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SDG 13: climate action

Introduction

It is no longer a fresh word that climate change represents one of the most pressing and complex challenges of the 21st century. Its far-reaching impacts transcend national borders, ecosystems and generations. Recognizing the urgency of addressing this global threat, the United Nations (UN) included the Goal 13: Climate Action among the 17 Sustainable Development Goals (SDGs) adopted in 2015 as part of the 2030 Agenda for Sustainable Development. SDG 13 calls for urgent action to combat climate change and its impacts, with a focus on resilience, adaptation and global cooperation.

Although climate change was once framed primarily as an environmental issue, it is now understood as a multidimensional matter - intersecting with health, energy, food security, water availability, livelihoods and social equity. This complexity makes SDG 13 a cross-cutting accelerator, supporting and dependent on progress across other goals, notably SDG 7 (Affordable and Clean Energy), SDG 15 (Life on Land), SDG 6 (Clean Water) and SDG 1 (No Poverty). Its effective implementation hinges on systemic transformation, justice-centered governance and science-based policymaking.

The year 2015 marked a “watershed moment” in global sustainability governance, not only through the adoption of the SDGs, but also via the Paris Agreement and the Sendai Framework for Disaster Risk Reduction. These frameworks established a globally shared vision for responding to the climate crisis, embedding commitments to decarbonization, risk reduction and leaving no one behind (LNOB).

Echoing above, the present chapter introduces the historical evolution of climate action within international legal and policy frameworks, identifies the challenges and opportunities in achieving SDG 13, examines its specific targets and indicators and explores the nexus between climate, energy systems and environmental sustainability. Special attention is dedicated to regional leadership, particularly the European Union’s (EU) ambitious climate strategy, which



serves as a model for embedding long-term climate neutrality into law and practice. The final section offers concluding reflections on advancing climate action through coherent, inclusive and enforceable policy frameworks that promote justice, resilience and intergenerational responsibility.

1. Brief Historical Overview

Efforts to address climate change at the international level trace back to the 1972 United Nations Conference on the Human Environment in Stockholm (United Nations 2024), where the environmental consequences of human activity were first addressed globally. However, a comprehensive framework for addressing environmental degradation within the context of economic and social development began to take shape with the publication of the so-called Brundtland Report - officially titled *Our Common Future* - by the World Commission on Environment and Development (WCED) in 1987. This landmark report introduced the concept of sustainable development, defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). It emphasized the interconnectedness of environmental protection, economic growth and social equity - principles that would underpin global climate governance for decades to come.

Along these lines, climate change emerged as a distinct political and scientific concern during the 1980s, culminating in the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 (IPCC n.d.). Nevertheless, it was not until the adoption of The United Nations Framework Convention on Climate Change (UNFCCC), at the 1992 Rio Earth Summit, when the foundation for future climate negotiations had been formally laid down (United Nations 2025).

The Kyoto Protocol (1997) was the first binding international agreement to impose emission reduction obligations, although its effectiveness was hindered by limited participation and its narrow focus on industrialized countries (United Nations 2025). The Paris Agreement (2015) represented a paradigm shift by adopting a bottom-up structure and inviting all countries to submit Nationally Determined Contributions (NDCs) for mitigation and adaptation (United Nations 2025). It set an overarching goal of limiting global warming to “well below 2°C” above pre-industrial levels, with efforts to stay within 1.5°C. The year 2015 marked a special moment in global governance with the adoption of three interlinked frameworks: the 2030 Agenda for Sustainable Development, the Paris Agreement and the Sendai Framework for Disaster Risk



Reduction - together putting down a foundation for integrated responses to development, climate and disaster resilience (United Nations Office for Disaster Risk Reduction, n.d.).

With the inclusion of SDG 13 in the 2030 Agenda for Sustainable Development, climate action was fully integrated into the global development agenda. This integration acknowledges that climate change is not solely an environmental concern but a systemic challenge that affects poverty, health, migration, security and inequality.

Against this backdrop, the concept of green transformation has also gained prominence as a strategic response to the climate crisis. Green transformation refers to the deep structural shift in production, consumption, infrastructure and governance required to achieve a low-carbon, resource-efficient and socially inclusive global economy. It is not limited to decarbonization but entails a broader reorientation of societies toward sustainability, resilience and intergenerational equity.

Thus, the historical trajectory from environmental concern to sustainable development and now to green transformation reflects an evolving global understanding that combating climate change necessitates profound changes across all sectors of society, anchored in cooperation, innovation and justice.

2. SDG 13: Targets and Indicators

To track global progress and hold stakeholders accountable, the 2030 Agenda for Sustainable Development relies on a framework of targets and indicators. For SDG 13: Climate Action, these do not only serve as benchmarks for national and international efforts but also as instruments to monitor policy integration, guide resource allocation and assess systemic resilience to climate risks.

SDG 13 comprises of five key targets: three related to direct outcomes - resilience, policy integration and education - and two focused on enabling mechanisms - finance and capacity-building (United Nations 2025). Each target is accompanied by several quantitative or qualitative indicators, developed by the UN Statistical Commission, in coordination with international agencies such as the UNFCCC and OECD. These indicators are designed to measure institutional readiness, climate vulnerability and equity of support and they link national actions to global goals.



13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Indicator 13.1.1 measures the number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population. This target emphasizes disaster risk reduction and climate resilience, particularly in vulnerable regions. Complementing this, Indicator 13.1.2 tracks national adoption of disaster risk reduction strategies aligned with the Sendai Framework, while 13.1.3 assesses local-level implementation. Together, these indicators emphasize the importance of strengthening climate resilience and disaster preparedness at both national and local levels.

13.2 Integrate climate change measures into national policies, strategies and planning

Indicator 13.2.1 assesses the existence of nationally determined contributions, long-term low-emissions development strategies and climate-related policies. Integration of climate goals into national development frameworks is key for coherence and accountability. Indicator 13.2.2 tracks total annual greenhouse gas (GHG) emissions, providing a quantitative measure of a country's progress in climate mitigation. Monitoring emissions helps assess the effectiveness of national policies and informs adjustments to meet long-term decarbonization objectives.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

The respective indicator tracks the number of countries with education curricula on climate change and institutional frameworks promoting capacity-building. Public awareness is essential for behavioral change and democratic engagement.

13.a Implement the commitment undertaken by developed countries to a goal of mobilizing jointly \$100 billion annually by 2020 to address the needs of developing countries

Indicator 13.a.1 measures financial flows towards climate action in developing countries. Despite commitments, the \$100 billion target remains unmet, undermining trust and equity (OECD, 2023).



13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in LDCs and SIDS, including focusing on women, youth and local marginalized communities

Indicator 13.b.1 evaluates the number of LDCs and SIDS with climate-sensitive strategies. Capacity-building is crucial for these countries to design and implement effective climate policies.

Putting two and two together, SDG 13's indicators are evolving and partly overlapping with the UNFCCC process, they collectively aim to enhance the global architecture of climate governance. These targets and their associated indicators form a multi-dimensional framework that reflects both the urgency of climate action and the diverse capacities of countries to respond. They acknowledge that mitigation alone is insufficient, and that adaptation, education, finance and inclusive governance must also be part of the solution. Even though some indicators remain under development or face data limitations, their purpose goes beyond technical measurement: they serve as a political compass to align development trajectories with climate goals, improve transparency and promote international cooperation. Moreover, they highlight critical implementation gaps, such as insufficient finance and limited institutional capacity in the Global South, which must be addressed to realize the transformative potential of SDG 13.

3. Challenges and Opportunities

What is currently possible to observe, climate change is both a threat multiplier and a driver of transformation. Identifying and analyzing the challenges and opportunities associated with SDG 13 is essential for designing effective climate responses that are not only technically sound but also politically feasible, socially just and economically viable. Understanding these dimensions helps policymakers, civil society and international actors move beyond abstract commitments toward strategic, context-specific action.

On the one hand, climate change exacerbates inequalities, disrupts ecosystems and places unprecedented pressure on institutions. It opens space for innovation, global solidarity and structural reform - what some have termed a "once-in-a-generation opportunity" to redefine human development within planetary boundaries. Mapping this duality reveals where interventions are most needed and where momentum for change can also be leveraged.

3.1. Challenges

➤ **Escalating Emissions and Insufficient Action**

Despite decades of scientific consensus and policy commitments, global GHG emissions continue to rise. The IPCC's Sixth Assessment Report (2021–2023) confirms with high confidence that human-induced climate change is widespread, rapid and intensifying, fueling more frequent and severe extreme weather events, biodiversity loss and human displacement (IPCC 2023). According to the United Nations Environment Program (UNEP), current NDCs put the world on track for a temperature increase of 2.8°C by the end of the century (UNEP 2023). The gap between ambition and implementation remains a core challenge.

➤ **Disproportionate Impacts and Inequality**

Climate change does not affect all regions equally. Small Island Developing States (SIDS), least developed countries (LDCs) and marginalized communities often face the greatest risks despite contributing the least to global emissions. Climate justice, therefore, is a critical dimension of SDG 13 (Roberts & Parks 2007).

➤ **Political and Economic Resistance**

Climate policy often encounters resistance from industries reliant on fossil fuels, as well as from governments concerned with short-term economic competitiveness. Transitioning to low-carbon economies requires significant structural changes and political commitment.

➤ **Adaptation and Resilience Gaps**

While mitigation remains central, increasing attention must be given to adaptation. Many countries lack the resources, infrastructure and governance capacity to adapt to rising sea levels, extreme weather events and climate-induced displacement.

3.2. Opportunities

➤ **Green Innovation and Economic Transformation**

The green transition opens pathways to new industries, jobs and technologies. Investments in renewable energy, sustainable infrastructure and nature-based solutions can drive inclusive economic growth (IRENA 2021).

➤ **International Cooperation and Finance**

Multilateral frameworks such as the Green Climate Fund (GCF) and the Global Environment Facility (GEF) have mobilized resources to support developing countries in climate mitigation and adaptation.

➤ **Legal and Rights-Based Approaches**

Increasingly, climate litigation is holding governments and corporations accountable for inaction. Legal recognition of the right to a clean, healthy and sustainable environment by the UN Human Rights Council (2021) reinforces the normative force of climate action.

In sum, the dual lens of challenges and opportunities underscores that climate action is certainly not a technical undertaking but a deeply political and ethical process. The threats posed by rising emissions, inequality and governance gaps demand urgent and systemic responses. Yet, these same pressures create momentum for transformative change - through innovation, multilateral solidarity and rights-based frameworks. Via integrating climate justice, long-term planning and inclusive governance, SDG 13 can catalyze not only environmental protection but also equitable development. Seizing these opportunities requires navigating entrenched interests and ensuring that the green transition benefits all, especially the most vulnerable. Climate action, when ambitious and inclusive, can redefine the relationship between society and the planet.

4. Nexus with Energy and Environment

Energy is not a unitary or isolated policy domain - it is a multi-dimensional and cross-sectoral “material” that intersects with legal, political, economic and environmental considerations. It permeates critical issues such as infrastructure development, market regulation, climate mitigation and human rights. Therefore, crafting coherent energy policy and law requires a mastery of interdisciplinary frameworks that can reconcile economic efficiency, environmental sustainability and social equity.

Given the fragmented and evolving nature of energy law, it is essential to adopt a common conceptual understanding. A foundational reference in this regard is Bradbrook’s widely cited definition, which characterizes energy law as “the allocation of rights and duties concerning the exploitation of all energy resources between individuals, between individuals



and governments, between governments and between states” (Bradbrook 1996). This definition underscores the distributional and governance dimensions of energy, which highlights its centrality to both public and private spheres of power.

The relevance of this nexus to SDG 13 is direct and systemic. The energy sector, governed by energy law, accounts for nearly three-quarters of global greenhouse gas emissions, making it the primary driver of anthropogenic climate change. At the same time, energy policy shapes land use, air quality, biodiversity and access to basic services, creating complex feedback loops with environmental sustainability (SDGs 6, 7, 14 and 15). The choice of energy pathways-fossil-based, renewable, centralized, or decentralized - has far-reaching implications for planetary health and human development.

Understanding the climate-energy-environment nexus is therefore vital for delivering on SDG 13. It does not only inform decarbonization strategies but also calls for an integrated regulatory approach that reflects ecological limits, social needs and intergenerational responsibilities.

Energy and Emissions

The energy sector is responsible for approximately 73% of global greenhouse gas emissions (IEA, 2022). Fossil fuel combustion for electricity, heating and transport remains the primary driver of climate change. Decarbonizing the energy system - through renewables, electrification, energy efficiency and innovation in storage - is therefore essential for achieving SDG 13.

At the same time, clean energy access (SDG 7) is a development imperative. Strategies must ensure that the shift to low-carbon energy also addresses energy poverty, particularly in Africa and parts of Asia. “Just transitions” are needed to ensure that climate action promotes rather than undermines social justice (Newell & Mulvaney 2013).

Biodiversity and Ecosystems

Climate change accelerates the loss of biodiversity and ecosystem services, while ecosystem degradation in turn amplifies climate risks. Forests, wetlands and oceans are natural carbon sinks. Deforestation, land degradation and ocean acidification not only release stored carbon but also diminish nature’s capacity to buffer climate shocks (IPBES 2019).

Nature-based solutions - such as reforestation, sustainable agriculture and restoration of mangroves - offer a triple win: mitigation, adaptation and biodiversity conservation. These synergies are at the heart of aligning SDG 13 with SDG 15 (Life on Land) and SDG 14 (Life Below Water).

Water and Food Systems

Climate variability directly impacts water availability, crop yields and food security. Prolonged droughts, floods and shifting precipitation patterns are already reducing agricultural productivity and increasing food prices, particularly in vulnerable regions. Integrating climate-smart agriculture and resilient water management into national planning is essential for adaptation and SDG alignment (FAO 2022).

5. Best (Regional) Practice: The European Union

Among all regional responses to climate change, the European Union has emerged as a global frontrunner in implementing legally binding, coordinated and long-term strategies for climate action. The EU's evolving climate framework demonstrates how a supranational bloc can translate international commitments, such as the Paris Agreement and UN SDGs, into enforceable and transformative policies. The EU has repeatedly reaffirmed its commitment to the below-2°C goal. In its landmark decision of 18 March 2016 endorsing the Paris Agreement, the European Council emphasized the importance of the Union and its Member States concluding the Paris promptly, ensuring their participation from its entry into force. Aligning with this commitment, the EU has been proactive in integrating its climate policies with the goals of the Paris Agreement. This is now “escalated” and reinforced by the Union's net-zero emissions objective by 2050 under the European Green Deal (explained below).

What was before? The EU's climate policy has deep roots. Since the early 1990s, the EU has actively participated in international climate processes, including the Intergovernmental Panel on Climate Change (IPCC) and the UNFCCC. In alignment with these frameworks, it developed sophisticated tools for GHG monitoring, reporting and verification, while advancing pioneering policies on renewable energy and energy efficiency (Delbeke & Vis 2016). Over the last 25 years, the EU has become not only the most active regulatory space for climate policy experimentation but also a testing ground for multilevel environmental governance.



The EU's first comprehensive climate and energy package was adopted in 2008, setting binding 2020 targets: a 20 % reduction in GHG emissions (from 1990 levels), 20 % of energy from renewables and a 20 % improvement in energy efficiency. Building on that, the 2030 Climate and Energy Framework - adopted in 2015 - strengthened the ambition: a 40 % GHG reduction by 2030, alongside updated renewable and efficiency targets. A major innovation introduced under this framework is the Governance Regulation (EU) 2018/1999, which established a new integrated governance system centered on National Energy and Climate Plans (NECPs). These plans, required on a rolling ten-year basis, ensure coherent national contributions toward collective EU targets, enhancing transparency, consistency and accountability.

To date, at the heart of the EU's contemporary climate architecture lies the European Green Deal (EGD) - launched in December 2019 as the Union's most ambitious vision for decarbonization and sustainable transformation (European Commission 2025). Framed as a new growth strategy, the EGD aims to turn the EU into a climate-neutral continent by 2050, decoupling economic growth from resource use and ensuring a just transition for all regions and sectors (Catuti, Kustova, & Egenhofer 2020). The EGD is not a legislative act per se, but rather a comprehensive political mandate with sectoral roadmaps in biodiversity, agriculture, mobility, energy, industry and pollution control - all tightly interlinked with environmental protection and SDG targets.

While ideologically rooted in the UN 2030 Agenda, the Green Deal reframes the SDGs through a European lens. It links long-term climate neutrality to green industrial policy, circular economy models, ecosystem resilience and energy system transformation. Financially, it is supported by instruments such as the Just Transition Mechanism and the EU Taxonomy for Sustainable Activities, ensuring that climate goals are supported by green finance and public investment (European Commission 2025). The European Climate Law, adopted in 2021, gives legal force to the Green Deal by enshrining the net-zero target for 2050 into Union law.

The EU's policy toolkit also includes long-standing instruments such as the EU Emissions Trading System (EU ETS). The EU ETS, the world's first and one of the largest international emissions trading systems plays a crucial role in the EU's strategy to reduce greenhouse gas emissions. By making polluters pay for their emissions, the EU ETS not only curbs pollution but also generates revenue for the EU's green transition. Operating across all EU countries, as well as Iceland, Liechtenstein and Norway, it covers approximately 10,000 installations in the energy sector, manufacturing industry and aviation - accounting for around 40% of the EU's emissions (European Commission 2024). The EU ETS operates on a "Cap-



and-Trade” principle, setting a cap on total emissions that decreases annually. Companies are required to surrender enough allowances to cover their emissions or face significant fines and they can trade allowances to meet their needs. Since its inception, the EU ETS has successfully reduced emissions from power and industry plants by 37% (European Commission 2024).

Other recent innovations such as the Carbon Border Adjustment Mechanism (CBAM) and the Social Climate Fund further illustrate the Union’s commitment to aligning climate ambition with trade, fairness and global equity (European Commission 2024). In the case of CBAM, for instance, the tool prevents carbon leakage by imposing a tariff on imports from countries with less ambitious climate policies than the importing country (Dominioni & Esty 2023). CBAM Regulation, therefore, reduces global emissions, supports the Paris Agreement goals and complements the EU Emissions Trading System by applying equivalent rules to imports.

Overall, the EU’s climate governance model exemplifies a holistic, legally anchored and equity-aware approach to SDG 13. Its success lies not only in ambitious target-setting but in its ability to operationalize those goals through binding legislation, cross-sectoral integration and multilevel coordination. Consequently, the EU provides a compelling blueprint for other regions seeking to institutionalize climate action in a way that is resilient, inclusive and anchored in democratic accountability.

6. Materializing the Green Deal: The Power of the EU Climate Law and Fit for 55

While the Green Deal provides the strategic vision for a climate-neutral Europe, its realization rests upon a strong and enforceable legislative foundation. Central to this is the European Climate Law, a landmark regulation adopted in 2021 that elevates the EU’s climate neutrality goal to a binding legal commitment and introduces a comprehensive governance framework to ensure delivery. It is this legal architecture - anchored in the Fit for 55 legislative package that operationalizes the abstract ambitions of the Green Deal into tangible legal obligations and policy tools.

The European Climate Law reinforces the idea of a central legal authority capable of guiding the Union’s transition toward climate neutrality. According to Article 2 of the Regulation (EU 2021/1119), “Union-wide greenhouse gas emissions and removals regulated in Union law shall be balanced within the Union at the latest by 2050”, aligning directly with Article 2(1) of the Paris Agreement. The law also sets a binding interim target: a net reduction of GHG emissions by at least 55% by 2030 compared to 1990 levels (Article 4) and provides a



transparent regulatory path through scientific monitoring, stakeholder engagement. Moreover, the regulation mandates the adoption of a 2040 target within six months following the first global stock take under the Paris Agreement, reinforcing long-term planning cycles (As of July 2025, 40 % GHG reduction target reported, European Commission 2025). The law enhances certainty for businesses, investors and consumers, while providing a framework for addressing the labor market transitions expected from the shift toward a climate-resilient and circular economy.

Importantly, the Climate Law does not stand in isolation-it creates a legal framework that exerts transformative pressure on other EGD-linked legislative actions, guiding emission trajectories and shaping future legal acts. It compels Member States to provide regular assessments of their national climate and energy contributions, thereby embedding climate planning into national governance systems through the Governance Regulation (EU) 2018/1999.

A flagship instrument for implementing the Climate Law is the Fit for 55 Package (FFFF), introduced by the European Commission on 14 July 2021. Representing the most ambitious climate legislative reform in EU history, Fit for 55 comprises a suite of policy proposals and revisions aimed at aligning the Union’s secondary legislation with the new 2030 and 2050 targets. The package represents a revolutionary tightening of sectoral targets and brings unprecedented legal depth to EU decarbonization (Schlacke 2021). The Fit for 55 Package, *among other things*, includes:

Table 1.

Emissions Trading System (EU ETS) Revision	Strengthens the existing ETS by tightening the emissions cap and expanding its scope to include maritime transport.
New Emissions Trading System for Buildings and Road Transport (ETS II)	Establishes a separate emissions trading system for fuel distribution for buildings and road transport sectors, starting in 2027.
Carbon Border Adjustment Mechanism (CBAM)	Introduces a carbon price on imports of certain goods from outside the EU to prevent carbon leakage and ensure fair competition.



Effort Regulation Revision	Sharing (ESR)	Sets binding annual greenhouse gas emission targets for each EU Member State for sectors not covered by the EU ETS, such as transport, buildings, agriculture and waste.
Renewable Energy Directive (RED II/III) Revision		Increases the EU's binding target for the share of renewable energy in final energy consumption to at least 40% by 2030.
Energy Efficiency Directive (EED) Revision		Sets more ambitious binding annual targets for reducing energy consumption at EU level.
Social Climate Fund (SCF)		Establishes a fund to support vulnerable households, micro-enterprises and transport users in the transition to cleaner energy, particularly in the context of the new ETS II.
Energy Taxation Directive (ETD) Revision		Aligns the taxation of energy products with EU energy and climate policies, promoting clean technologies and removing outdated exemptions.
CO₂ Standards for Cars and Vans	Emission	Sets stricter CO ₂ emission standards for new cars and vans, aiming for a 100% reduction in emissions from new vehicles by 2035.
Land Use, Land Use Change and Forestry (LULUCF) Regulation Revision		Sets an EU target of 310 million tons of CO ₂ equivalent net removals by 2030, enhancing the role of the land sector in climate mitigation.
Alternative Fuels Infrastructure Regulation (AFIR)		Ensures the deployment of sufficient alternative fuels infrastructure, such as electric charging and hydrogen refueling stations, across the EU.
Energy Performance of Buildings Directive (EPBD) Revision		Aims to decarbonize the building stock by setting new standards for energy performance and promoting the renovation of existing buildings.

The novelty of this approach lies in its binding force and integrative logic. Until 2021, overarching climate goals were primarily driven by soft law-the "three headline targets" for 2020 and 2030-formulated by the European Council. These included targets such as a 32% share of renewables and a 32.5% improvement in energy efficiency, but without direct legal enforceability across all instruments.

The adoption of the European Climate Law marked a turning point, and it introduced legally binding targets and outlined a dynamic governance process to implement them. This



governance is twofold: (1) it sets out a process-oriented structure for planning and reviewing national actions via the NECPs and (2) it requires legislative instruments-such as those proposed in Fit for 55-to give practical effect to the emission trajectories.

In essence, the Fit for 55 legislative package gives practical force to the European Climate Law, while the Climate Law itself operationalizes the long-term ambition of the European Green Deal. This triad forms the backbone of the EU's climate governance system - a procedurally integrated model that anchors climate neutrality by 2050 into enforceable obligations. Far from being limited to internal policy, this governance architecture positions the EU as a global norm-setter in climate regulation and a leading implementer of SDG 13.

Though institutionalizing emission targets, defining compliance pathways and embedding climate planning across all levels of governance, the EU model exemplifies how SDG 13 can be internalized into domestic legal systems. Its extraterritorial reach, through instruments such as the Carbon Border Adjustment Mechanism and climate-related conditionalities in EU external funding, reflects the growing normative pull of this framework. It demonstrates that meeting SDG 13 requires not only ambition, but also legal certainty, institutional accountability and concrete policy coherence.

Summary and Conclusion

Summing up, climate change remains the defining challenge of the 21st century, which is a systemic risk that imperils human well-being, environmental integrity and economic resilience. It is both a slow-moving catastrophe and a catalyst for transformation, demanding structural change in the way societies produce, consume, govern and cooperate. Through SDG 13, the international community has committed not only to reducing greenhouse gas emissions but also to strengthening adaptation, mobilizing climate finance and embedding climate action across all sectors. Yet, progress remains uneven and the narrowing window for limiting warming to 1.5°C reveals a growing mismatch between scientific urgency and political delivery.

One of the central messages of this chapter is that ambition must be institutionalized. Without clear legal frameworks, consistent monitoring and binding accountability, climate goals risk becoming aspirational rather than operational. The European Union's experience, especially the integration of the European Climate Law and the Fit for 55 packages, offers an exemplary model of how climate targets can be embedded in governance, law and policy implementation-balancing strategic vision with enforceable commitments.



At the same time, climate action must be just, inclusive and equitable. The impacts of climate change are disproportionately borne by the most vulnerable - those who contributed least to the problem but face its gravest consequences. Climate justice, therefore, must be at the heart of SDG 13 implementation, empowering affected communities as co-creators of solutions, not just recipients of aid or policy. True climate action must be guided by the core SDG principle of “leaving no one behind,” ensuring that mitigation and adaptation strategies prioritize the most vulnerable communities and bridge historical injustices.

The targets and indicators of SDG 13 provide an essential framework, but their success depends on a nexus approach-connecting climate action to energy systems, biodiversity protection, environmental regulation and socio-economic transformation. No climate target can be achieved in isolation, but only with global cooperation, regional leadership and multi-level governance.

Ultimately, SDG 13 is not merely a climate objective, but it is a litmus test for the sustainability, fairness and foresight of our global development model. Its fulfilment requires more than decarbonization, it demands a redefinition of prosperity that respects ecological boundaries and ensures intergenerational equity. The choices made today, especially in how climate action is governed, legislated and financed, will certainly shape the climate legacy of tomorrow. Therefore, aligning legal frameworks, financial instruments and governance mechanisms with the objectives of SDG 13 is not optional, it is essential to steering the global response toward a just, resilient and climate-safe future.

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