

CLIMATE INVESTMENT READINESS INDEX (CIRI) - A Tool to Assess Investment Climate for Climate Investments

Background

Mitigating climate-change while addressing development needs will involve massive scale-up of renewable energy as well as investments in energy-efficiency ('climate investments').¹ While the private sector will be the main driver for putting economies-both developed as well as developing-onto a low-carbon growth trajectory, public policy, at least in the near to medium term will be the key driver for private investments and responsible for creating a conducive 'investment climate' for climate investments. The ingredients that combine to form the right enabling environment for climate investments are diverse and quite often depend on complex factors and country-specific circumstances. They may comprise at a broader level macro-economic determinants such as a functioning bureaucracy and banking system to a narrower set of determinants that address barriers specific to clean energy and energy efficiency investments for instance, renewable energy targets, preferential power tariffs, tax and other fiscal incentives. Similarly for greater diffusion of energy-efficient products- electricity prices matter, but so will specific policies, regulations and incentives (PRIs) designed to promote greater uptake of energy-efficient products. These include, for instance energy-efficiency targets, mandatory and voluntary appliance labeling schemes and producer and consumer-oriented incentives.

While the exact policy mix and design will depend on country-specific circumstances, the presence of key sector-specific policies could send the right 'signals' to the private sector about the readiness of countries to create an 'enabling' environment to attract climate investments. These PRIs provide not only legal certainty to investors, but also make investments in renewable energy and energy efficiency worthwhile by lowering investment-related costs and risks. They help 'level' the playing field in an environment where market realities, support for fossil-fuels and the high costs of renewable energy technologies largely favors fossil-fuel deployment and consequent 'lock-in' of carbon intensive growth patterns.

Climate Investment Readiness Index (CIRI) is a tool for promoting sustainable investment climates for climate -friendly investments. The objective of the tool is two-fold: (i) A systematic and objective evaluation of the enabling environment, particularly in developing countries for supporting private sector investment in climate mitigation technologies; and (ii) Enabling an inter-country comparison of investment climates for climate investments by systematically capturing and assessing policies that multitude of incentives and barriers - ranging from technical, to financial, to markets, to regulatory barriers – from a private sector perspective into some sort of a common, normalized and composite index (or sub-indices) which could make it easy to objectively compare countries and markets in terms of their preparedness and maturity to move into the arena of climate-friendly investments.

¹ International Energy Agency (IEA) forecasts that US\$13.5 trillion (or about \$500 billion annually) in clean energy investments will be needed between 2010 and 2035 and mostly in developing countries. Source: *World Energy Outlook 2010*.

Approach and Methodology

Clean energy investors look for specific policies, regulations and incentives such as renewable energy targets, reliable power purchase agreements that offer attractive tariffs, access to grids, tax and other fiscal incentives based on installed capacity, capital equipment or amount of power generated. Similarly for greater diffusion of energy-efficient products- electricity prices matter, but so will specific policies, regulations and incentives designed to promote greater uptake of energy-efficient products. These range from economy-wide or sector-specific energy-efficiency targets, mandatory and voluntary appliance labeling schemes together with producer and consumer-oriented subsidies and fiscal incentives. ‘Green’ building codes and incentives for ‘green’ construction can also encourage greater energy efficiency in the design, construction and deployment of low-carbon lighting, heating and cooling appliances within buildings-a sector that accounts for almost a third of energy consumption globally and an equally important source of CO2 emissions according to the IEA. For both renewable energy as well as energy-efficiency, the existence of an institutional framework that effectively administers and implements these PRIs contributes to a meaningful and credible enabling environment.

A recent report by the Corporate Investment Climate Department of the International Finance Corporation (IFC) while underscoring the crucial role of private investment in achieving goal of sustainable energy development, suggests that the most appropriate mechanisms for attracting private investment should be based on a country’s resources, features of its electricity market and related institutions, and investment promotion policies. According to the report such an approach minimizes distortions in the power sector and the overall economy and encourages competition and efficiency.

The report also categorizes policy instruments to promote renewable energy into three groups: (i) interventions that ease entry through streamlined regulations; (ii) regulations that reduce revenue risk and facilitate investor operations; and (iii) fiscal incentives that attract investment. Figure 1 below illustrates these categories with examples of policies and measures under each category.

Figure 1: Components of an Enabling Business Environment for Renewable Energy Investments

Facilitating entry	Reducing revenue risks and facilitating operations	Providing fiscal incentives to encourage investment
<p data-bbox="181 1541 512 1653">Provisions that allow for independent private providers</p> <p data-bbox="181 1675 512 1742">Coordinated, streamlined licensing and permitting</p> <p data-bbox="181 1776 512 1843"><i>Clear, transparent rules for grid access (on-grid projects)</i></p>	<p data-bbox="569 1541 946 1574"><i>Price guarantees (feed-in tariffs)</i></p> <p data-bbox="569 1608 946 1641">Quantity guarantees</p> <p data-bbox="569 1675 946 1709">Power purchase agreements</p> <p data-bbox="569 1731 946 1765"><i>Other regulatory measures</i></p>	<p data-bbox="981 1541 1286 1574">Tax incentives</p> <p data-bbox="981 1608 1382 1675"><i>Nontax incentives (such as R&D, rebates, and grants)</i></p> <p data-bbox="981 1697 1315 1731">Disincentives for fossil fuels</p>

Source: The World Bank/IFC, 2011, *Improving the Investment Climate for Renewable Energy: A Guide for Practitioners of Investment Climate Reform*.

While diagnostic country-specific studies could help in identifying the full range of policies and potential actions required to attract climate-friendly investments, investors would, at least initially, look for a set of pre-conditions or basic parameters that would signal whether a country was serious in terms of its intent to attract such investments. CIRI is a tool that would enable investors to quickly ascertain the presence of certain basic PRIs in a country as well as the enabling environment to assess country readiness to attract private investments in the clean energy space.

Countries that have attracted the most investment in low-carbon technologies, renewable energy and energy efficiency have generally been those that have provided long-term certainty around the structure and incentives associated with these investments.² Conversely, many countries have struggled to attract investment because they do not have appropriate policies in place, because the policies are poorly implemented or because the policies do not provide sufficient incentives for investment.³

Thus in addition to tracking PRIs, their implementation aspects and their *attractiveness* is very important. By gathering and analyzing comprehensive quantitative data to compare the enabling environments across economies and over time, CIRI can encourage countries to compete towards more efficient regulation; offers measurable benchmarks for reform and serve as a resource for governments, donor agencies, private sector researchers and others interested in the business climate of climate-friendly investments.

CIRI will also thus facilitate the process to assess progress made by countries in moving towards a low-energy/carbon growth path and inform needed assistance/cooperative efforts. It will be a valuable tool not only for private sector investors but also policy makers as well as the donor community in among others, understanding what PRIs may or may not work in differing country contexts, to improve transparency, address 'weak-spots', spur much-needed reform and better targeting of external assistance.

Progress so far and way forward

Development of CIRI was initially piloted as a part of a regional study, "Assessing Investment Climate for Climate Investment in South Asia." This study outlined some of the main findings from a regulatory survey of countries in the South Asian region-India, Pakistan, Bangladesh, Nepal, Sri Lanka and the Maldives and subsequently CIRI scores were constructed for South Asian countries- for the presence of important enabling policies, regulations and incentives as well as institutions thereby providing a 'snapshot' picture of how these countries fare in terms of basic preconditions necessary for attracting climate-friendly investments. It also compared scores obtained by South Asian countries with a number of other countries-both developed as well as developing to get an assessment of how the region fares overall in terms of a conducive policy environment for climate investments relative to other countries.

² 2011 Global Investor Statement on Climate Change.

<http://www.unepfi.org/fileadmin/documents/2011InvestorStatementClimateChange.pdf>

³ According to a recent World Bank study, in spite of a reasonably stable policy regime, a large number of renewable energy projects in India are held up because of the large number of clearances that are required during the development cycle (World Bank, 2010: Unleashing the Potential of Renewable Energy in India).

While benchmarking countries on the basis of existence of PRIs was a good starting point, it is now proposed that CIRI methodology be refined and extended and made a truly global index—first of its kind--capturing investment friendliness of countries towards clean energy investments covering a number of countries. It is proposed that the “enabling environment” for clean energy investments will be captured through standard questionnaires that will be administered a rolling basis initially in a number of countries.⁴ The CIRI index thus created will tell us how attractive the private sector perceives the various PRIs available in a given country on paper as well as the effectiveness of implementation. Other complementary outputs could include as per demand: (i) country specific investment climate type studies; (ii) regional studies; and (iii) sector studies (e.g. solar, wind, biomass etc.). Country coverage and sector coverage could be revisited annually. It is also proposed that a web-based “Clean Energy Platform” be created that captures, in addition to country specific policies, regulations and incentives, and private perception the actual clean energy investment flows (available from Bloomberg) and the general “Doing Business” index.

A range of stakeholders will be engaged through this exercise. The private sector will be engaged actively (including business associations/chambers of commerce) which have been successful in developing and promoting locally viable renewable energy investments to assess the potential/opportunities for generating additional venture capital and/or internationally-motivated private-sector engagement to the promotion of renewable technologies. The team will also consult other experts in RE and EE along with an extensive mix of private-sector respondents including large firms and SMEs. Other relevant players included would be equipment manufacturers, energy service companies, manufacturers of EE material such as light bulbs and HVAC.

At the national level key players will include relevant government agencies including Ministries of Energy/Renewable Energy, Environment and Finance, electricity generation and distribution utilities and line agencies responsible for promoting energy efficiency. Going forward, it is important to ensure that the CIRI index:

- (i) Has a wide recognition and appropriate buy-in at country level;
- (ii) Uses transparent and robust methodologies;
- (iii) Incorporates the needs of the key investors;
- (iv) Focuses on key areas for investors e.g. infrastructure or innovation rather than trying to be all encompassing and too ambitious at early stages;
- (v) Builds on and not duplicate existing investment climate/ doing business work;
- (vi) Be continuing and sustainable i.e. updated each year;
- (vii) Be supported by key development partners/organizations.

⁴ Methodology will be designed along the lines of “Doing Business” model where standard questionnaires are administered through local experts, including lawyers, business consultants, accountants, freight forwarders, government officials and other professionals routinely administering or advising on legal and regulatory requirements.

Institutional Arrangements

The CIRI team will be housed in Global Indicators & Analysis Group of Finance and Private Sector Vice Presidency of the World Bank Group. The team will closely interact with the World Bank Group's Investment Climate Assessment and Doing Business teams, various regional division experts as well as the Energy Sector Management Assistance Program (ESMAP) teams to avoid any duplication of efforts ensure coherence as well as exploit mutual synergies. The team will be guided by a group of senior technical experts from both within and outside the Bank.

The World Bank's Investment Climate Assessments (ICAs), Investing Across Borders (IAB) and Doing Business (DB) initiatives already evaluate and compare the general business climate in a country (that also impacts investments in clean energy sectors). IAB for instance has already developed scores based on whether full-equity ownership is available to foreign investors in electricity generation, transmission and distribution including in renewable power sectors of hydro, solar, wind and biomass. CIRI will take these valuable initiatives in a new direction by looking at sector-specific determinants. Like the ICA and IAB it will also examine objective laws and regulations (in this case those which are relevant to clean electricity generation). Unlike IAB (that focuses on foreign direct investment) CIRI will target both foreign as well as domestic investors. While the cross-cutting variables measured by Doing Business (such as the number of days required to register a business) are important for clean energy investors, CIRI (unlike Doing Business) will not be limited to firms of any particular size or by geographical location within a country.

The International Finance Corporation (IFC) is also very actively involved in providing investment and advisory services to firms involved in clean energy generation and clean technologies. The IFC's Investment Climate business line's interventions are designed to complement the work of other parts of the World Bank and IFC and focuses on measures that foster competition, reduce barriers to private sector entry and operation, and develop appropriate and affordable fiscal and non-fiscal incentives to promote investments in renewable energy.

CIRI findings will be of great value to IFC teams in getting a better insight into the barriers to investment that the private sector faces in various countries. This will immensely help their advisory service activities as well as enable a strategic channeling of their lending activities. The team expects to work closely with relevant experts at the IFC and also develop collaborative work programs that will draw on expertise and networks within the Bank and IFC and exploit resulting synergies.

CIRI will seek to be a 'living' and constantly evolving (and improving) tool. It will seek to differentiate itself from similar initiatives in evaluating countries horizontally across specific policy indicators within sectors (wherever possible) and will score countries based on the presence of key PRIs as well as the perceptions of the key private sector players (in terms of global and country market presence) in clean energy and energy-efficient products rather than arbitrarily constructed numbers and weights. Based on feedback from experts and target audiences, the indices can over time ensure that the policy variable elements it captures and measures are the ones that 'truly matter' taking into account national circumstances and priorities.

Expected Outcomes and Impact

The success of every activity lies in the outcomes and long-term impact that it has. *CIRI: Assessing Investment Climates for Climate Investments* will seek to enable the following outcomes:

- *Transparency*: It will provide factual information about what clean-energy laws and regulations say and how they are implemented.
- *Identification of ‘weak’ spots* in a country’s business climate for clean energy investments by clearly identifying areas of policy implementation where a country needs to improve.
- *Reform*: An index-based benchmarking of countries based on the perception of their investment climates amongst the private sector will be useful in spurring reform in these countries.
- *Better evaluation and understanding* of what clean-energy and energy-efficiency promotion policies may or may not work in different country-contexts both by governments as well as donor agencies.
- *Better targeting of external assistance*: The project results will be useful for tailoring country-specific technical assistance to improve investment climate in the clean-energy and energy-efficiency sectors both from various departments within the Bank group as well as other aid-agencies. Further it is also expected that the results will influence the nature and direction of assistance that is channeled under the auspices of the UNFCCC through the Green Climate Fund and Technology Mechanism.
- *Independent Verification*: The results could also be a useful way to independently verify National Appropriate Mitigation Action (NAMAs) that are related to clean-energy

In the long run, it is expected that the wider diffusion of the findings will result in greater inflows of private-sector investments into clean-energy sectors as a result of reform driven by CIRI findings. Greater coherence and synergy between public financing (domestic governments, World Bank and external aid agencies) and private-sector needs is also expected to result in better use of public funds to leverage clean energy and energy-efficiency investments.

Measuring some of these impacts will also be important to assess the overall effectiveness of the approach. For instance it may be interesting to correlate the trends in actual private-sector investment flows into a country with both for existence of policy, regulation and incentives (PRI) as well as based on private-sector perception surveys (PSPS).

One could think of this leading to a “**Clean Energy Platform**” where one will be able to track periodically the evolving PRI regime in countries, private perception, actual level of investments in clean energy and energy efficiency and broader macro variables of doing business from “Doing Business” or “Investment Across Borders” database.

This is envisaged as a multi-donor initiative. USAID has committed over a five year period.

Budget

Proposed Annual Budget¹

Output	Costs (US\$)
Framework development	500,000
Survey design	500,000
Data collection and analysis in candidate countries (e.g. 80 countries)	1,800,000
Publication/Dissemination	200,000
Total	3,000,000

¹ It is anticipated that the costs for framework development and survey design are upfront costs and need not be incurred on an annual basis. There will be some costs, however, for annual updates of the survey.

Timetable and milestones

Formal CIRI launch	January 2012
Framework development	January-June 2012
Identification of partners and consultants and launch workshops	February-June 2012
Launch of Questionnaires	June-December 2012
Side Event in COP 18	December 2012
Data analysis and collation	January-June 2013
Stakeholder consultations	June-August 2013
Release of CIRI index	September 2013
Dissemination Workshops	September-December 2013