



INTEGRATED NDC X SDG INSIGHTS CAMBODIA

This initiative explores the NDC - SDG impact and leverages data, systems and finance analysis to pinpoint policy accelerators tailored to national context and sustainable development vision.



OBJECTIVES

This initiative explores the NDC-SDG connections by leveraging data, systems and finance analysis to pinpoint policy accelerators tailored to national context and a sustainable development vision.

A ROBUST CASE FOR NDC 3.0



Backed by national data and AI-driven tools, pinpoint where key investments through NDCs can drive progress across national development priorities.

ALIGN POLICY PATHWAYS



Build coherence and common ground to help decision-makers maximize positive outcomes across climate and development goals.

ACT WITH CONFIDENCE

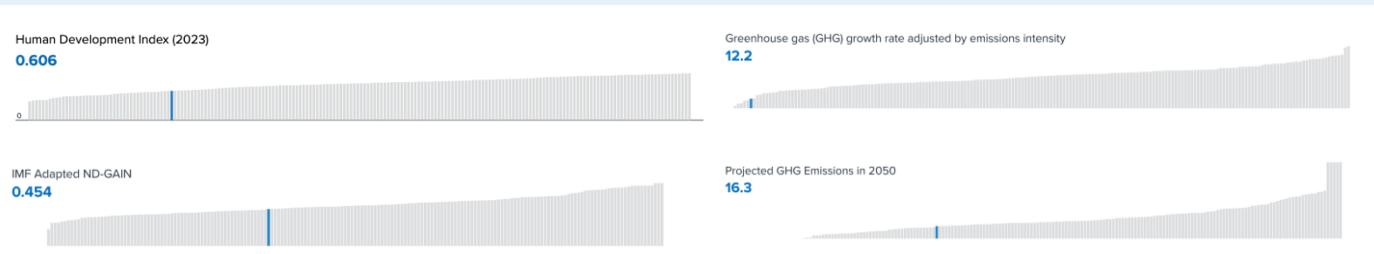


Tailored recommendations on integrated policy approaches, investment strategies, and finance opportunities that turbo-charge climate action for sustainable development goals.

HOW TO READ THIS REPORT

1

NDC x SDG Moment: human progress within planetary boundaries is the next development frontier. This section provides a snapshot of key climate and human development data



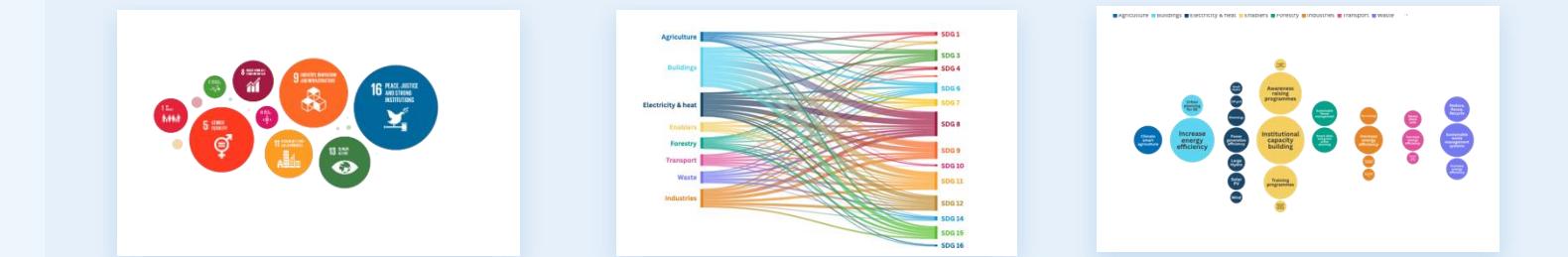
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NDC x SDG Interlinkages: identifies national-level actions through that accelerate SDG achievement and advances a robust development case.



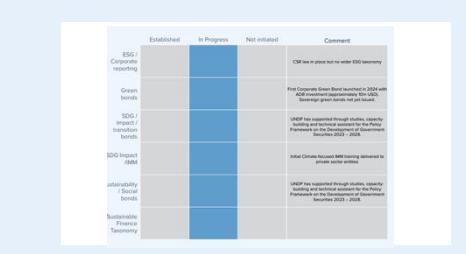
2

NDC x SDG Alignment: maps climate commitments and national development priorities using custom machine learning tool that draws from an SDG vocabulary of 100k terms.



4

Finance & Stimulus: charts fiscal constraints and stimulus opportunities to ensure climate and development policy choices can be advanced with greatest impact.



NDC X SDG Moment

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NDC X SDG MOMENT:

As part of their mitigation measures, Cambodia has set a target of reducing emissions by

**64.6 MtCO₂e
(41.7%)**

By 2030, compared to the BAU scenario

Human activities are causing significant climate change with severe environmental and socio-economic consequences. Integrating climate action for emissions reduction and enhanced resilience into development strategies can **advance human development and provide multiple co-benefits**.

Cambodia is in the medium human development category (151 out of 193 countries and territories) and the country's IMF Adapted ND-GAIN index indicates vulnerability to climate disruptions and readiness to leverage investments to adaptation actions. With a projected emissions level score of 16.3/100 in 2050, Cambodia will need to make significant investments in achieving carbon neutrality at the current pace. Cambodia's projected Biodiversity Intactness Index measuring ecosystem integrity indicates a relatively low impact on biodiversity in 2050.

Despite a rapid recovery from COVID-19, Cambodia has yet to return to its pre-pandemic growth rate of around 7%. However, the country has set ambitious development goals to be achieved beyond the SDG timeframe, particularly aiming to reach High-Income status and carbon neutrality by 2050. Intermediate milestones are also challenging, including graduating from Least Developed Country (LDC) status by 2029 and reaching Upper Middle-Income status by 2030. These ambitious goals will require significant social and economic transformations for Cambodia to grow at the necessary pace and achieve sustainability to reach carbon neutrality.

Recent economic modelling indicates a strong relationship between Cambodia's economic growth and its greenhouse gases emission. Even though Cambodia is listed among the least-emitting countries, it is showing an increasing trend in emissions. The country is also vulnerable to climate shocks due to low adaptive capacity to cope with climate change and lack of capacity for sustainable management of natural resources. This could hinder the country's progress in achieving the SDG targets.

Human Development

Human Development Index (2023)

0.606



Climate Impact and Adaptation

INFORM Climate Change Risk Index

● Historical (2022) ● RCP 4.5 SSP 1 (2050) ● RCP 8.5 SSP 3 (2050)

4.6 **4.9** **5.2**

IMF-Adapted ND-GAIN (2021)

0.45



Mitigation

Greenhouse gas (GHG) growth rate adjusted by emissions intensity

12.16



Projected GHG Emissions in 2050

16.3



Biodiversity

Biodiversity Intactness Index

● Historical (2014) ● RCP 2.6 SSP 1 (2050) ● RCP 7.0 SSP 3 (2050)

0.71 **0.72**

Sources European Commission 2023 (INFORM Climate Change Risk Index), IMF 2022 (IMF-Adapted ND-GAIN Index); Environmental Performance Index 2024 (GHG growth rate adjusted by emissions intensity & Projected Emissions in 2050); Helen Phillips; Adriana De Palma; Ricardo E Gonzalez; Sara Contu et al. 2021 (Biodiversity Intactness Index).

NDC X SDG Alignment

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NDC x SDG Alignment

Goal Level

This analysis shows the most prominent SDGs in each of the two national strategies on climate and development. This identifies areas of common action and potential synergies across national climate and development priorities.

NATIONALLY DETERMINED CONTRIBUTION (NDC)



Note: Based on NDC 2.0 (2021)

NATIONAL DEVELOPMENT PLAN(S) (NDP)



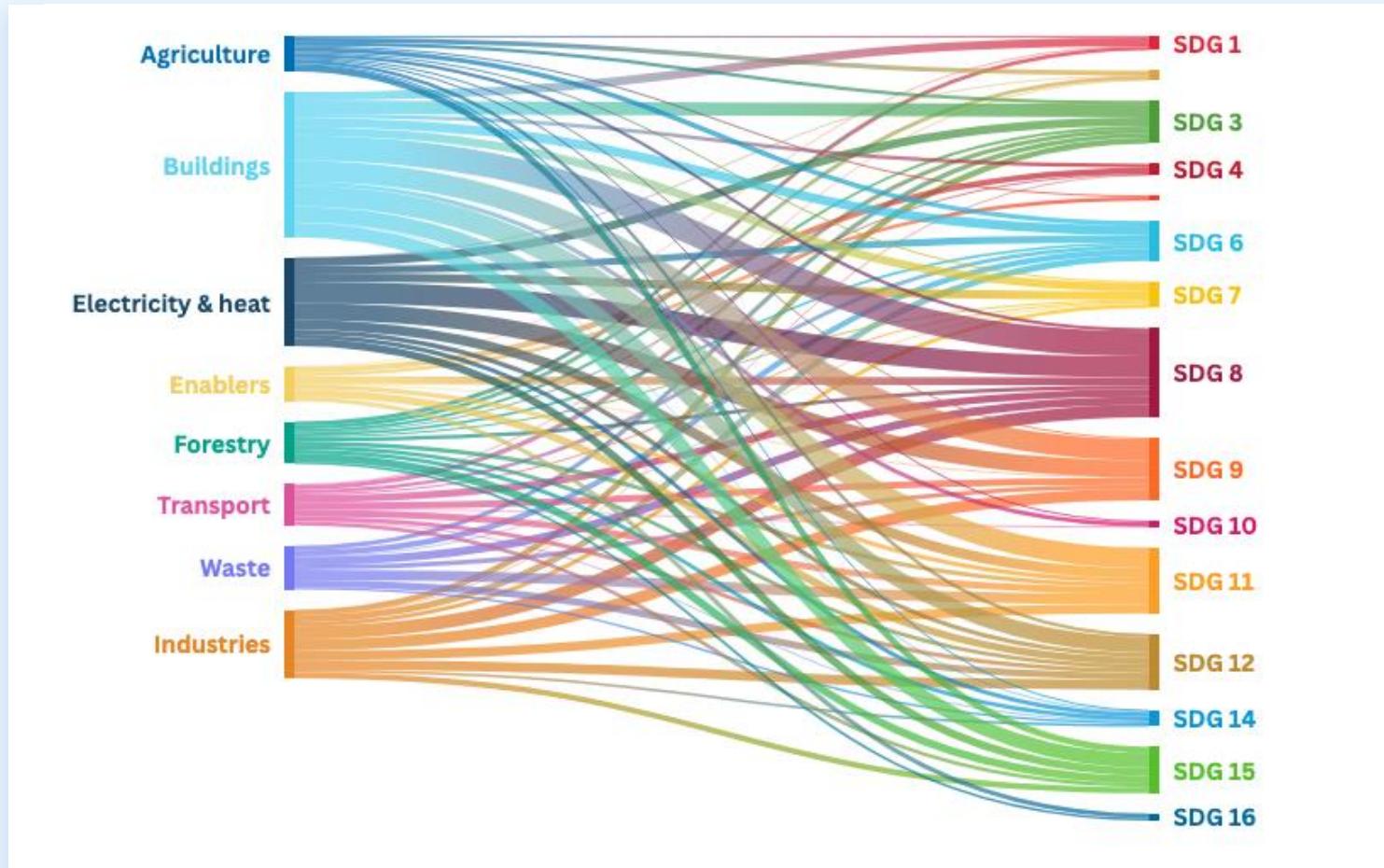
Note: Based on: 1) Pentagonal Strategy-Phase I; 2) National Strategic Development Plan (NSDP) 2019-2023; 3) Mid-Term Review NSDP 2019-2023; 4) Rectangular Strategy Phase IV; 5) Pentagon Strategy 2024-2028 Phase I

NDC X SDG ALIGNMENT

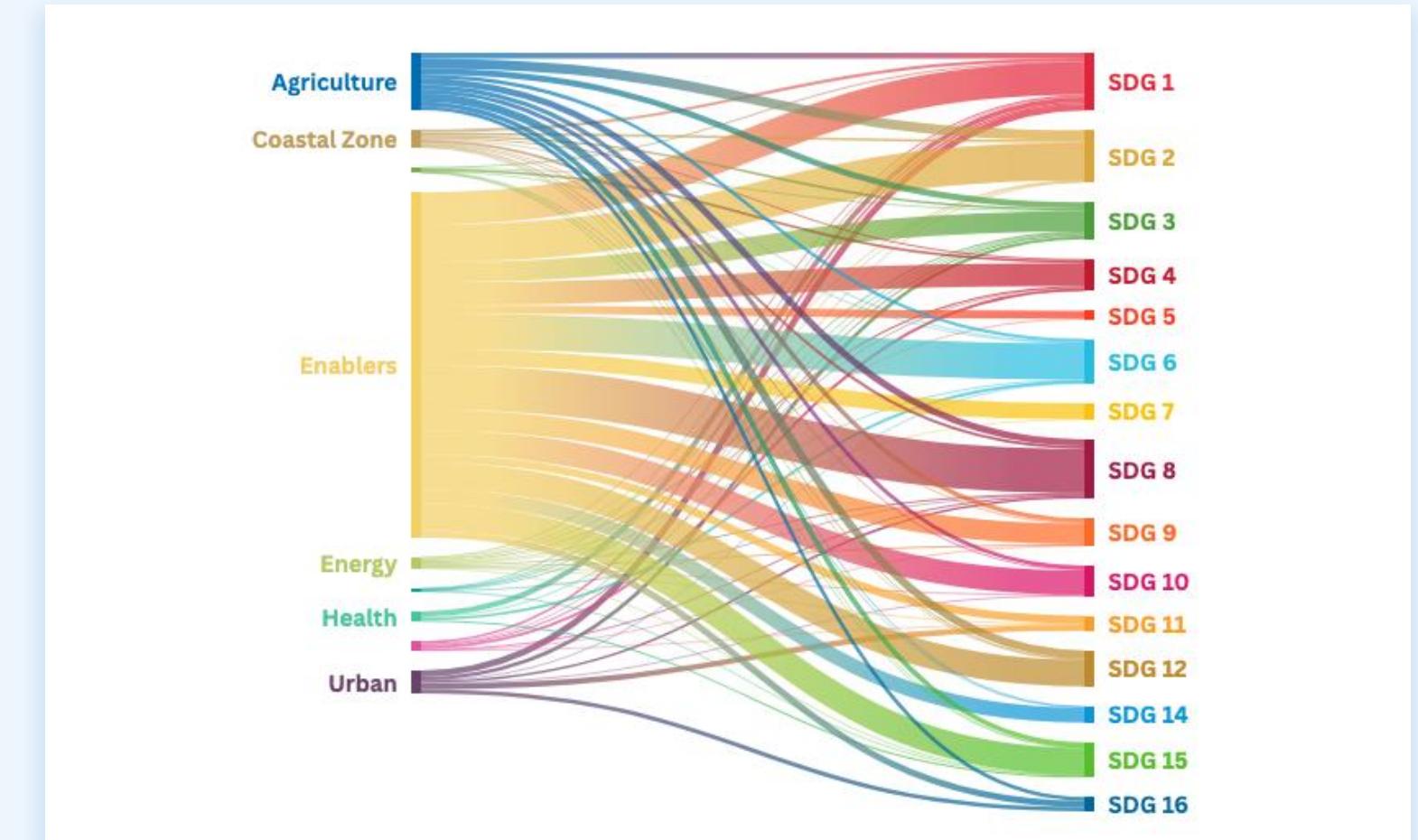
Target Level

This analysis provides a target level alignment of climate actions (mitigation and adaptation) with impact on the SDGs for Cambodia.

MITIGATION NDCs



ADAPTATION NDCs



These visuals are generated by analyzing NDC actions through a custom-built AI tool and categorized using the SCAN tool to surface relevant SDG synergies at the Goal level.

For additional information on the NDC-SDG mapping, please visit: https://ambitiontoaction.net/scan_tool/

NDC X SDG ALIGNMENT

Action Level

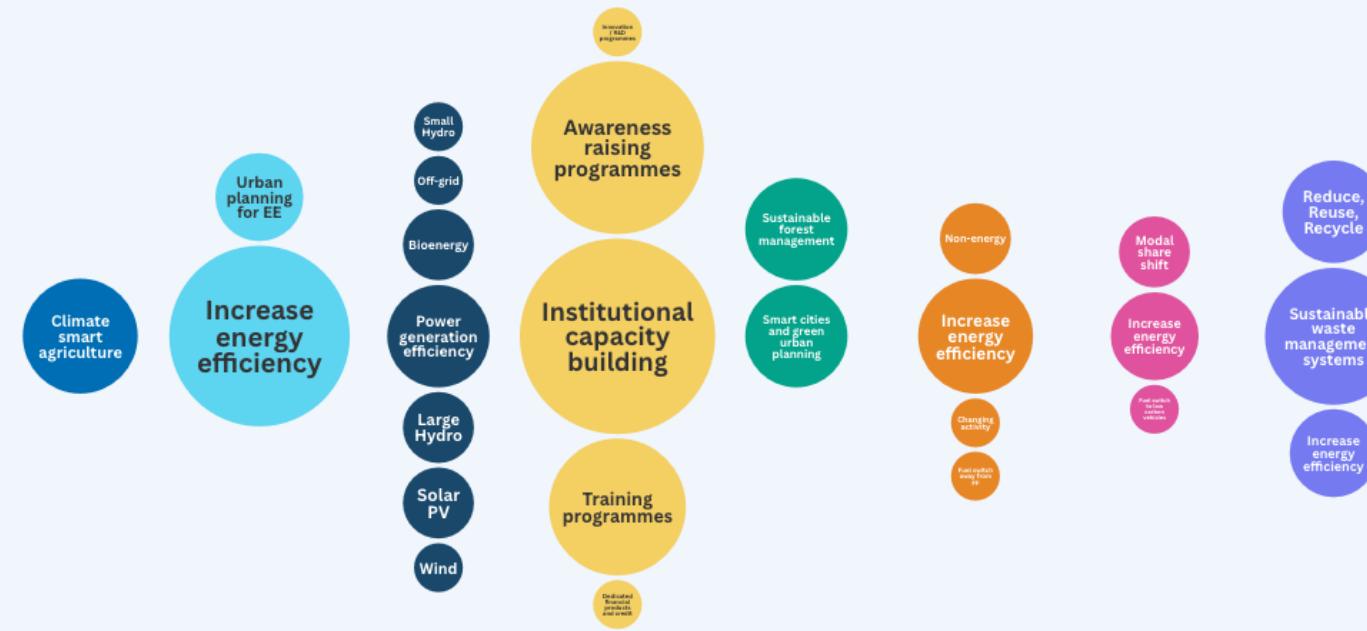
This visual unpacks the NDC categories into the specific actions committed in Cambodia using a custom-built AI.

The size of the bubbles reflects the number of NDC actions identified under each category, to identify NDC x SDG accelerators with precision.

Cambodia's NDC includes actions in these sectors:

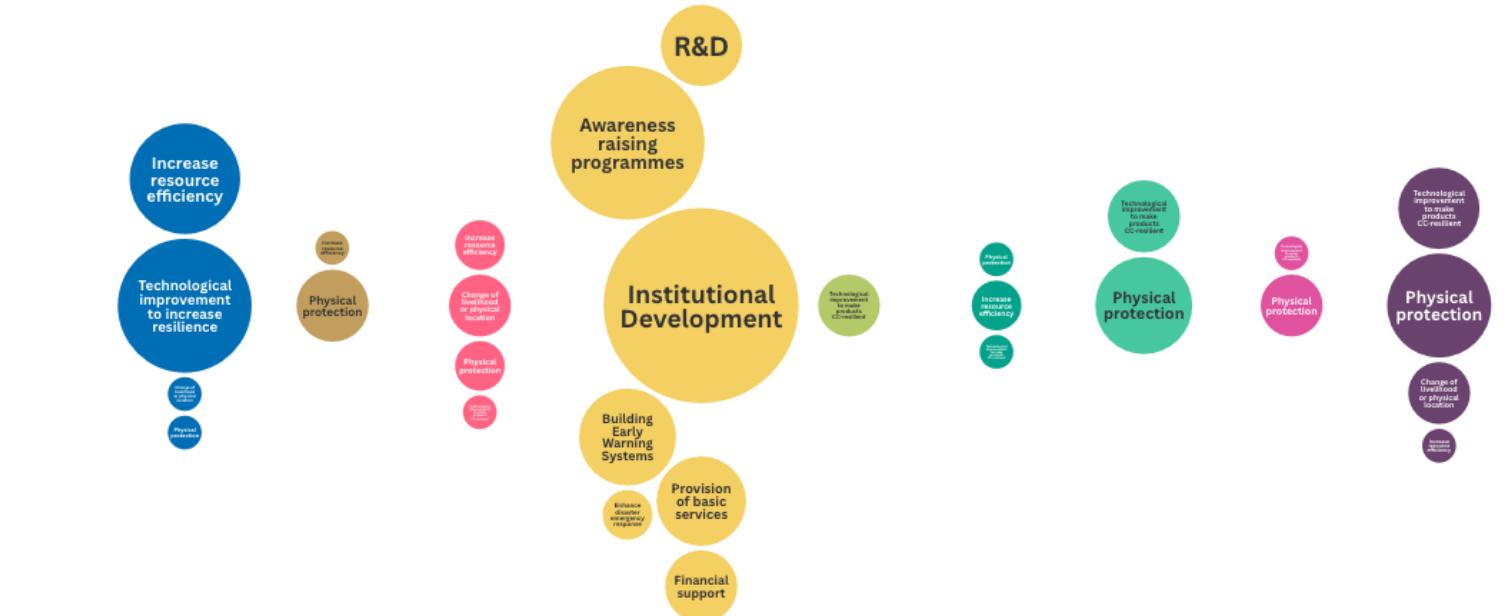
Mitigation

■ Agriculture ■ Buildings ■ Electricity & heat ■ Enablers ■ Forestry ■ Industries ■ Transport ■ Waste →



Adaptation

■ Agriculture ■ Coastal Zone ■ Ecosystem management ■ Enablers ■ Energy ■ Forestry ■ Health ■ Transport ■ Urban →



NDC x SDG INTERLINKAGES

Overview

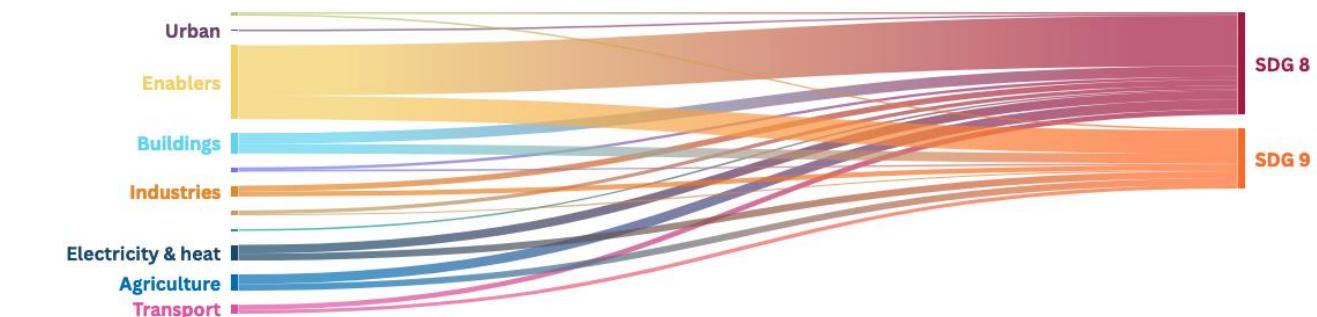
NDC-SDG interlinkages reveal how climate actions can impact SDG progress. Uncovering and understanding these interactions can help Cambodia to achieve the 2030 Agenda while fulfilling its climate ambitions and navigating trade-offs.

Building from the NDC actions and SDG priorities, the following integrated SDG pathways reflect NDC actions with the most potential to accelerate the SDGs for Cambodia:

- **SDG Target 8.3:** Promote policies to support job creation and growing enterprises
- **SDG Target 8.4:** Improve resource efficiency in consumption and production
- **SDG Target 9.1:** Develop sustainable, resilient and inclusive infrastructures
- **SDG Target 9.4:** Upgrade all industries and infrastructures for sustainability



ACCELERATION PATHWAYS



NDC X SDG Interlinkages

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INTERLINKAGES

SDG 8.3

Promote policies to support productivity, decent job creation and entrepreneurship

These actions reflect the country's emphasis on inclusive economic diversification, SME support, and climate resilience. As Cambodia prepares for LDC graduation, equipping women with market-relevant skills, access to finance, and entrepreneurial education will be essential for unlocking new income-generating opportunities, as women's access to competitive markets and climate-informed business practices enhances enterprise growth and job creation. In addition, energy management improvements are expected to reduce energy consumption by 10% by 2030, leading to significant cost savings for businesses by reducing the operational expenses, thus leading to improved competitiveness and ultimately to higher economic growth and job creation. Climate investments programs - both public and private - can drive economic growth and job creation in Cambodia by channelling resources into green industries, resilient infrastructure, and climate-smart businesses. By supporting MSMEs and improving access to ESG-aligned finance, these programs can stimulate entrepreneurship and innovation in sectors like renewable energy, waste management, and sustainable agriculture. Implementing 3R principles in Cambodia can lower production costs, improve resource efficiency, and drive job creation. With the garment industry generating 60% of Cambodia's industrial waste, scaling up 3R practices —alongside ongoing energy efficiency initiatives— offers a high-impact opportunity to reduce fabric waste, reuse textile offcuts, and create jobs in waste sorting, material recovery, and circular product development. It also opens the space for new business models such as sustainable packaging, and textile recycling hubs.

Moreover, supporting rural women entrepreneurs contributes to SDG 10.2, by advancing the social and economic inclusion of vulnerable populations, and SDG 16.7, by promoting participatory, community-led development. Improvements in energy management enhance SDG 9.4, by fostering cleaner and more efficient industrial practices, and strengthen SDG 11.6, by reducing emissions and improving the environmental performance of urban systems. Public climate investment programs support SDG 16.6, reinforcing transparency, effectiveness, and accountability in public finance systems. Meanwhile, the 3Rs Strategy contributes to both SDG 11.6 and SDG 8.4, by minimizing environmental degradation while enabling continued economic activity.

Priority NDC Activities

Activity 1

Empowering rural women entrepreneurs for climate resilience and DRR

Activity 2

Energy management improvements in buildings & industries

Activity 3

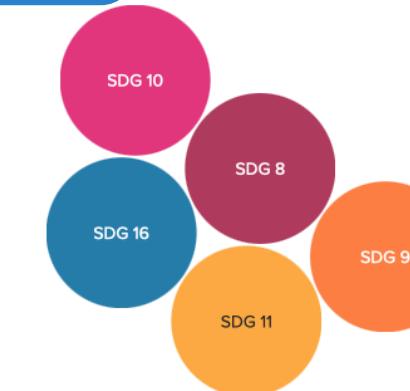
Public climate investment programs

Activity 4

Implementation of national 'Reduce, Reuse, Recycle' Strategy

NDC SYNERGIES WITH THE PRIORITY SDGS

Activity 1



Activity 2



Activity 3



Activity 4



INTERLINKAGES

SDG 8.4

Improve resource efficiency in consumption and production to decouple economic growth from environmental degradation

Transitioning from wastewater disposal to reuse, recycling, and resource recovery can lower operational costs, improve resource efficiency, and generate new revenue streams, particularly through the recovery of valuable by-products. Beyond cost savings, improved wastewater management can also drive innovation, expand local industries, and create new business and employment opportunities in water treatment, waste-to-energy solutions, and sustainable packaging. Moreover, Cambodia can strategically position itself as a regional frontrunner in the circular economy by advancing policy and market frameworks that promote resource efficiency and waste reduction across key sectors. The garment industry – responsible for 60% of the country's industrial waste offers a strong entry point for initiatives such as battery recycling, complemented by circular practices such as Extended Producer Responsibility (EPR) schemes. Adopting Reduce, Reuse, Recycle (3R) practices can boost Cambodia's resource productivity by integrating circular economy principles, such as sustainable design, material recovery, and efficient waste management. Across Cambodia and other Asian countries, more efficient resource use presents a major opportunity for economic growth and **new jobs in recycling and sustainable manufacturing**.

Wastewater treatment in the food sector supports SDG 9.4, by encouraging cleaner and more efficient agro-industrial systems, and SDG 11.6, by reducing the environmental footprint of urban and peri-urban food processing. The garment recycling facility contributes to SDG 8.3, by fostering innovation and new business models for sustainable textile production, while also promoting SDG 10.2, through employment and inclusion in circular economy value chains. Implementation of the 3Rs Strategy enhances SDG 8.4, but also strengthens SDG 11.6, by reducing municipal waste and improving the growing urban centers. These activities also reinforce SDG 16.6, by promoting transparency and accountability in environmental governance and waste regulation.

Priority NDC Activities

Activity 1

Improved wastewater management in the food sector

Activity 2

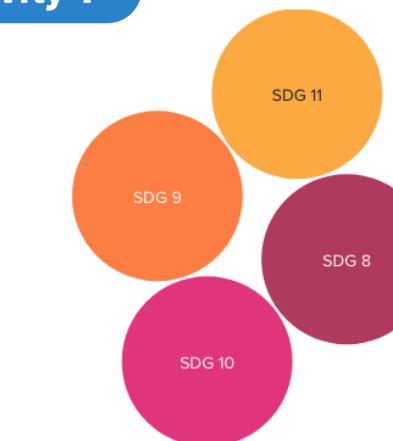
Centralized recycling facility for garment industry waste

Activity 3

Implementation of national 'Reduce, Reuse, Recycle' Strategy

NDC SYNERGIES WITH THE PRIORITY SDGS

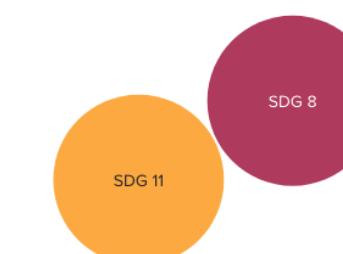
Activity 1



Activity 2



Activity 3



INTERLINKAGES

SDG 9.1

Develop sustainable, resilient and inclusive infrastructures

The enforcement of updated building codes would ensure that new constructions and renovations meet climate-resilient and energy-efficient standards, supporting long-term structural integrity and safety. In addition, updated building codes can improve equity by standardizing safety standards across regions, benefiting vulnerable communities. Updating road construction and maintenance design standards improves the durability and connectivity of transport infrastructure, particularly in rural areas vulnerable to floods and erosion.

Investment in resilient school infrastructure guarantees continuity of education and shelter during disasters, fulfilling both social and infrastructural goals. Climate-adaptive land use planning for low-income and homeless housing ensures equitable access to safe, sustainable shelter. In parallel, climate-proofing solar and hydropower infrastructure would directly contribute to this target by safeguarding national energy reliability and reducing climate-induced service interruptions.

Climate-proofed energy infrastructure enhances SDG 8.2, by improving the reliability and productivity of industrial systems and SDG 10.2, by ensuring broader access to reliable power. Climate-adapted roads support SDG 8.3, by enabling the movement of goods, people, and services across regions, which is vital for entrepreneurship and rural enterprise.

Investment in resilient schools contributes to SDG 10.2, by reducing education disruptions for marginalized groups, and to SDG 11.1, by expanding public infrastructure access in underserved communities. Adaptive land use planning directly supports SDG 11.1, through inclusive housing development, and is expected to strengthen SDG 16.6, by promoting effective, equitable urban governance and service delivery.

Priority NDC Activities

Activity 1

Building codes and enforcement for new construction and renovations

Activity 2

Climate-proofing existing & future solar/hydropower infrastructure

Activity 3

Road construction & maintenance design standards

Activity 4

Resilient school infrastructure

Activity 5

Climate-adaptive land use planning for low-income and homeless housing.

NDC SYNERGIES WITH THE PRIORITY SDGS

Activity 1



Activity 2



Activity 3



Activity 4



Activity 5



INTERLINKAGES

SDG 9.4

Upgrade all industries and infrastructures for sustainability

A centralized recycling facility is a key mitigation measure to reduce greenhouse gas emissions in the garment sector-- and these facilities can minimize landfilling, reduce pollution, and enhance resource efficiency by minimizing the need for virgin materials for manufacturing products, contributing to a more sustainable industry and directly supporting the country's efforts to achieve SDG 9.4. Adapting industrial processes to rising heat—through improved ventilation, cooling technologies, and modified work arrangements—enhances resilience and operational continuity in the face of climate stressors. Finally MEPS labeling can help inform consumers about energy efficiency and subtly help the demand for less efficient products from the market. Literature has shown that these measures are highly effective in improving appliance efficiency, reducing electricity consumption, and lowering carbon emissions from both household and industrial appliances, contributing to more sustainable industrial processes and supporting SDG 9.4.

These industrial climate actions are also expected to generate gains across other development targets. The recycling facility and MEPS implementation contribute to SDG 8.2, by supporting productivity improvements through technological upgrading, and to SDG 8.3, by fostering entrepreneurship and MSME participation in green industries. Adaptations to heat stress promote SDG 8.8, by ensuring safe and secure working conditions for factory workers. All three interventions are expected to support SDG 9.2, by promoting sustainable and inclusive industrialization, and SDG 9.5, through encouraging innovation in clean technologies. The recycling initiative also aligns with SDG 11.6, by reducing industrial pollution and solid waste in urban areas. By enabling more equitable access to clean technologies and safer working environments, these actions contribute to SDG 10.3, helping to reduce inequalities within the labor force and industrial sectors.

Priority NDC Activities

Activity 1

Centralized recycling facility for garment industry waste

Activity 2

Adaptations to heat stress in industrial production

Activity 3

Application of equipment labelling & Minimum Energy Performance Standards (MEPS)

NDC SYNERGIES WITH THE PRIORITY SDGS

Activity 1



Activity 2



Activity 3



Finance & Stimulus

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FINANCE & STIMULUS

The radar diagram shows low frequency data points linked to government revenue, debt, and natural resources rents as a proportion of GDP. The financial indicator graphs show external debt servicing relative to revenue as well as the country's latest Debt Sustainability Assessment (DSA) risk rating (IMF; WB, 2024).

Cambodia's gross government debt was expected to reach 29.1% of GDP in 2025, significantly lower than the low-income developing countries (LIDC) average of 59.1%. The country is projected to collect revenue equivalent to 14.7% of GDP in 2025, or a third below the LIDC average of 21.8%.

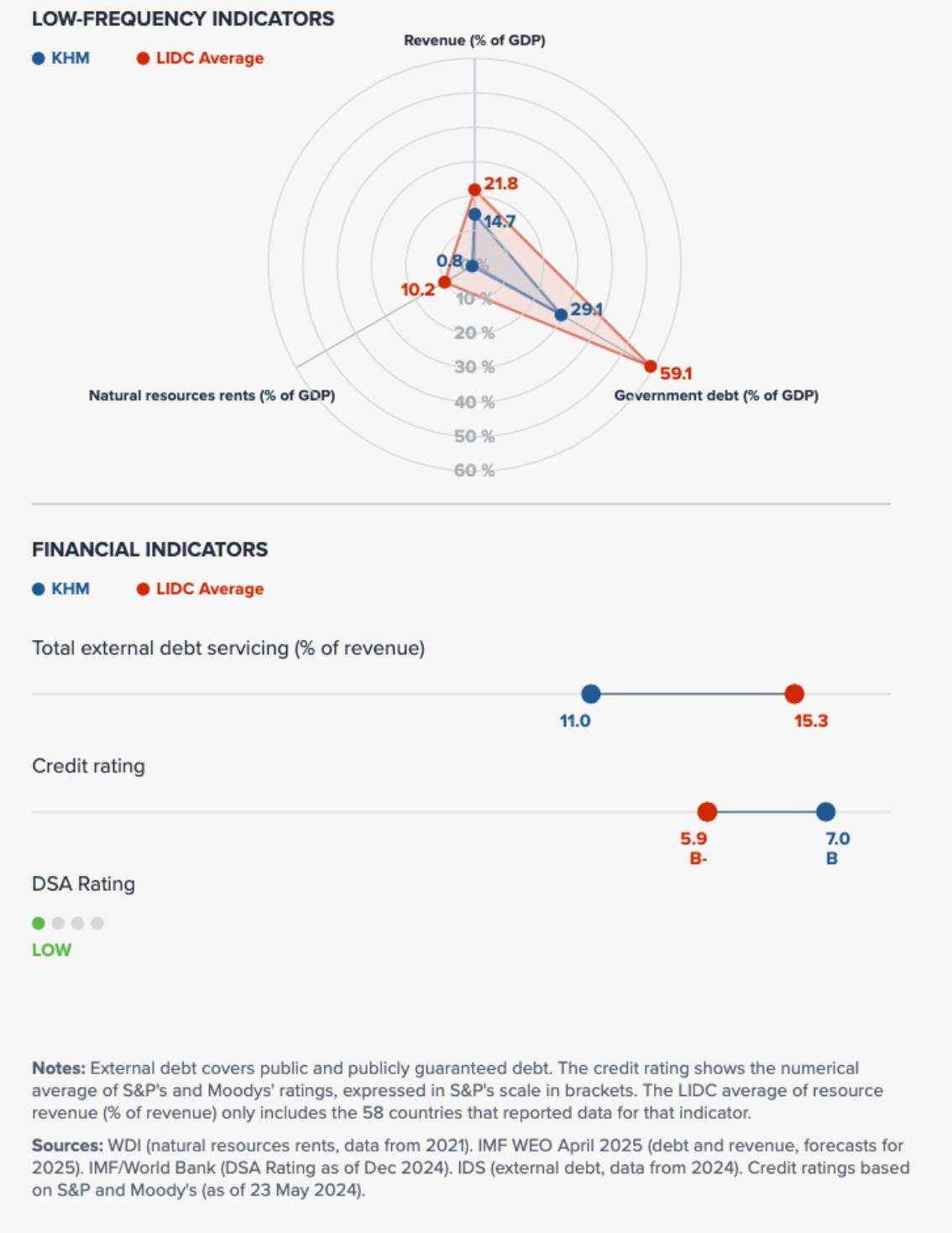
Cambodia's public external debt servicing this year is expected to reach 11.0% of revenue, which is about a fifth below the LIDC average of 15.3%. According to the latest World Bank and IMF Debt Sustainability analysis (DSA) from December 2023 the country is rated as in 'low risk of debt distress'.

Cambodia is financially robust due to its moderate fiscal stance. The Kingdom only borrows for productive investments in infrastructure and is implementing a Revenue Mobilization Strategy 2019-2023 that ensures contributions to public spending.

Challenges such as high private and corporate debt levels and increasing exposure to climate-related shocks are impacting economic growth and resilience.

Cambodia has made progress in climate-related CSDGs, improving green infrastructure, water access, sanitation, and renewable energy. However, challenges persist in rural infrastructure, financing, urbanization, and waste management (VNR 2023).

The average annual NDC financial needs are USD 781 million with an average annual gap of 49.8% (USD 357 million). Key sectors like forestry, energy, and waste remain underfunded. Mitigation accounts for most costs, with agriculture, infrastructure, and water resources receiving the majority of funding. Development partners provide 86.8% of funds, but private sector contributions remain low at 0.2%, indicating untapped investment opportunities (NDC 2.0 Financial Landscape Stocktake - Draft).



Cambodia recently updated its GDP base year from 2000 to 2014. This rebasing revealed that the economy is approximately 35% larger than previously estimated. Consequently, figures relative to the new GDP represent a smaller proportion.

PUBLIC FINANCE

Financing needs

SDGs: The additional annual costs required to achieve the SDGs in Cambodia. The cumulative value of this estimated gap is approximately USD 18 billion per year.

NDC: Estimated 7.7 billion USD total by 2030

- 5.7 billion USD for mitigation
- 2 billion USD for adaptation

Financing strategy

Financing strategy under development for Pentagon Strategy and NDCs to achieve:

- CSDGs and High-Income Status by 2050
- LT-LEDS / Carbon Neutrality by 2050

Expenditures & budgets

- Climate expenditure budgeted (focus on vulnerable households)
- Investment in forest protection to curb emissions
- Phase out of fossil fuel subsidies by 2030 (currently 3.2% of GDP)

Debt instruments

- In November 2023, the Government endorsed the “Policy Framework on the Development of Government Securities 2023 – 2028” aiming to establish a well-functioning government securities market.
- Although sovereign thematic bond issuance is not expected soon, the groundwork laid by development partners for the Cambodian Government, through studies, capacity-building efforts, and technical assistant, has created the conditions needed to move forward.

International climate finance

- GCF: Over 245 million total to date
- GEF: Approx. 18 million total for climate change to date (GEF4-8)
- Adaptation Fund: Approx. 20 million total to date

PRIVATE FINANCE & ECONOMY

Policy & Regulatory Measures:

| | Established | In Progress | Not initiated | Comment |
|---------------------------------|-------------|-------------|---------------|---|
| ESG / Corporate reporting | | | | CSR law in place but no wider ESG taxonomy |
| Green bonds | | | | First Corporate Green Bond launched in 2024 with ADB investment (approximately 10m USD). Sovereign green bonds not yet issued. |
| SDG / impact / transition bonds | | | | UNDP has supported through studies, capacity-building and technical assistant for the Policy Framework on the Development of Government Securities 2023 – 2028. |
| SDG Impact /IMM | | | | Initial Climate-focused IMM training delivered to private sector entities |
| Sustainability / Social bonds | | | | UNDP has supported through studies, capacity-building and technical assistant for the Policy Framework on the Development of Government Securities 2023 – 2028. |
| Sustainable Finance Taxonomy | | | | |

Innovative Instruments:

While Cambodia's first thematic bond issuance is not expected soon, development partners including UNDP has laid the groundwork through studies, capacity-building, and expert consultations.

Cambodia has launched several blended finance initiatives to promote sustainable development. The Clean Energy Revolving Fund offers loans to farmers for clean energy adoption. The WASH sector explores private investment alongside public funds for improved water and sanitation. The Investment Support Facility for Post-Harvest Fisheries by UNIDO and CGCC, co-funded by the EU, blends financing to boost fisheries productivity. And the Sustainable Green Financing Facility, launched in October 2024 by CGCC and UNDP, supports green projects through a public-private funding mix.

However, limitations remain, including low private sector participation, regulatory challenges, and capacity constraints in structuring and managing blended finance mechanisms. Ensuring long-term success will require stronger policy frameworks, incentives for private investment, and improved coordination among stakeholders.

International Investment:

Foreign Direct Investment accounts for 46.46 per cent of the approved 186 investment projects in 2022. Major foreign investors came from China, Thailand and Japan.

Domestic Investment:

Local investment accounts for 53.54 per cent of the approved 186 investment projects in 2022.

SDG Investor Map

15 Investment Opportunity Areas (IOAs) that contribute to the government's NDC priorities and meet SDG needs.

The priority IOAs span **4 climate adaptation-relevant sectors** in Cambodia:



METHODOLOGY



NDC X SDG MOMENT

Methodology

This section provides a snapshot of key climate and human development data.

Data Sources

European Commission 2023 (INFORM Climate Change Risk Index), IMF 2022 (IMF-Adapted ND-GAIN Index); Environmental Performance Index 2024 (GHG growth rate adjusted by emissions intensity & Projected Emissions in 2050); Helen Phillips; Adriana De Palma; Ricardo E Gonzalez; Sara Contu *et al.* 2021 (Biodiversity Intactness Index).



ALIGNMENT & INTERLINKAGES

Methodology

NDC activities from Cambodia's NDC submission are extracted. These are mapped with Mitigation or Adaptation Actions defined by SCAN-Tool initiative, which finds interlinkages between these Actions and the SDGs. Accordingly, synergies and trade-offs between NDC activities and the SDGs are identified.

Data Source

NDC activities data are from NDC-SDG Connections ([Connecting climate action to the Sustainable Development Goals | NDC-SDG Connections \(idos-research.de\)](#)); Mitigation or Adaptation Actions are defined by SCAN-Tool ([Scan tool - Ambition To Action](#)).



FINANCE & STIMULUS

Methodology

Provides an overview of the financing options for NDC implementation.

Data Source

World Development Indicators (2024), IMF WEO (Oct 2024), IDS (2024), UNU-WIDER (2021), DFA 2021