

Insight Brief

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Just Transition In LT-LEDS: A review of G20 Submissions

Executive Summary

This insight brief examines whether and how the different aspects of a just transition feature in the long-term low-emission development strategies (LT-LEDS) submitted by G20 countries¹. As more countries develop LT-LEDS and initiate just transition measures, there is a growing need to assess the extent to which these strategies are comprehensive, integrated, and aligned with both national priorities and global climate goals. Ensuring that LT-LEDS incorporate just transition principles is vital, not only because of the moral imperative of fairness and leaving no one behind, but also because it makes transitions smoother and socially supported, thereby accelerating emission reductions, avoiding additional costs, and maximizing the benefits.

The analysis identifies which just transition aspects are (more or less prominently) covered in the strategies (with illustrations) and is based on a framework of 20 questions across seven thematic areas: 1) governance, 2) climate and sustainability planning, 3) workforce development, 4) economic development, 5) regional and rural development, 6) innovation and research, and 7) social support. The results offer insight into those aspects that merit more attention in future iterations of LT-LEDS, such as specific regional support, addressing stranded assets and investment needs, and turning workforce risks into opportunities.

¹ The analysis considered 16 G20 countries, which submitted an LT-LEDS to the UNFCCC, and the EU as a cross-national jurisdiction. Saudi Arabia and Italy are part of the G20 but have not submitted an LT-LEDS as of November 2025.

This policy brief complements the growing literature on coal and energy transitions. While existing studies often examine how transitions are implemented on the ground, this policy brief provides a high-level overview of how just transition principles are incorporated into long-term strategies that shape those implementations. The analysis focuses on domestic aspects of just transition across a variety of themes but does not rank countries or score how fairness is incorporated into transition planning.

Key Findings

Most LT-LEDS in this analysis include just transition aspects. However, the framing and integration of these aspects vary significantly across countries, reflecting each country's unique national context and strategic priorities. For some, such as Argentina, Canada, or South Africa, just transition serves as an overarching, cross-cutting principle guiding the entire strategy, whereas for others, such as Australia or Germany, individual just transition aspects are considered through a more targeted focus on specific needs and vulnerabilities to be addressed.

Just transition aspects that are prominently covered in LT-LEDS

1. **Innovation and research:** The majority of the strategies analysed (82%) highlight research and innovation as a key enabler for the transition. Innovation, as described in the LT-LEDS, is more focused on emission reduction than on developmental impacts such as reducing poverty or addressing inequality.
2. **Workforce development:** After innovation and research, it is the second most discussed just transition aspect, appearing in 12 out of 17 G20 strategies (71%). Some countries take an integrated approach to workforce development, while others focus on employment impacts and opportunities without suggesting a concrete facilitating approach.
3. **Economic Development:** Over 70% of the strategies analysed focus on upgrading or diversifying existing economic activities, especially by improving energy and material efficiency and supporting businesses where human capital skills are transferable and know-how is permeable, such as with emerging clean technologies. Additionally, 65% highlight the need to identify new green growth opportunities within existing industries. There is

less emphasis on ensuring a fair and orderly phase-out of incompatible industries and on supporting associated regions and communities.

4. **Governance and Inclusive Development Process:** At least three quarters of the strategies are the result of a participatory stakeholder process, and most of those recognize the important role of local governments in their implementation. This shows the power of LT-LEDS as a platform for continuous dialogue on participation, the distribution of benefits and burden, the timing and sequencing of actions, and identifying where support is needed to ease transition impacts and ensure fair outcomes.

Overall, the assessment results show that G20 countries view innovation, workforce development, and economic diversification as the main pillars of a just transition. Widespread use of participatory governance processes reflects growing recognition that inclusive and locally driven engagement is essential to achieving a fair and sustainable outcome. However, the analysis also highlights several notable gaps, as many strategies lack specificity in their actions and place insufficient emphasis on social equity, inclusive implementation and financing needs. (See Image 1 – Overall Results)

Just transitions' aspects that should be strengthened within the LT-LEDS:

1. **Be more specific on who will be affected and how:** Although the majority of strategies recognize that the transition will disproportionately affect some and that certain groups are (historically) more vulnerable than others, the details on *who* is affected, *how*, and to *what extent* are mostly lacking. For example, only a few strategies (29%) explicitly identify regions negatively affected by the transition or with green growth potential. Several strategies discuss that certain groups have limited access to opportunities or are at risk of bearing high costs – but these groups are described in very generic terms (e.g., women, the elderly and disabled, and the poor). Moreover, coverage of social support (47% of LT-LEDS analysed) and addressing existing social injustices (24%) is limited.
2. **Address immediate social impacts by proposing just transition measures:** Future iterations of LT-LEDS may consider a stronger connection to the short-term realities of households, communities, and businesses. This includes themes such as social inclusion, affordability of basic services, livelihood resilience, energy security, economic

diversification, and access to goods and services needed to participate in the transition (e.g., energy-efficient housing, electric vehicles).

3. **Provide more clarity on the timing and process of phase out of incompatible activities:** while the premise of all LT-LEDS is that incompatible activities are phased out, and certain businesses will have no future in their current form, the strategies lack guidance on **when and how** this will have to take place. Discussions on critical economic risks, such as dealing with stranded assets and carbon lock-ins, are mostly lacking, leaving those affected with insufficient clarity for thorough preparation.
4. **Provide more information on investments and financing needs:** Net-zero transformations require significant investments in infrastructure and capital goods. Decisions on financing needs, investment priorities, and ways to mobilise capital can have a large impact on who has access to the benefits of the transition and who bears the costs. This is underrepresented in the current editions of LT-LEDS, and as a topic with direct bearing on matters of fairness, this deserves more prominence in future updates.
5. **Monitor and evaluate actions and outcomes:** given the medium- to long-term horizon of LT-LEDS, it is important to monitor the speed and direction of change continuously, make sure that the sector transformations stay on track, and assess if (and where) matters of (un)fairness occur and require attention. This is especially relevant in relation to the increasingly ambitious shorter-term nationally determined contributions (NDCs) that countries prepare and implement.

Keeping up the integration of just transition principles into LT-LEDS is crucial for building public trust and social support, facilitating the implementation of climate policy, ensuring equitable outcomes, and avoiding unnecessary costs. Anchoring just transition guidance into LT-LEDS development and implementation can offer a framework for timing and sequencing actions, send predictable signals to high-emitting sectors and regions, and offer households, communities, and businesses support to ensure fair outcomes and a just transition.

Image 1. Overall results per just transition area

Share (%) of LT-LEDS assessed that have...

