

README for the Reproducibility Package for

Climate Change Framework Legislation: A Growing Trend.

The following package applies to the Excel file “CC Framework Laws Review 2024 External” which was used as the basis for the Prosperity Insight publication, *Climate Change Framework Legislation: A Growing Trend*. The authors also intend to make this data available on the Development Data Hub.

This note analyzes 12 key elements of framework laws, covering strategic goals, policy development and execution, evaluation and enforcement. The analysis is based on the content of each country’s climate change law, downloaded from the [Climate Change Laws of the World](#) database.

Consistent with the methodology used in the Reference Guide to Climate Change Framework Legislation, this note applied the questions in the first tab of the Excel file, “CC Laws Assessment Tab,” to assess the incidence of the elements across all climate change laws (figure 2) and the integration of the elements into the framework law of each country (Figure 5. Heat Map).

An element was determined to be either integrated, somewhat integrated, or not integrated into the relevant framework law based on the summation of answers to each question (yes, no, or partial), and the number of questions (i.e., “sub-elements” in Column A of the “CC Laws Assessment Tab”) under each element (see Excel Tab 2 “Assessment-Scoring Methodology”).

The assessment-scoring methodology is outlined below:

2 Sub-Elements	3 Sub-Elements	4 Sub-Elements
2 Yes = Integrated	3 Yes = Integrated	4 Yes = Integrated
1 Yes; 1 Partial = Somewhat integrated	2 Yes; 1 Partial = Integrated	3 Yes; 1 Partial = Integrated
1 Yes; 1 No = Somewhat integrated	2 Yes; 1 No = Somewhat integrated	3 Yes; 1 No = Somewhat integrated
2 Partial = Somewhat integrated	1 Yes; 2 Partial = Somewhat integrated	2 Yes; 2 Partial = Somewhat integrated
1 No; 1 Partial = Not integrated	1 Yes; 1 No; 1 Partial = Somewhat integrated	2 Yes; 1 Partial; 1 No = Somewhat integrated
2 No = Not integrated	1 Yes; 2 No = Somewhat integrated	2 Yes; 2 No = Somewhat integrated
	3 Partial = Somewhat integrated	4 Partial = Somewhat integrated
	1 No; 2 Partial = Not integrated	3 Partial; 1 Yes = Somewhat integrated
	2 No; 1 Partial = Not integrated	3 Partial; 1 No = Somewhat integrated
	3 No = Not integrated	2 Partial; 2 No = Somewhat integrated
		2 Partial; 1 Yes; 1 No = Somewhat integrated
		2 No; 1 Yes; 1 Partial = Not integrated
		3 No; 1 Yes = Not integrated
		3 No; 1 Partial = Not integrated
		4 No = Not integrated

Elements 1 (Long-term Targets), 4 (Climate Change Strategies and Plans), 10 (Financing Implementation), 11 (Monitoring, Reporting, and Verification), and 12 (Oversight) have two sub-elements.

Elements 2 (Intermediate and Sectoral Targets), 3 (Risk and Vulnerability Assessments), and 9 (Subnational Government), have three sub-elements.

Elements 5 (Policy Instruments), 6 (Independent Expert Advice), 7 (Coordination Mechanism), and 8 (Stakeholder Engagement) have four sub-elements.

Note: Partial scores are provided when the language used in the law is ambiguous, vague or if the law relies on other mechanisms to achieve a specific purpose.

Income group data in “Figure 5. Heat Map” was derived from the official [World Bank Country and Lending Groups](#) classification page.

Figure 1 “Number of CC Laws” was derived by counting the number of laws passed per year since 1998 (Column E) and then calculating the cumulative total number of laws passed over time for the trend line (Column F) in the figure. Country names were derived from Row 1 of “CC Laws Assessment Tab” and Year was derived from the [Climate Change Laws of the World](#) database (link to specific law in Row 2).

Figure 2 “Level of Incidence” was constructed in two steps. First, a COUNTIF function was used in the Excel tab titled, “Table 5. Heat Map” in Rows 72, 73, and 74 to identify the incidence of the elements across the laws. These values were then divided by 66 (the total number of CC laws) to calculate the level of incidence (percentage) as illustrated in the Excel tab “Figure 2. Level of Incidence.”

Figure 3 “Long-Term Targets” was constructed in two steps. First, the “yes” or “no” scores from Rows 5 and 6 of the “CC Laws Assessment Tab” were converted into numerical scores as follows: “yes” = 1 and “no” equals 0. Partial scores were also given “0” scores as they did not meet the same level of specificity as “yes” scores. These scores were manually populated onto the Excel tab “Figure 3. Long-term Targets” in columns D and F for net-zero and adaptation targets respectfully. The number of targets was calculated manually by year in Column J for net-zero targets and then the cumulative total was calculated in Column K. The same steps were repeated for adaptation targets in Columns L and M.

Figure 4 “Policy Instruments” was constructed in two steps. First, any policy instruments identified in Rows 23 and 25 of the “CC Laws Assessment Tab” (Information, Regulation, Fiscal Management, Fiscal Measures, Programs, and Carbon Pricing” for each of the climate change laws were converted into numerical scores as follows: “1” if it exists and “0” if not mentioned in the law – and then mapped into the appropriate Columns (C, D, E, F, G, H, I, J, K, L, M) in the Excel tab “Figure 4. Policy Instruments.” The total number of adaptation and decarbonization targets by instrument was calculated using the SUM function in row 69 of the Excel tab “Figure 4. Policy Instruments.” The values were then used to construct the visual for each type of policy instrument.