

Distributional implications of climate change and policy recommendations for an inclusive, just and sustainable transition

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Introduction

- Inequality both among and within countries poses a barrier to implementing policies that facilitate the transition to low-carbon, climate-resilient economies. This is especially relevant for regions such as Latin American and the Caribbean, where structural, high levels of inequality are a longstanding challenge.
- There are multiple dimensions of inequality regarding climate change:
 - There are considerable differences in the carbon footprint among and within countries.
 - Developing and emerging economies tend to be more vulnerable to climate change impacts and those impacts are intensifying every year. Therefore, climate change impacts contribute to widening the gap between advanced economies and the rest of the world.
 - Countries present different capacities to cope with climate change. The structure of the economy, socioeconomic conditions, the quality and accessibility to basic services, ecosystems health, and the diverse geographical features are the main determinants of societies' vulnerability and exposure levels to climate change.
 - Current economic structure is relevant assessing the vulnerability to the low carbon transition. Economies more dependent on declining sectors (high GHG emissions intensity in the context of a low carbon transition) exhibit a higher transition risk.
- On the other hand, transition policies themselves present heterogeneous impacts. The distributive impact of policies aimed at promoting decarbonization, resilience and sustainable development can be progressive (i.e. policies that present both an environmental and a distributive benefit; win-win policies), neutral (i.e. transition policies that do not alter the distribution of income) or regressive (i.e. instruments in the policy mix that present a negative impact on income distribution if no compensation is provided for, such as carbon pricing mechanisms).
- A mix of policies is required to appropriately manage the physical, economic and distributive risks of climate change and transition policies. Productive development, trade, fiscal and social policies are needed to potentiate the socioeconomic benefits of the transition and manage the most harmful risks.

I. Distributional impacts of climate change

The consequences of climate change are already significant and exacerbate existing development gaps, including the inequality gap, whether income or multidimensional. On the one hand, the countries that have contributed the least to this global problem, due to their geographical location, are more exposed to its most harmful impacts, while domestic socioeconomic conditions combine to set a profile of high vulnerability.

The objective of this section is to review the evidence of the distributional impacts of climate change, based mainly on evidence and figures from IPCC reports and ECLAC's own studies and investigations.

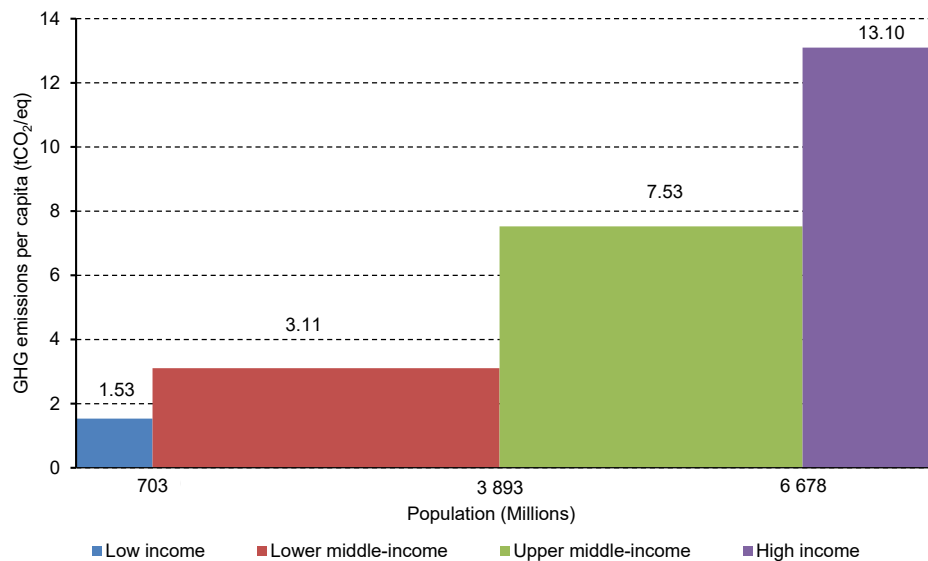
- The impacts of climate change are not equally or uniformly distributed.
 - Climate change is a global phenomenon. All countries and all social groups are subject to the impacts of climate change.
 - However, different people and systems present varying degrees of exposure (presence in places and settings that could be adversely affected) and vulnerability (the propensity or predisposition to be adversely affected) (IPCC, 2023).
- The most vulnerable people and systems are disproportionately affected by the impacts of climate change. The intersectionality between income level, gender, race and ethnic dimensions is relevant as different layers of socioeconomic vulnerabilities blend and combine.
 - Vulnerability of economic structures has macroeconomic growth implications (ECLAC, 2023).
 - Vulnerability is exacerbated by inequity and marginalization (IPCC, 2023). One of the reasons is that these populations have fewer means and capacity to cope and adapt (IPCC and ECLAC, various).

In this context, unmanaged climate change is itself a phenomenon that aggravates distributional issues.

A. Inequality in the attribution

Compared to upper-middle-income economies, high-income countries present per capita emissions 1.5 times higher, and these emissions are up to 10 times higher compared to low-income countries (figure 1). And, moreover, the top 1% of the population is responsible for 15% of emissions, while half of the lowest-income population is responsible for only 10% (Bruckner et al., 2022).

Figure 1
World: annual per capita greenhouse gas emissions, 2022
(Tons of CO₂eq per person)

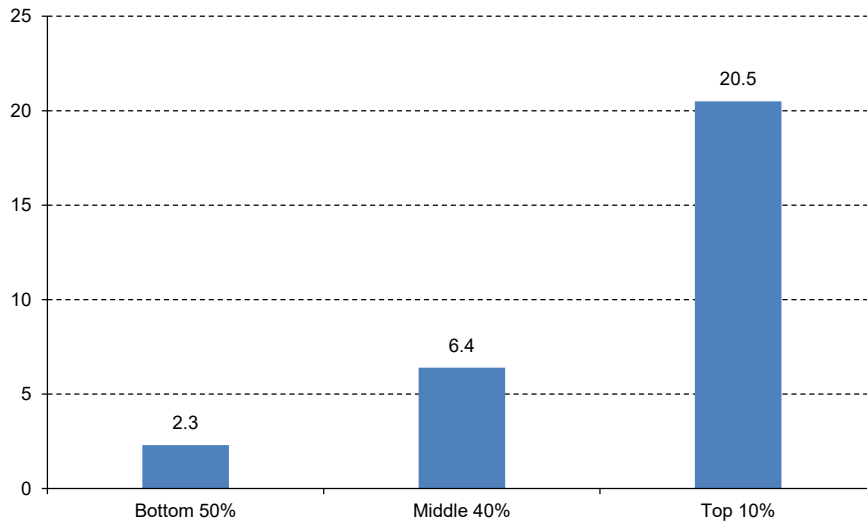


Source: European Union 2023, European Commission, Joint Research Centre (JRC), EDGAR (Emissions Database for Global Atmospheric Research) Community GHG database, comprising IEA-EDGAR CO₂, EDGAR CH₄, EDGAR N₂O and EDGAR F-gases version 8.0 (2023), y CEPAL, 2022, Towards transformation of the development model in Latin America and the Caribbean: production, inclusion and sustainability (cepal.org).

This phenomenon is also reproduced within countries, where higher-income households have a carbon footprint several times higher than lower-income households. In the case of Latin America and the Caribbean, the 10% of the population with the highest income emits 9 times more than the 50% of the population with the lowest income and between 4 and 5 times more than the segment of the population that represents 40% of the middle of the distribution (figure 2) (CEPAL, 2022).

Carbon budget is and has been unequally distributed. And, considering the 1.5-degree target, this budget is rapidly running out: 9 years is all the remaining time that the carbon budget will last if current emissions trends continue (CEPAL, 2024a).

Figure 2
Latin America and the Caribbean: annual per capita greenhouse gas emissions, 2019
(Tons of CO₂eq per person)

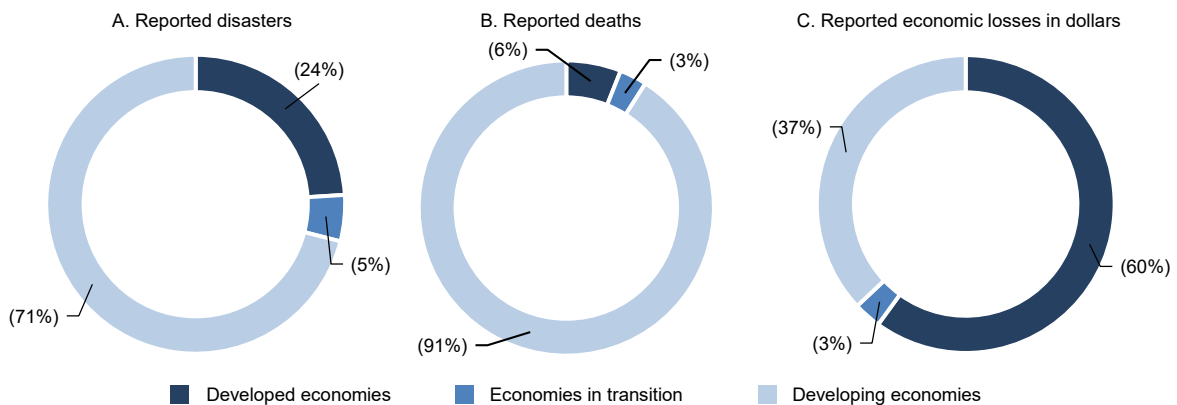


Source: European Union 2023, European Commission, Joint Research Centre (JRC), EDGAR (Emissions Database for Global Atmospheric Research) Community GHG database, comprising IEA-EDGAR CO₂, EDGAR CH₄, EDGAR N₂O and EDGAR F-gases version 8.0 (2023), y CEPAL, 2022, Towards transformation of the development model in Latin America and the Caribbean: production, inclusion and sustainability (cepal.org).

B. Inequality in the distribution of physical risk

Meanwhile, due to their geographical location and socioeconomic conditions, developing countries face a higher level of exposure and vulnerability to the impacts of climate change. Thus, between 1970–2021, more than 75% of climate disasters and 94% of reported deaths occurred in developing or transition economies (figure 3) (WMO, 2021).

Figure 3
Disasters, deaths, and economic losses reported between 1970–2021



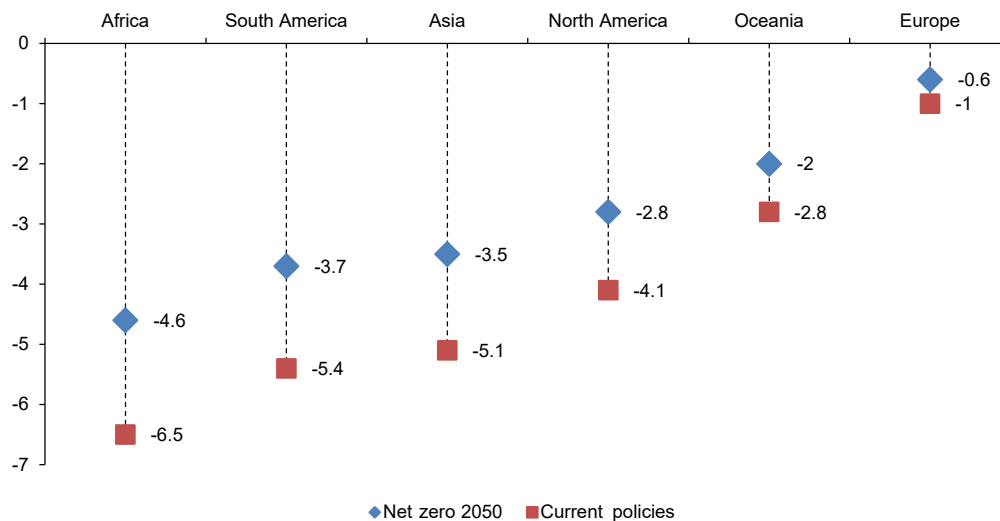
Source: WMO Atlas of Mortality and Economic Losses from Weather, Climate, and Water Extremes (1970–2021).

Evidence shows that temperature increases have already negatively impacted economic growth in low-income countries and other middle-income countries, such as Latin America and the Caribbean and there is evidence of the persistence and increase of these effects. In the LAC region, the average temperature rise of 1°C experienced between 1970 and 2020, has impacted potential output growth by nearly one percentage point (CEPAL, 2024a). Since these consequences have been more harmful in developing countries, climate impacts drive further income divergence.

In this way, climate impacts constrain the development process of lower-income countries, widening income gaps between countries and within countries, fostering increasingly high levels of inequality. Moreover, as emissions continue to trend upwards, the frequency and magnitude of impacts will only increase, exacerbating inequality. By 2030, per capita GDP losses due to temperature increases in LAC could reach 6.3% (CEPAL, 2024a). Taking into account the worsening of acute climate shocks by 2050, recent estimates for six highly exposed countries in the region show that GDP could be between 9% and 12% lower than that corresponding to a trend growth scenario. This would require exceptionally large additional investments to offset such impacts (CEPAL, 2023).

Heat waves are expected to negatively affect labor productivity. By 2050, even in a net zero scenario, there are negative impacts on labor productivity, and these are more acute in developing regions (figure 4). For Latin America and the Caribbean, labor productivity would fall between 4% and 5%, in relation to the productivity levels of the period 1986–2006. These impacts present important differences between countries, with Suriname, Guyana and Venezuela being the most affected in the region with losses close to 10%. Meanwhile, in the regions of Europe and Oceania, the expected losses do not exceed 3% (CEPAL, 2024a).

Figure 4
Relative change in labour productivity to 2050 as a result of heat waves compared to the reference period 1986–2006
(Percentages)



Source: Climate Analytics, 2023. Climate Impact Explorer.

Note: Spatial aggregation method by weighted average by population. NGFS Net Zero 2050 and current policies scenarios.

C. Inequality in the capacity to address the impacts of climate change

In addition to the greater exposure to climate impacts faced by lower-income countries, their socioeconomic conditions make them especially vulnerable. In developing countries, a large segment of the population is poor or vulnerable to poverty. For example, in the case of Latin America and the Caribbean, 29% of the population, or 181 million people, were below the poverty line in 2022, and 11.2% of the population, or 70 million people, were in extreme poverty that same year, and around 25% of the population is above the poverty line but with low incomes (Salazar-Xirinachs, 2023). Therefore, in the region more than 50% of the population is poor or at high risk of falling into poverty as a result of economic or climate shocks (Salazar-Xirinachs, 2023). Moreover, poor households are often located in areas more prone to disaster risks, such as hill slopes subject to landslides or riverbanks subject to flooding.

Countries present varying capacities to address the impacts. Social protection networks and access and quality of basic services are already fragile and, as shown in the COVID crisis, require more investment and are not well suited to cope with the challenges posed by climate change.

Adaptation needs are therefore differentiated, being greater in lower-income countries that, in addition, have reduced fiscal space and tend to face high levels of indebtedness and cost of capital. In fact, currently 3.3 billion people live in countries that spend more on debt interest payments than they do on health or education (UNCTAD, 2023). In Latin America, interest payments accounts, on average, 2.6% of GDP and 16% of tax revenues, matching, surpassing or exceeding the expenditure on education, health and social protection and more than doubling the expenditure on public investment (CEPAL, 2024b).

Therefore, some countries have the condition of "double vulnerability" whereby climate vulnerability is combined with macrofinancial vulnerability, i.e., reduced fiscal space and high levels of debt to GDP that limit the capacity to respond to various emergencies (Bedossa, 2023; Kling et al., 2018). In this way, the reaction capacity of those countries that present this double vulnerability is limited by the reduced fiscal space when they are compromised by an extreme event, which can plunge these countries into a "climate-financial trap" (Bedossa, 2023).

In this way, the physical impacts of climate change are combined with development deficits and macroeconomic vulnerabilities, exacerbating the unequal effect of the current styles of development.

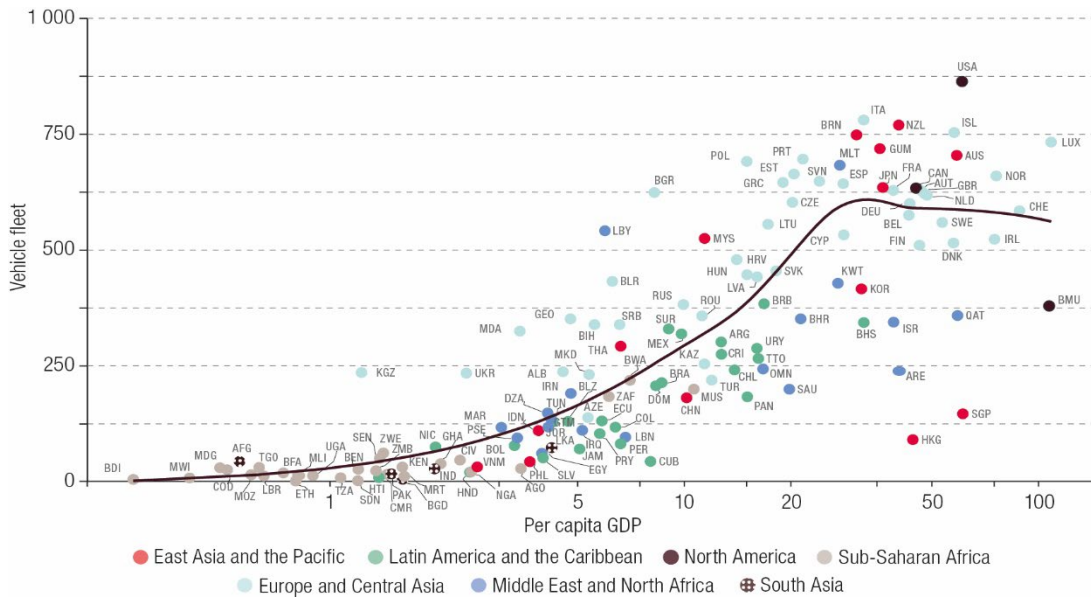
II. Distributional implications of low-carbon transition policies

The overall direction and magnitude of the distributional effect of carbon pricing on households will depend on the policy instrument and how it is implemented, its sectoral coverage, and the structure of the economy (Claeys, 2024). When a broader perspective is considered, including the effects on fuel prices, transport prices and energy prices, the evidence suggests that carbon pricing is regressive, because of the share of spending of poor families in fossil fuels (direct and indirect) is larger than those of rich families.

At the household level, current consumption patterns are a determinant of distributional impacts. This can be illustrated by the trend in car ownership and gasoline consumption (figure 5). The pattern of gasoline consumption in Latin America indicates that the amount of gasoline that is being used is on the rise for all income quintiles in most cases, despite the fact that it is a relatively homogeneous good in terms of quality and price (CEPAL, 2014; Galindo et al., 2014). Furthermore, an especially large share of total expenditure is accounted for by gasoline use in the top income quintile. Trends in this item of expenditure, divided by quintile, vary across countries, but generally speaking, are moving upward (figure 6). The concentration of expenditure on gasoline in middle- and high-income groups becomes even more evident when expenditure by quintile is weighted by the percentage of people who actually consume gasoline in each quintile (Antón-Sarabia y Hernández-Trillo, 2014; Poterba, 1991). This concentration of expenditure on gasoline is in line with the concentration of private car ownership in middle- and high-income groups. In this case, high levels of concentration means that a carbon tax effect is likely to be progressive since it will affect higher income groups more heavily than lower income groups.

However, these measures may be associated with welfare losses given the ongoing shift from public to private transportation as income levels rise suggests that public transit systems are not meeting the mobility demands of the region's emerging income groups and also if the tax affects the cost of public transportation. Therefore, it is important to consider compensation measures that use the revenues collected to strengthen safe and sustainable public transport systems, so that it constitutes a satisfactory transport alternative (CEPAL, 2014).

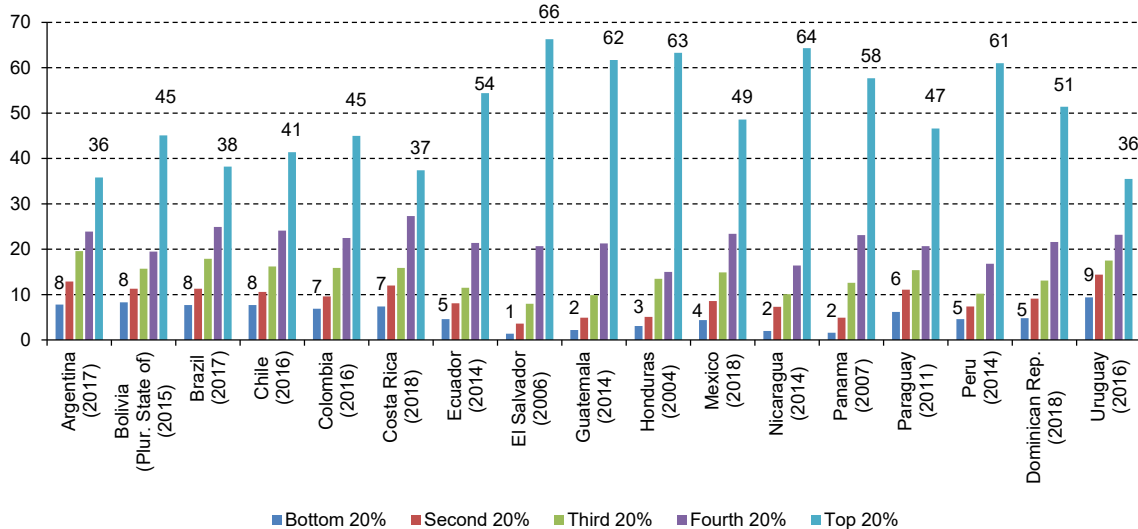
Figure 5
World: per capita GDP and vehicle fleet, by country, 2019
(Thousands of dollars at 2015 prices and vehicles per 1.000 inhabitants)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from the International Organization of Motor Vehicle Manufacturers (OICA).

At the household level, electricity consumption shows that a carbon tax can have a regressive effect, affecting lower-income households the most. This stems from the fact that electricity is widely used, and its consumption represents a significant percentage of the budget of these households.

Figure 6
Share of total household expenditure accounted for by expenditure on gasoline, diesel fuel and biodiesel fuel and share of total expenditure on gasoline, diesel fuel and biodiesel fuel for each income quintile
(Percentages)



Source: CEPAL based on national household surveys.

Finally, food price inflation caused by low yields for specific extreme weather events is another transmission channel that directly affects household budgets. Food represents a significant amount of expenditure by lower-income households, so that increases in prices will have regressive distributional effects. Another factor to consider is the effectiveness of policies. In the case of Latin American countries, the Gini index before and after taxes and transfers varies very little, compared to countries in the European Union, Australia, Russia or Japan, where the pre-policy index is around 0.5 and falls to levels of 0.3 thanks to public policy. This fact points out the effort that must be made to implement effective redistribution policies in the region.

A. Inequality in the distribution of transition risk

Transition policies will have distributional impacts at the macro level. In the context of the low carbon transition, the productive structure and international insertion in the global value chains determine the level of risk to the transition to a low carbon world. For those countries with high dependence, in terms of exports, employment and tax revenues, on high-carbon industries such as oil extraction and refining, cement production or metals, the transition to low-carbon economies will represent a limitation of these activities with their consequent macroeconomic effects.

Latin America and the Caribbean and other developing economies specialize in commodities, some of which are carbon-intensive, which should be phased down in order to meet climate goals. Countries that depend on carbon intensive commodities are prone to face reductions in their fiscal revenues, exports and employment levels, if no economic development alternative is pursued and promoted. For instance, 4.4% of the region's central government revenues came from the oil and gas sector (OECD et al., 2024).

Economies with more technologically and productively complex economic structures are better equipped with knowledge and capacities to successfully transit towards a low carbon economy. The complexity of the economy helps to take advantage of the transition.

The promotion of the transition requires, in turn, productive development policies that stimulate the emergence or consolidation of activities consistent with climate goals. The policies and plans directed to the low transition can either close or widen the gap with advanced countries. For instance, US Inflation Reduction Act, the EU Green Deal and other major green investment policies will boost growth and innovation, which will have positive effects in the world economy but could also widen the productivity gap between high income countries and the rest of the world and aggravate the technological dependence of developing and emerging economies.

Investment will foster green innovation. It is possible that this innovation will be concentrated in developed countries, which in turn will have productivity gains. Depending on the dissemination of green technologies across countries, the concentration of green innovation could widen the productivity gap among countries. Therefore, the necessity to of implementing global policies to disseminate green technologies and subsidize its adoption in less developed countries (Aghion, Antonin y Bunel, 2021).

Decarbonized value chains represent a landslide in global commodity trade and some countries and regions will be impacted, wise sustainable development policies require to be in place to make this transition smoother.

III. Policy recommendations for an inclusive, just and sustainable transition

Given the multiple facets of climate change that will affect inequality between and within countries, it is necessary to implement a set of different policies. To reduce society's vulnerability, it is important to establish social safety nets and invest in improving the coverage and efficiency of basic goods and services such as health, education, water, energy, and public transportation. This addresses the vulnerability of society and, in addition, encourages the modification of consumption patterns.

A progressive structural shift is required to overcome the limitations imposed by the current development style. In developing countries, the knowledge economy - sectors with higher rates of value added and employment growth must form a larger part of the production structure. This must be achieved without sacrificing the ecosystems' capacity to generate a sustainable volume of quality goods and services. These changes call for a coordinated set of policies, conceived by the Economic Commission for Latin America and the Caribbean (ECLAC, 2020) as a big push for sustainability.

The big push for sustainability is based on the coordination of technological and industrial, fiscal, financial, environmental, social and regulatory policies. It shall aim to establish a new relative return of investments aligned with the main objectives for the three pillars of sustainability, the creation of higher-productivity jobs and the development of environmentally sustainable production chains. At the same time, it should result in a smaller environmental footprint and in the restoration or better maintenance of the productive capacity of the natural heritage, including its environmental or ecosystemic services.

Linking competitiveness with the fostering of equality and environmental protection can generate a better-quality and more dynamic development process, and support alignment with other goals that are essential for achieving environmental objectives. All the foregoing requires an active State that coordinates, guides, and induces change in production and consumption patterns, while discouraging unsustainable forms of behaviour —a State that represents and brings together a wide range of social stakeholders rather than just minority interest groups.

Facilitating public and private sector experimentation with new technologies and concentrating on the competitive allocation of funds, monitoring and evaluation, systematic learning, joint design of instruments, and co-financing with the private and social sectors are criteria recognized as necessary in industrial policies (Altenburg y Lütkenhorst, 2015). All this means going beyond traditional industrial policy to embark on a strategy for a big push for sustainability.

Because the policies needed for this big push depend on national contexts, and the applicable instruments need to be calibrated to each country's economic and social conditions and institutional capacities, the political process must be able to deal with uncertainty, dilemmas and synergies between targets and outcomes and interactions among stakeholders. In contexts of major uncertainty, marginal institutional modifications are insufficient; instead, it is necessary to "invent and develop institutions which are 'learning systems', that is to say, systems capable of bringing about their own continuing transformation" (Schon, 1973). In this regard, the new generation of sustainability standards in financial accounting is a current development that needs to be supported by governments.

Challenge is to harmonize policies aimed at closing the external, social and environmental gaps with a view to forging new development patterns and fulfilling the 2030 Agenda for Sustainable Development. The basic criteria suggested to guide this action are as follows:

- Incentives for structural transformation based on promoting dynamic, inclusive sectors with a small environmental footprint for capacity-building, sustainability, production diversification, increased productivity and job creation. Timely review for each incentive implemented.
- Social and environmental justice, with a preventive approach that strengthens physical, economic and social resilience.
- Coordinated and consistent action among stakeholders to reduce inequality, prioritizing the protection and improvement of living conditions.
- Protection of the environment and people against environmental degradation, with measures that foster economic recovery with less poverty and inequality.
- Green taxation and financing, and payment for ecosystem services arising from nature-based solutions.
- Strengthened international collaboration among countries and regions.
- Strengthened institutional and State capacities.

Consideration of each country's conditions and the social context in which the policies will be implemented, to ensure a just transition towards delivery of results.

Bibliography

- Aghion, Philippe, Céline Antonin, y Simon Bunel (2021), *The Power of Creative Destruction: Economic Upheaval and the Wealth of Nations*. Traducido por Jodie Cohen-Tanugi. Cambridge, Massachusetts.
- Altenburg, Tilman, y Wilfried Lütkenhorst (2015), "Industrial Policy in Developing Countries". Books. Edward Elgar Publishing. <https://econpapers.repec.org/bookchap/elgeebook/14726.htm>.
- Antón-Sarabia, Arturo, y Fausto Hernández-Trillo (2014), "Optimal gasoline tax in developing, oil-producing countries: The case of Mexico". *Energy Policy* 67 (C): 564–71.
- Bedossa, Bastien (2023), "Climate-Financial Trap: An Empirical Approach to Detecting Situations of Double Vulnerability". MACRODEV. AFD. <https://www.afd.fr/en/ressources/climate-financial-trap-empirical-approach-detecting-situations-double-vulnerability>.
- Bruckner, Benedikt, Klaus Hubacek, Yuli Shan, Honglin Zhong, y Kuishuang Feng (2022), "Impacts of Poverty Alleviation on National and Global Carbon Emissions". *Nature Sustainability* 5 (4): 311–20. <https://doi.org/10.1038/s41893-021-00842-z>.
- CEPAL (2023), *Estudio Económico de América Latina y el Caribe 2023. El financiamiento de una transición sostenible: inversión para crecer y enfrentar el cambio climático*. CEPAL. <https://hdl.handle.net/11362/67989>.
- ____ (2024a), "La economía del cambio climático en América Latina y el Caribe, 2023: necesidades de financiamiento y herramientas de política para la transición hacia economías con bajas emisiones de carbono y resilientes al cambio climático". CEPAL. <https://hdl.handle.net/11362/69031>.
- ____ (2024b), *Panorama Fiscal de América Latina y el Caribe, 2024: política fiscal para enfrentar los desafíos del cambio climático*. Comisión Económica para América Latina y el Caribe. <https://www.cepal.org/es/publicaciones/69216-panorama-fiscal-america-latina-caribe-2024-politica-fiscal-enfrentar-desafios>.
- ____ (2014), *La economía del cambio climático en América Latina y el Caribe: paradojas y desafíos*. Santiago de Chile.
- Claeys, Gregory (2024), *The Macroeconomics of Decarbonisation*. Cambridge, United Kingdom New York, NY, USA Port Melbourne, VIC, Australia New Delhi, India Singapore.
- Galindo, Luis Miguel y otros (2014), "Meta-análisis de las elasticidades ingreso y precio de la demanda de gasolina. Implicaciones de política pública para América Latina". CEPAL, División de Desarrollo Sostenible y Asentamientos Humanos. (En edición).
- Kling, Gerhard, Yuen C. Lo, Victor Murinde, y Ulrich Volz (2018), "Climate Vulnerability and the Cost of Debt". SSRN Scholarly Paper. Rochester, NY. <https://doi.org/10.2139/ssrn.3198093>.

- OECD, ECLAC, CIAT, y IADB (2024), "Revenue Statistics in Latin America and the Caribbean 2024". <https://www.oecd.org/ctp/revenue-statistics-in-latin-america-and-the-caribbean-24104736.htm>.
- Poterba, James M. (1991), "Is the Gasoline Tax Regressive?" Working Paper 3578. National Bureau of Economic Research. <http://www.nber.org/papers/w3578>.
- Salazar-Xirinachs, José Manuel (2023), "Repensar, reimaginar, transformar: los 'qué' y los 'cómo' para avanzar hacia un modelo de desarrollo más productivo, inclusivo y sostenible", diciembre. <https://hdl.handle.net/11362/69112>.
- Schon, Donald A. (1973), *Beyond the Stable State*. New York.
- UNCTAD (2023), *A World of Debt 2023: A Growing Burden to Global Prosperity*. https://unctad.org/system/files/official-document/osgmisc_2023d4_en.pdf.
- WMO (2021), "WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019)". World Meteorological Organization. <https://library.wmo.int/records/item/57564-wmo-atlas-of-mortality-and-economic-losses-from-weather-climate-and-water-extremes-1970-2019>.

Inequality, both among and within countries, is a significant barrier to transitioning to low-carbon, climate-resilient economies. This is especially true in regions like Latin America and the Caribbean, where high levels of structural inequality persist. The multiple dimensions of inequality include differences in carbon footprints and varying vulnerabilities to climate impacts. Developing nations are disproportionately affected by climate change because of their reduced capacity to cope with its impacts owing to their economic structures, poor access to basic services and geography.

A mix of policies is required to manage climate change risk, including productive development, trade, fiscal and social policies, which should aim to enhance socioeconomic benefits while mitigating harmful effects. Climate change exacerbates existing inequalities, and vulnerable groups are more exposed to climate risks and have fewer means to adapt. Therefore, managing climate risks and ensuring a just, equitable transition are crucial for addressing the development gap and achieving sustainable growth. This document is the ECLAC contribution to the G20 Framework Working Group.

