopes 1, 2, and 3, with short- and medium-term milestones.
- Require companies to account for direct, indirect, and induced impacts on forests at every stage of the operations, as well as [systematically applying the mitigation hierarchy](#) throughout the life-cycle of the project.
- Commit companies to [adopting a governance structure that incentivizes climate action and a policy not to lobby against climate regulation](#).

## 3 Cross-cutting provisions

- Avoid [stabilization clauses, force majeure, and arbitration clauses](#) that constrain the government's ability to adopt policy to reduce GHG emissions and climate-related risks from extractive projects.
- Require companies to purchase insurance policies from brokers who have specific tools to analyze the local and global risks associated with climate change, as well as additional insurance for any site-specific risks.
- Provide for the parties to renegotiate the contract every three to five years, including in light of scientific findings about potential climate impacts.

## 4 Mining-Specific Adaptation Provisions

- Require companies to justify their tailings dam design, ban dams upstream of communities, avoid wet tailings dams, and demonstrate in the mining plan that the tailings dam follows the latest global safety standards and that ongoing maintenance and remediation activities will be conducted.
- Require companies to model the risk of tailings dam failure due to climate-related risks in the environmental and social impact assessment (ESIA), and to include tailings monitoring in the environmental management plan (EMP), with the goal of achieving zero failures.

## 5 Petroleum- and Coal-Specific Mitigation Provisions

- Require companies to eliminate routine [vented, fugitive, and flaring \(VFF\) emissions](#) and [coal-mine methane \(CMM\) emissions](#), with deterring penalties for non-compliance.
- Where appropriate, negotiate the early closure or decommissioning of coal, oil, and gas exploration and exploitation projects and related infrastructure, with provisions to address the associated socioeconomic and environmental risks and impacts.

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## Read more

Tehtena Mebratu-Tsegaye, Perrine Toledano, Martin Dietrich Brauch, and Mara Greenberg. *Five Years After the Adoption of the Paris Agreement, Are Climate Change Considerations Reflected in Mining Contracts?* New York: Columbia Center on Sustainable Investment (CCSI), 2021, <https://ccsi.columbia.edu/sites/default/files/content/docs/ccsi-climate-change-investor-state-mining-contracts.pdf>.

Martin Dietrich Brauch, Perrine Toledano, and Cody Aceveda. *Allocation of Climate-Related Risks in Investor-State Mining Contracts*. New York: Columbia Center on Sustainable Investment (CCSI), June 2022, <https://ccsi.columbia.edu/content/allocation-climate-change-risks-investor-state-mining-contracts>.



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