NATIONAL/POLICY LEVEL TOOL
Climate and Disaster Risk Screening Guidance Note

This Sector Screening Guidance Note provides an end-to-end roadmap of the climate and disaster risk screening process.

Climate and disaster risk screening applies to:
- All IDA operations
- All IBRD operations starting July 1, 2017

Why screen for climate and disaster risk?

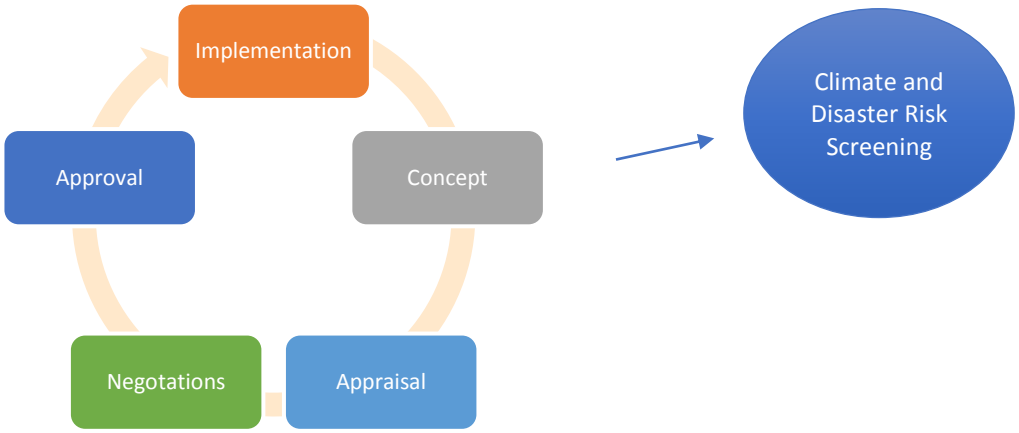
- Meeting the corporate climate commitment (WBG Climate Change Action Plan (CCAP) commits to increasing the climate related share of the portfolio to 28% by 2020)
- Complying with the screening requirement (IDA-17 policy commitment to screen operations since July 1, 2014; commitment will continue under IDA-18; screening requirement extended to IBRD operations starting July 1,2017 as per CCAP commitment)

What is climate and disaster risk screening?

- A **proactive approach to managing short- and long-term climate and disaster risks** with the final aim of integrating appropriate resilience measures in development policies, programs and projects

When to screen operations?

- Climate and disaster screening is carried out at an **early concept stage** of the project cycle



What information is required for screening?

- An initial understanding of priority sectors for development programming of policymaking
- Some knowledge of the project's country context
- No specialized knowledge of climate change and disasters is required

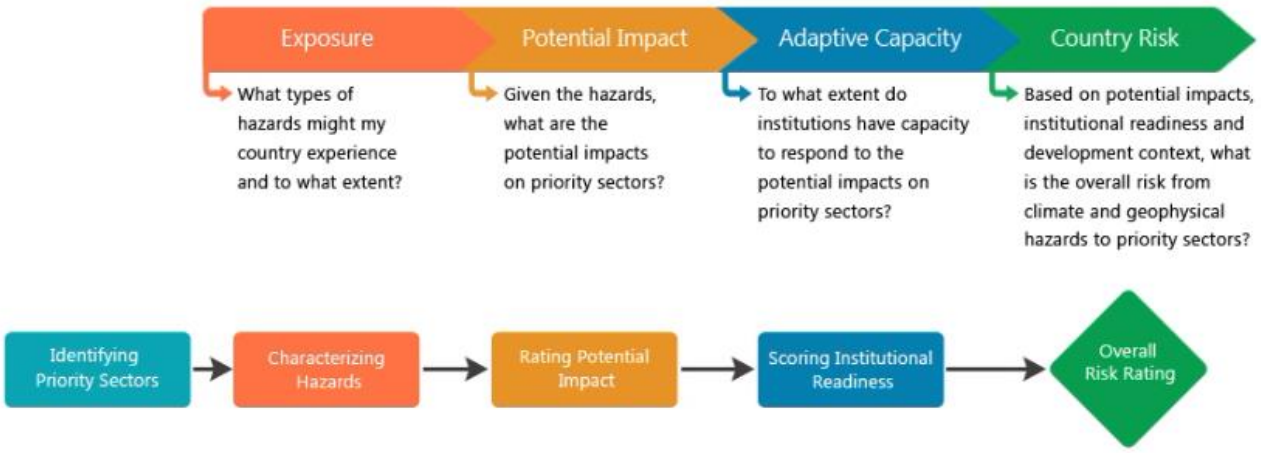
Where to get screening support?

- Visit the Country Adaptation Profiles and Climate Change Knowledge Portal (CCKP) for information on climate and disaster risks
- Watch the training videos for screening and the CCKP
- Follow an e-learning course

- Join a face to face training session
- Contact the Climate Help Desk at climatescreeninghelpdesk@worldbankgroup.org

What screening steps do the tools follow?

The screening tools follow four main steps illustrated below



STEP 1: IDENTIFY PRIORITY SECTORS

- This step identifies key development goals and associated sectors required to achieve proposed plans or policies
- In subsequent steps, priority sectors will be screened for climate and disaster risks
- Sectors include: Agriculture; Education; Energy; Finance; Fisheries; Natural Resource Management; Health and other Social Service; Industry; Information and Communications; Mining and Metals; Public Administration, Law and Justice; Sanitation; Trade; Transportation; and Water

The following key questions should be considered in choosing priority sectors:

- Which sectors are critical to meeting the country's goals and priorities?
- Which sectors are important for meeting sustainable development outcomes?
- Which sectors are important for economic growth? Which sectors support or contribute to the growth of multiple sectors?
- Which sectors are receiving, or expected to receive, significant investments?
- Which sectors engage a large part of the country's population?
- Which sectors have been or may be affected by climate or geophysical disasters?
- Which policies and institutional reforms are critical for the success of national development goal?

STEP 2: CHARACTERIZE CLIMATE AND GEOPHYSICAL HAZARDS AND RATE IMPACTS

- This step characterizes current and future exposure to relevant climate and geophysical hazards
- It then allows for a rating of impacts of these hazards on priority sectors
- This is based on climate information drawing on global, quality controlled data sets from the Climate Change Knowledge Portal (CCKP)

- Understanding climate trends is important as they act individually and collectively on key sectors

Climate and geophysical hazards	Guiding questions to assess impacts on priority sectors
Extreme temperature	• How are annual and seasonal temperatures projected to change? • How are the frequency and intensity of extreme temperatures projected to change?
Extreme precipitation and flooding	• How are annual and seasonal precipitation patterns projected to change? • How are the frequency and intensity of extreme precipitation and flooding projected to change?
Drought	• Is the frequency, intensity and duration of droughts projected to change?
Strong winds	• Is the country exposed to winds from tropical cyclones, such as hurricanes or typhoons? • Is the country exposed to other damaging wind storms, such as thunderstorms, tornadoes, or dust storms? • What have been the trends in the frequency and intensity of these wind events?
Sea level rise	• How is sea level along the country's coast projected to change?
Storm surge	• What trends in the frequency and severity of storm surges have been observed?
Geophysical hazards (earthquakes, volcanic eruptions, and landslides)	• Are there regions in the country with high, medium, or low seismic risk? Has the country experienced earthquakes before? • Are there historical records of tsunamis? • Are there active volcanoes, (those that might have erupted in the last 10,000 years)? If yes, consider potential effects of ash and mudflows. • Has part of the country ever experienced landslides of any nature in the past?
Impacts	• Given future projections, how may impacts to the sector change in the future? • Are such impacts likely to affect the sector more or less than in the past? • Have efforts been initiated to help protect this sector against the hazard?

STEP 3: SCORING INSTITUTIONAL READINESS

- This step assesses the institutional readiness to act on potential impacts from climate and geophysical hazards at the national level and for the priority sectors, institutional strengthening and/or policy reforms that have been identified.
- The term institution refers to the national government and all key sectoral entities, including public ministries and agencies, civil society, the private sector, academia, and NGOs.
- The tool will generate a summary table of your scores and a graph of your scores. It will also record any changes in institutional readiness this step is revisited at a later time, since institutional readiness can be improved over time through activities such as capacity building, education, and training.

Guiding questions to score dimensions of institutional readiness for climate and disaster risks
Assess Awareness of Hazards ***Are the risks from climate and geophysical hazards known throughout the institution?***
• Is there evidence that the institution(s) includes the impacts from climate and geophysical hazards in national planning? • Is there evidence that key personnel within the institution(s) recognize the potential for impacts from climate and geophysical hazards? • Is there evidence that the institution(s) routinely monitors and analyzes data on recent impacts from extreme weather and geophysical hazards? • Is there evidence that key personnel are aware of the social, economic, and environmental consequences of hazards?
Assess Ability to Conduct Hazard Risk an Impact Assessments ***Does the institution have the ability to conduct assessments of exposure to climate and geophysical hazards and assessments of their potential impact?***
• Is there evidence that the institution(s) has developed or used climate data to consider future impacts? • Is there evidence that the institution(s) has conducted risk assessments of hazards? • Are the risk assessments rigorous (e.g., do they include quantitative assessment of extreme weather events?)
Assess Ability to Plan/Implement Adaptation Measures ***Does the institution have the ability to plan and implement adaptation measures to enhance resilience to climate and geophysical hazards?***
• Is adaptation considered in planning, development or investment strategies? • Is there a framework for identifying and prioritizing adaptation-related investments? • Are there adequate human and financial resources for adaptation programming? • Are actions to address climate and geophysical hazards included in budgets? • Is there an effective multi-agency coordination mechanism for disaster risk management?
Assess Adaptive Management Capabilities ***Is the institution sufficiently flexible to adjust adaptation approaches when there is new information about climate and geophysical hazards or when conditions change?***
• Can the institution(s) identify adaptation options and pathways that will be robust under a range of climate and natural disaster scenarios and that will account for uncertainties? • Is there a working system for monitoring and evaluating adaptation programs? • Are there mechanisms for sharing lessons to improve existing risk management practices and structures?

Interpreting the Readiness Scores:

- **Absent.** No evidence of readiness is available or capacity is nonexistent
- **0 to 4: Minimal Readiness.** These scores indicate that there is no formalized capacity, and that awareness and analytical abilities are very limited within the institution
- **5 to 8: Moderate Readiness.** Scores in this range indicate that a modest level of formal capacity exists within the institution. However, there are no arrangements to routinely incorporate hazard assessment into planning and implementation or to include hazard planning in budgets
- **9 to 12: Significant Readiness.** These scores indicate strong formal capacity. Awareness and analytical abilities related to hazards are a significant consideration in budgets as well as national planning and project development.
- **13 to 16: Outstanding Readiness.** These scores indicate excellent formal capacity. Awareness and analytical abilities related to hazards have been fully mainstreamed in national planning and project development in the institution.

STEP 4: RATE RISK OF PRIORITY SECTORS

- In this step, the results from the previous stages will be synthesized to arrive at an overall rating of risk to priority sectors
- Risk is the degree to which a sector, institutions and/or and policy operations are impacted by hazards combined with its ability to respond to their adverse effects
- Development context considerations can also reduce (or increase) a sector's ability to function properly and increase (decrease) its risk

For example:

- Suppose the sector is rated at high risk in the historical/current time-frame but at moderate risk in the future time-frame; in that case, you should probably rate the overall sector risk as high
- Then consider the institutional readiness score and adjust your sector rating accordingly:
    - Scores between 0 and 5 indicate minimal readiness and higher risk, thus a higher risk rating
    - Scores between 6 and 11 indicate moderate readiness. Your assessment should be based only on the potential impacts
    - Scores above 11 indicate significant readiness and lower risk to impacts
- The consider development context and adjust your sector rating accordingly:
    - If the development context considerations increase risk, adjust the overall sector risk to a higher level.
    - If the development context considerations decrease risk, treat the overall sectoral risk as identical to the preliminary risk rating

Please see below for some climate risk management measures for development policy and planning for your consideration.

OBJECTIVE	EXAMPLES
Develop low-emission development strategies	• Incentives provided by financial institutions and governments can encourage the private sector to develop and deploy technologies in renewable energy and energy efficiency; waste, water and sanitation; and transport. There are opportunities across the entire value chain and to reach a wide variety of beneficiaries – in design,

	manufacturing, operations and maintenance (O&M), installation, retail and distribution, and research and development (R&D). • Emphasize the potential of O&M to improve equipment and system performance without the need to invest in new capital. O&M training is less expensive than capital investment, can be implemented promptly, can include simple protocols such as regular filter cleaning that workers of all skill levels can implement, and may extend the life of current equipment. Improved performance means the same output is achieved with fewer inputs. To the extent that energy inputs are reduced, greenhouse gas emissions will be reduced.
Use public finance mechanisms to mobilize and leverage private capital for promising adaptation and climate change mitigation technologies	• Carbon finance can be used to monetize future cash flows from the advanced sale of carbon credits to finance investment costs for climate resilience investment (e.g., resilient infrastructure) or renewable energy and energy efficiency projects. • Ensuring public infrastructure projects consider climate information and/or can contribute to climate resilience of the economy. • Encourage investment in cost effective "smart" technologies such as meters, light sensors, and motion detectors that reduce energy and greenhouse gas emissions in residential, commercial, and industrial facilities. • Explore new sources of financing such as green bonds to raise capital for climate-resilient infrastructure that will improve services while strengthening resilience and directly or indirectly enhance economic growth by making a municipality or other jurisdiction a more attractive place to invest. If used to support infrastructure such as public transit, green bonds can reduce emissions growth in the transportation sector.
Develop financial services for underserved populations	• Mobile banking, Village Savings and Loan Associations (VSLAs), and microfinance can help build the adaptive capacity of smallholders, entrepreneurs, women-owned businesses, economically disadvantaged persons, or other groups that otherwise lack access to financial services.
Create synergies with existing or planned reforms	• Reforms to public utility pricing and management can increase efficiency and reduce the vulnerability of climate-sensitive resources. For example, subsidies for electricity and water use can distort price signals that would otherwise encourage investment in conservation (e.g., drip irrigation in agriculture, alternative sources of energy, and energy saving technologies). Increased rate collection can help to ensure wise use of resources.
Develop public-private partnerships to achieve multiple economic objectives when addressing climate impacts	• For example, challenges caused by climate change such as disruptions in power supply may provide opportunities to diversify the supply of services to be more inclusive of the private sector (e.g., distributed energy and energy service companies). Distributed energy systems often use renewable energy sources and energy service companies typically provide energy-saving services or equipment that are paid for by the energy cost savings. Both help mitigate climate change.
Encourage governments to place a higher priority on related development objectives and realize co-benefits	• Climate-proofing infrastructure and infrastructure services can support economic growth in a changing climate. • Government policies that support increased adaptive capacity as an aspect of economic growth, such as tax incentive for relocation or protection of factories or businesses, can support economic growth while increasing resilience. • Strengthening civil society and engaging broader sectors of the population – including marginalized populations – in development can increase democratic participation and government accountability while simultaneously bolstering economic capacity and resilience of those groups to the impacts of climate change

Consider climate information relevant to economic growth	• Analyze climate information to determine vulnerabilities and risks to key economic sectors for this stage of the program cycle. Consider the climate risk management options for the sectors described in the other annexes. • Increase awareness of various stakeholders about implications of climate change for economic growth and increase understanding of how these implications may impact women and men differently, as well as how marginalized populations may suffer disproportionately.
Strengthen economic policies and planning systems	• Improve coordination of government economic policies and green growth opportunities. • Determine adaptation needs and opportunities to sustain private sector productivity. • Increase availability and access to finance to reduce climate risks
Improve risk management	• Develop new insurance instruments to address climate risks. • Make financial markets more inclusive to help build the adaptive capacity of marginalized populations. • Encourage new development away from high-risk locations.

Source: USAID Climate Risk Screening and Management Tools: Economic Growth Annex

Additional Resources*:*

- National Adaptation Plans of Action are reports prepared by a number of countries that often include information on sector or location-specific risks.
- National Communications are country-specific reports to the UNFCC that often contain information and research on a country's risks.
- Turn Down the Heat: Why a 4°C Warmer World Must be Avoided is a World Bank report focused on the impacts of climate change on developing countries.
- Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience builds on the previous report and focuses on impacts in Sub-Saharan Africa, South East Asia, and South Asia.
- Turn Down the Heat: Confronting the New Climate Normal is a World Bank Report that builds on previous reports and focuses on impacts to development in Latin America and the Caribbean, the Middle East and North Africa, and parts of Europe and Central Asia.
- National Indicators from World Bank Open Data may also be useful for this tool.
- World Bank Country Assistance Strategies – Past country assistance strategies will provide information about a country's development goals and the World Bank's program of support for that country.
- World Bank Poverty Reduction Strategy Papers – A Poverty Reduction Strategy Paper describes a country's long- term vision and sets out macroeconomic, structural, and social policy goals.
- World Bank Country Page – Provides access to a number of helpful resources, including a country brief, country statistics, feature stories, and country portfolio information.
- Multilateral Development Bank's Country Pages – The African Development Bank, Asian Development Bank, Inter-American Development Bank, and the Caribbean Development Bank host information on development strategies, portfolios, sectors, human development, etc.
- Individual Country Strategies – Some countries may develop their own individual poverty reduction, economic growth, or development strategies, plans or programs.

Other screening tools/manuals:

- African Development Bank (AfDB): Booklet on Climate Screening and the Adaptation and Review Evaluation Procedures (AREP): is a manual representing a set of decision-making tools and guides that enable the AfDB to screen projects in vulnerable sectors for climate change risks and identify appropriate adaptation measures to reduce vulnerability. It covers the Agriculture, Water, Energy and Transport sector.
- Think Hazard!, is a web-based tool enabling non-specialists to consider the impacts of disasters on new development projects. Users can quickly and robustly assess the level of river flood, earthquake, drought, cyclone, coastal flood, tsunami, volcano, and landslide hazard within their project area to assist with project planning and design.
- The Climate Finance Impact Tool, made by Japan International Cooperation Agency (JICA), is designed to screen for risks in the early stages of project development. It is designed for offline use in under two hours.
- The Caribbean Climate Online Risk and Adaptation Tool (CCORAL) guides users to identify whether an activity is likely to be influenced by climate change. The tool is focused on the Caribbean region. It may be completed in under two hours.

- CRiSTAL (Community-based Risk Screening Tool – Adaptation and Livelihoods) is based on a participatory, local-scale approach to prioritize climate risks. Tool versions are available for Food Security and Forests.
- The UK Climate Impacts Programme Business Areas Climate Assessment Tool (BACLIAT) is a workshop-based process designed to help users consider the potential impacts of future climate change on business areas.
- The U.S. Department of Agriculture's Forest Service Climate Project Screening Tool is a process-oriented tool designed to help land managers integrate climate change considerations into project planning. The tool may be completed in under two hours.
- The National Wildlife Federation's Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment is a guide for natural resource managers for assessing key components of vulnerability, focusing on species, habitats, or ecosystems.
- USAID Climate Risk Screening and Management Tool: this tool is guiding users through the process of assessing and addressing climate-related risks.
- The Climate, Environment and Disaster Risk Guidance (CEDRIG) developed by the Swiss Agency for Development and Cooperation, is a tool designed to systematically integrate climate, environment and disaster risk reduction (DRR) into development cooperation and humanitarian aid in order to enhance the overall resilience of systems and communities

Climate change and migration:

- Environmental Change and Human Mobility: Reducing Vulnerability & Increasing Resilience is a policy brief by the KNOWMAD Thematic Working Group on Environmental Change and Migration summarizes major findings and policy implications of papers commissioned to examine vulnerability and resilience, with particular focus on developing countries.
- The IDMC's Global Internal Displacement Database is an interactive platform designed for policy makers, NGOs, researchers, journalists and the general public for data and analysis on internal displacement.
- IOM's Environmental Migration Portal / Country Profiles
- World Bank's Groundswell: Preparing for Internal Climate Migration Report projects the internal migration trends due to slow-onset impacts of climate change in three regions – Sub-Saharan Africa, South Asia, and Latin America.