Guiding climate compatible development

User-orientated analysis of planning tools and methodologies

Appendices to analytical report

Final report

By: Ecofys and IDS

Date: 20 September 2011

This analytical report and an associated web-based user guide (www.climateplanning.org) has been prepared in response to demand from a range of practitioners and government officials in developing countries, including demand expressed through members of the Coordinated Low Emissions Assistance Network (CLEAN).

As a member of CLEAN, the Climate and Development Knowledge Network funded and commissioned this work to help guide decision makers in developing countries to select appropriate tools and methodologies to support climate compatible development.

This report was produced by Ecofys and IDS
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Glossary

ACVC	Adapting to Climate Variability and Change
AOGCM	Atmosphere-Ocean General Circulation Model
CCAIRR	Climate Change Adaptation through Integrated Risk Reduction
CEEESA	Center for Energy, Environmental, and Economic Systems Analysis
CIFF	Children's Investment Fund Foundation
CPFD	Climate Proofing for Development
AR4	Fourth Assessment Report
FARA	Forum for Agricultural Research in Africa
GCM	General Circulation Models
GGGI	Global Green Growth Institute
GGP	Green Growth Planning
GTZ (Now GiZ)	Gesellschaft für Technische Zusammenarbeit
GVEP	Global Village Energy Partnership
ICCASL	Integrating Climate Change Adaptation into Secure Livelihoods
ICPAC	IGAD Climate Prediction and Applications Centre
IGCI	International Global Change Institute
IISD	International Institute for Sustainable Development
LECRDS	Low Emission Climate Resilient Development Strategy
NEMA	National Environment Management Authority (Kenya)
NWP	Nairobi Work Programme
OpenEI	Open Energy Information
ORCHID	Opportunities and Risks for Climate Change and Disasters
PWC	PricewaterhouseCoopers
REDD	Reducing Emissions from Deforestation and Degradation
RETs	Renewable Energy Technologies
SBSTA	Scientific Body for Scientific and Technological Advice
USAID	United States Agency for International Development
VCA	Vulnerability and Capacity Assessment
WRI	World Resources Institute

Appendix A – Steering Group members and roles

Organisation	Invited individual	Contact information
ESMAP World Bank	Jane Ebinger and Sameer Akbar	Energy Sector Management Assistence Program http://www.esmap.org/esmap/
OECD Environment Directorate	Shannon Wang	Organisation for Economic Co-operation and Development http://www.oecd.org/department/0,3355,en_2649_33713_1_1_1_1_1,00.html
UNEP	Jyotsna Puri	United Nations Environmental Programme http://www.unep.org/
UNEP Risø Centre	Anne Olhoff	United Nations Environmental Programme Risø Centre http://uneprisoe.org/
NREL (Strategic Energy Analysis Center)	Sadie Cox	National Renewable Energy Laboratory http://www.nrel.gov/
PWC	Dan Hamza-Goodacre	PricewaterhouseCoopers http://www.pwc.com/
CIFF / MAPS	Farhana Yamin	Children's Investment Fund Foundation http://ciff.org/ / Mitigation Action Plans and Scenarios
Practical Action	Steven Hunt	http://practicalaction.org/
ClimateWorks	Charles McElwee	http://www.climateworks.org/
UNECA - ACPC	Youba Sokona	United Nations Economic Commission for Africa - African Climate Policy Centre (previously of the Sahara and Sahel Observatory) http://www.uneca.org/acpc/index.php?Page=home
IISD	Anne Hammill	International Institute for Sustainable Development http://www.iisd.org/
WRI	Heather McGray	World Resource Institute http://www.wri.org/

Steering group's role:

The Steering Group helped to guide the strategic direction and conceptual development of the initiative by providing advisory services to CDKN, Ecofys and IDS to undertake a user-oriented comparative analysis of climate compatible development methodologies and tools. This included:

Guidance and direction

Methodology development:

- Advice on the definition of the scope of the project and key user groups from the project outset,
- Suggestion of additional relevant information, methodologies and tools which have not been identified by the project team,
- Advice on the selection, inclusion and exclusion criteria to apply to the long list of methodologies and tools to be included in the analysis and from which to make the comparative analysis.

Strategy and analysis:

- Advice on the strategic positioning of the project and its outputs, in order to maximise participation from owners of different methodologies and tools, and maximise benefit for end users. This included advice on avoiding bias and ensuring impartiality in the comparative analysis, and in communicating this to participants.

Support for access to information and sharing knowledge:

- Access to their own contacts for information on tools and methodologies as well as individuals to contact for in-country interviews; advice on how to engage participants and how to bring different organisations and companies on board to participate in the study and share information required for the analysis.
- Insights from their own experiences of working with developing country decision-makers and target users of the user-orientated outputs of this project, in order to shape the analysis and the look and feel of the final deliverables.
- Connections back to other CLEAN activities and other ongoing initiatives that members are aware of, to ensure the outputs make best use of available information and integrate as well as possible with other activities.
- Insights from members' knowledge of the bigger picture, including international negotiations, initiatives and latest thinking, and changes in this during the duration of this project, to support positioning and benefits realisation.
- Advice on knowledge-sharing of the outputs and priorities for the user-guide.

Review of drafts

- Advice on quality assurance and peer review of the comparative analysis.
- Advice on further knowledge products and dissemination.

Participation involved:

- Regular monthly/bi-monthly Steering Group virtual meetings via web based conference calling during the duration of the project.
- Email and telephone discussions with the project team in between meetings.

Appendix B - Methodological steps

In this appendix we further elaborate on the 3-step approach characterised briefly in Section 1.3.
Steps in the project included:
Step 1 Inventory & exclusion of T&M and user needs
Step 2 Organisation of methodologies and tools
Step 3 Criteria development and in-depth analysis

B.1 Step 1: Inventory and exclusion T&M and user needs

In Step 1, the team made an inventory of relevant tools and methodologies, following the approach as illustrated in
Figure 1, below.

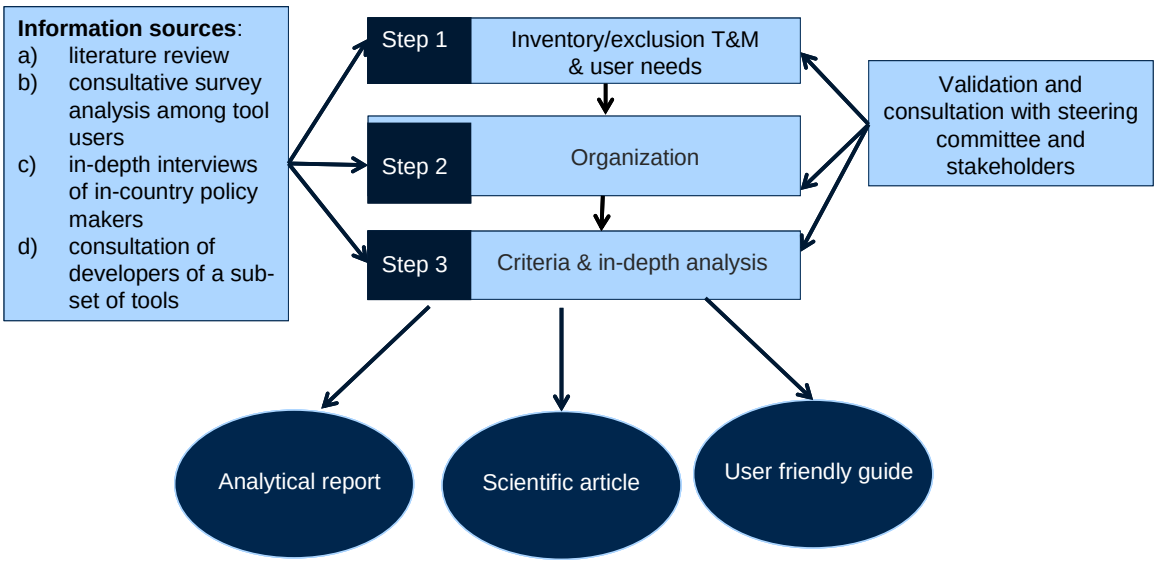


Figure 1: Approach undertaken in Step 1: Inventory and exclusion

In consultation with CDKN and the steering group, the project team agreed upon the three user groups targeted for this analysis and the user-oriented tool that would be developed from this analysis (see also Appendix B-USER PROFILES):

a. *In-country policy makers* and civil servants - especially those who are working closely with Ministers (e.g. Directors and Chief Directors of relevant Ministries)
b. *Technical experts* working with ministries. These could include other civil servants, consultants or advisors from national institutions (academic, research, NGO and private sectors)
c. *In-country donors* who provide advice to ministers, policy makers and civil servants (e.g. DFID country advisors)

The team narrowed the scope of tools and methodologies to focus on those that support decision makers at the national level to plan to deliver CCD. Sources of information for doing this included:

1. A literature review: this provided the basis for a database of tools and methodologies to be considered. The starting point for this review was existing survey studies on tools and methodologies in the fields of adaptation and mitigation (see previous sections).
2. A survey of the user groups identified: this was sent out through various mitigation and adaptation networks (See Appendix G for survey questions).
3. Six telephone interviews: with in-country policy makers to gain further demand-led insight into tools used and the country contexts. Throughout the process, the project team regularly consulted with the project's steering group and the larger CCD community to ensure contact was made where there were gaps in responses, expert insights included, country contexts considered, etc.

In order to filter out some tools which may not be appropriate for this study, the team applied a set of inventory criteria to focus on those tools that are particularly relevant to the target user groups (Table 1).

Table 1: Inventory criteria

Criteria	Description / Rationale
Development focus	The T&M has been, or is currently, applied in a developing country
Climate focus	The T&M primarily focuses on climate change (adaptation or mitigation); this excluded tools in the broader field of development without any link to adaptation or mitigation.
National scope	The T&M supports national level decision making.

Even after applying the inventory criteria, given the broad scope of the project, the database contained over 100 different tools and methodologies. While this provides a very good overview of the landscape of tools available, such broadness is not practical in terms of undertaking an in-depth, user-oriented analysis.

Therefore the team applied a second filter of exclusion criteria to sharpen the focus of tools and methodologies; the rationale was to ensure a clear focus on those tools which are most relevant to the identified user groups.

Table 2: Exclusion criteria

Criteria	Description / Rationale
Survey	include T&M that were recommended by users (not an exclusion criteria)
Usage/Flexibility	include T&M that have been widely used in at least two developing countries and can be adjusted to different local settings
Development focused	include T&M which are geared towards developing countries / development issues
Internal usage only	exclude tools that are intended for programme staff rather than a broader user ship
State of the art	Include tools that are currently in use (i.e. been applied in the last three years)
Tangibility	Exclude T&M that cannot be either applied by the user group themselves or an institution associated with the approach

B.2 Step 2: Organisation

After inventory and exclusion the database contained a wide variety of tools and methodologies for the analysis. This list needed to be organised to enable the in-depth analysis. All tools and methodologies were labelled according to:

a. a *typology* related to their key objective
b. the stage in the *policy cycle* they would apply to
c. one of 12 *categories* of mitigation or adaptation tools

These classifications are described in more detail below.

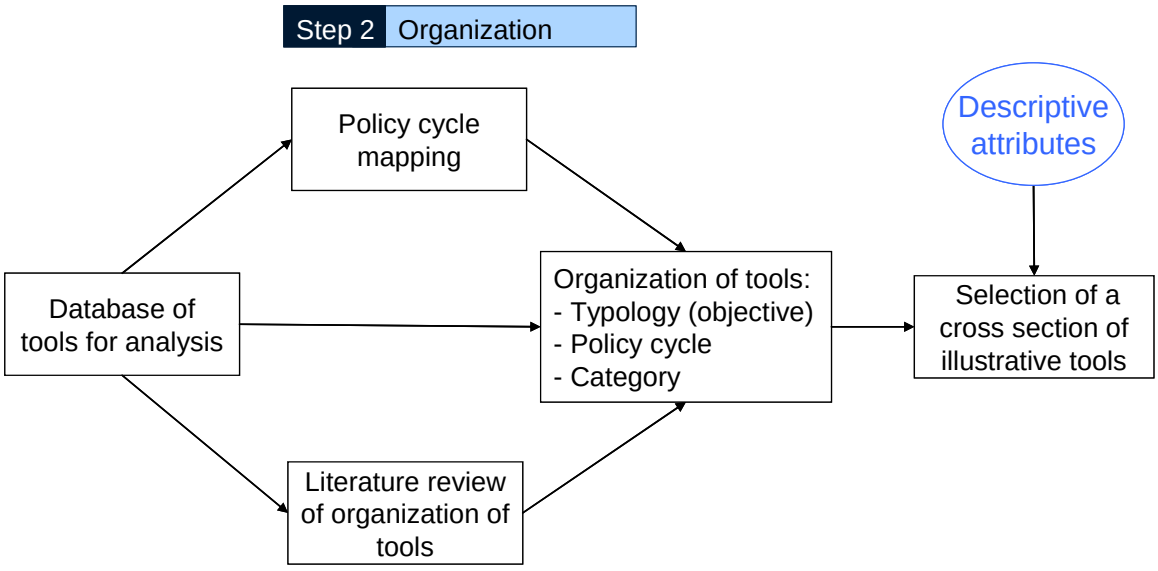


Figure 2: Approach in Step 2: Organisation of tools and methodologies

a. Typology of key objective

For this we used a typology used by e.g. Hammill and Tanner (2011), who distinguished tools and methodologies for:

- *Data and information generation*: generating new information
- *Knowledge sharing*: information resources, such as websites and networks.
- *Process guidance*: helping planners (actors) to go through various steps and to complete these steps.

b. Stages in policy cycle

The team then classified the tools and methodologies by identifying what stages of the policy cycle are covered by the tools. The following definition of the policy cycle was developed in an iterative process by the project team as new methodologies were added to the list (compare to earlier screening studies Clapp et al. 2010; see Figure 3)

1. *Awareness raising*
2. *Identification of mitigation and adaptation options*
3. *Identification of policy proposals* (includes common standards, policies as incentives)
4. *Policy decision* (which options from above should be taken–includes participatory processes to make those decisions)
5. *Implementation of policies* (technical options are included in policy decisions, make distinctions where adaptation and mitigation options differ here)
6. *Evaluation of policies*

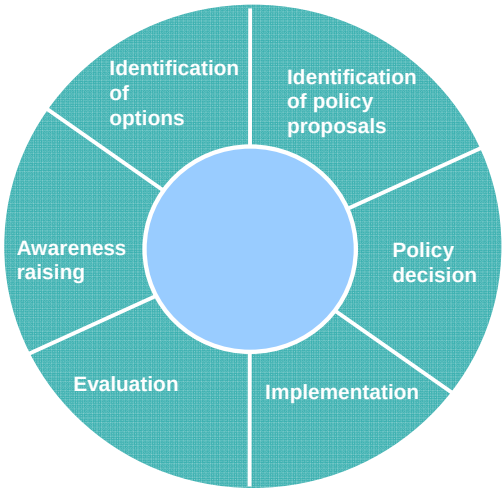


Figure 3: Policy cycle applied in this study

c. Categorisation

Finally, the team grouped the tools into categories, using widely recognised groupings in the adaptation and mitigation communities (see section 2):

- Assessment of mitigation potential / resource potential
- GHG emissions and energy models
- Technology roadmaps
- Technology Needs Assessments (TNAs) – Mitigation
- Low carbon development / technology platforms or databases
- Low emission development strategies (LEDS)
- Climate policy database
- Policy evaluation
- Vulnerability and capacity assessment
- Adaptation decision making guidance tools
- Adaptation data and information provision tools
- Adaptation knowledge-sharing tools

After these classification exercises the team defined a limited set of categories to consider in detail in the in-depth analysis. Within each of these categories the team selected approximately 5-6 short-listed tools which cover a cross-section of the landscape within each selected category, according to the following descriptive attributes:

- Key area covered (adaptation, mitigation, development)
- Linkages to other areas
- Costs of access, training and implementation
- Training requirements and duration
- Accessibility in developing countries

B.3 Step 3: Criteria development and in-depth analysis

The end point of Step 2 was a limited set of categories, each with a cross-section of illustrative tools. This was the starting point for an in-depth analysis using descriptive criteria. (compare Section 3 and 4)

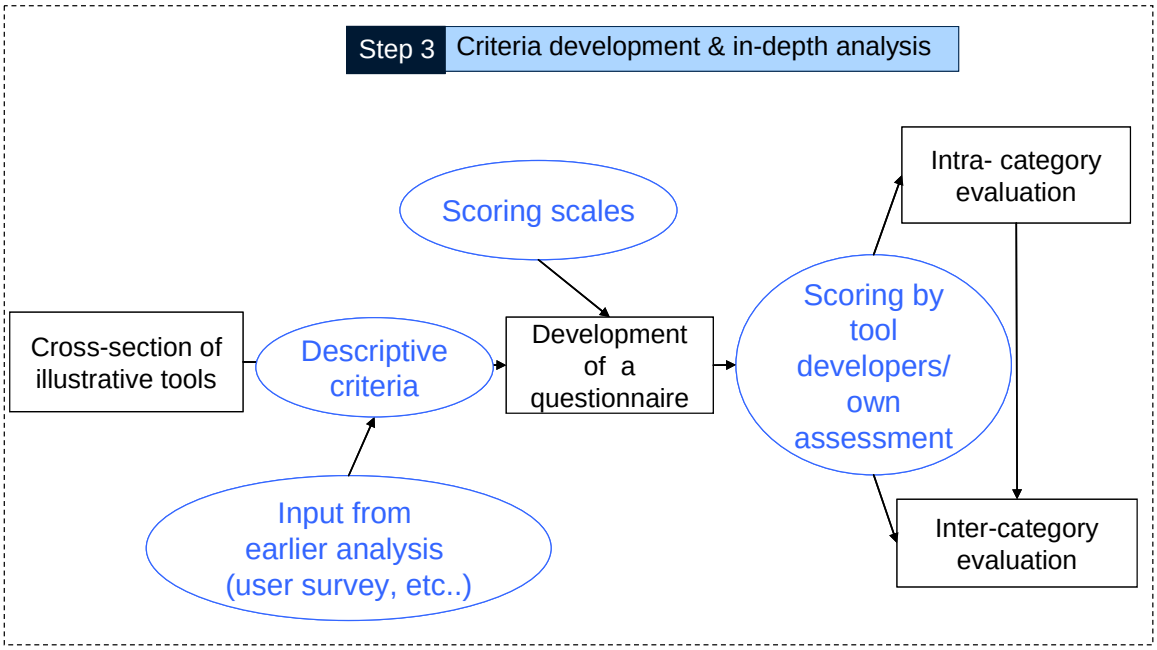


Figure 4: Approach in Step 3: Criteria development and in-depth analysis

For the in-depth analysis the project team developed a set of descriptive criteria for evaluation (see Table 3), to be scored with a mark between 0 and 3. This information was integrated into a questionnaire that the project team sent out to tool/methodology developer with the aim to receive their assessment of the tool. In parallel the team assessed each tool separately, using the same questionnaire. In the end we compared the two analyses and, where necessary, adjusted the score of the tool developer ranking. This was done to ensure independence of the analysis of the tools.

It is important to note here that the aim of the scoring was to give a weighting of the relative focus on different areas. This differs from ranking in that there is no implicit or explicit good or bad end of the scoring range.

Table 3: Descriptive criteria for the in-depth analysis (Section 3 and 4)

Grouped indicator	Descriptive criteria used for evaluation	Source for information (primary)	Source for information (secondary)
Area of focus (ad/mit/dev)	key areas	tool assessment	
	linkage to other key areas	tool assessment	
Tool design /	Tools used to date	user survey	in-country interview
	Most useful tools	user survey	in-country interview
	Least useful tools	user survey	
	Geographical usage	tool assessment	
	Coverage/ policy cycle	tool assessment	
	Scope (regional, national, etc.)	tool assessment	
	Stakeholder involvement	tool assessment	
Access / usability	Cost	tool assessment	
	Training Requirements	tool assessment	user survey
	Accessibility (formats)	tool assessment	user survey
	Audience	tool assessment	
	Implementation requirements (independently or with another organisation)	tool assessment	
	Case Study – guidance material	tool assessment	
	Languages available	tool assessment	

The responses to the questionnaire were then used for analysing tools/methodologies and categories in two steps:

1. an ***intra-category analysis*** whereby we compare illustrative tools and methodologies within a certain category (Section 3).
2. an ***inter-category analysis,*** which builds on step 1 and compares the categories with each other (Section 4).

This two-step process was chosen, as the depth of analysis that can be performed in the first step differs largely from that in the second step.

Intra-category analysis (Section 3)
This analysis was broadly organised around three main indicators:

1. Area of focus – How far do the tools cover adaptation, mitigation and development?
2. Tool design / extent – What are the design characteristics of the tools within the category? This reflects the tool developer (supplier) perspective.
3. Access / usability – How accessible, user friendly are the tools within the category? This reflects on the user perspective.

Inter-category comparison (Section 4)
The inter-category comparison is performed in the same way as the intra-category comparison, only with the difference that we compare categories instead of specific tools. It is a continuation of the intra-category analysis and therefore is based on the results of the latter. We thereby performed three different comparisons:

1. Comparison of mitigation tool categories – drawing on the mitigation intra-category analysis, we compare the mitigation categories
2. Comparison of adaptation tool categories – drawing on the adaptation intra-category analysis, we compare the mitigation categories
3. Comparison across the whole landscape – after we have gained a comprehensive insight for tools in the adaptation and mitigation realm, we draw some conclusions with respect to their compatibility to climate compatible development.

In all cases the conclusions we draw depend on the illustrative tools selected for detailed analysis within the categories. Therefore we will refrain from making general conclusions if we feel we did not sufficiently capture all tools within categories.

Table 4: Overview of data sources used in the report

Instrument	Role	Type of organisation	Dates	Dissemination/ method	Responses
Survey	Tool users	Government, Academic, NGOs, bi- and multilateral donors	Mar 2011	Online survey	82
Survey	Tool developers	NGOs, bi- and multilateral donors, UN agencies	Jun 2011	Online survey	30
Interviews	In-country experts and policymakers	Government, intergovernmental and international	May-Jun 2011	Telephone interview	6
Interview	Steering group members	Academic, NGOs, bi- and multilateral donors	Feb-May 2011	Regular conference calls, telephone interview	14 SG members

Appendix C – User Profiles

Technical experts working with ministers, e.g. on national climate change committees, working across ministries. These could include other civil servants, consultants or advisors from national institutions.

Persona data

Technical know-how: High degree of technical competence. First-hand experience in using select number of tools. Likely to have had in-depth training on some. In some cases, may be coming from development or other background and be new to the climate change arena (i.e. limited technical know-how on science-related tools but strong on development-oriented tools).

Age range: 30-55

Gender distribution: 70% Men / 30% Women

Location (geographical and post): Southern countries, primarily based in larger cities but some may be based (at least part-time) in field offices. May be sitting in government ministries, but may also be outside of government in NGOs, consultancies, or universities and brought in on consultancy basis to help with decision making processes (e.g. national strategies, etc.).

Workflow: Technical experts use tools as a part of their daily jobs either within government or in related sectors (NGOs, academia, etc.). They are likely to be brought on to specific committees or projects to provide strategic advice and specialist guidance.
[…] May be asked to apply their current knowledge in new contexts as donor/country/international priorities evolve (e.g. REDD or NAMAs).

Usage pattern: Will use intermittently to select appropriate tools/methods for application in context where they may not have a high degree of experience or expertise. May also use it to compare their current practices with new emerging approaches with the aim of updating their practice.

Social patterns: They are likely to work in networked communities of practice (of varying sizes and "quality" depending on national circumstances and priorities) with whom they regularly exchange on approaches, research, projects etc. They are likely to be given direction from above on the approaches that they should be pursuing for a given project or activity, but may also be called upon to provide similar types of recommendations that this user guide intends to help provide.

Comparator products/services: Networks of contacts including country advisers, NGOs and other national/international expert groups (e.g. expert workshops, working groups, etc.), websites and searches.

Common gripes: Lack of sufficient financial resources, training, licensing, (resource support), data, out of date (online) tools.

Wish lists: More financial resources, open source licensing, updated data, training, ease of use.

Policy-makers and civil servants - especially those who are working closely with Ministers (e.g. Directors and Chief Directors of relevant Ministries)

Persona data

Technical know-how: Wide-ranging due to the breadth of this category, and to the different pathways through which senior civil servants may reach their posts. Generally would have a high level of education, but may not be in a closely-related field in all cases (e.g. Ayub Macharia, Director of NEMA in Kenya has a PhD in Education).

Age range: 40-65

Gender distribution: 75% men/ 25% women

Location (geographical and post): Primarily based in national capitals in the South. Posts would be in government ministries.

Demographics: Generally a small number per ministry.

Workflow: Would typically receive direction from Ministers and be charged with implementation of programming in consultation with technical advisors (see above) and department staff, and perhaps in consultation with Donor country office advisers.

Usage pattern: Depending on the degree of engagement of the civil servant, may use intermittently to select appropriate tools/methods for application in context where they may not have a high degree of experience or expertise. May also use it to collectively review methodology options with actors described in the workflow section above. May use it to compare recommended options provided by advisers with other possible options.

Social patterns: May draw on communities of practice with whom they regularly exchange on approaches, programming, etc. May participate in professional exchanges and training with international organisations, donors, etc. Likely to interface directly with ministers on key strategic programming and planning decisions.

Comparator products/services: Advice from technical advisors and donor country advisors is likely to have a strong influence on selection of tools and methodologies. Exposure to tools and approaches at workshops and training events will have some influence. May use web searches and relevant websites (e.g. weadapt.org) to identify tools and methods.

Common gripes: Lack of sufficient financial resources, training, licensing, support, accessibility issues, inappropriateness of tools to national contexts.

Wish lists: Accessibility, ease of use, support, training.

In-country donors who provide advice to ministers, policy makers and civil servants (e.g. DFID country advisors)

Persona data

Technical know-how: High degree of technical competence. First-hand experience in using select number of methods and tools. Likely to have had in-depth training on many. Will have a high level of education in a closely-related field.

Age range: 35-50

Gender distribution: 50% men/ 50% women

Location (geographical and post): Primarily based in national capitals in the south.

Demographics: Generally one advisor on climate change in each country.

Workflow: Would typically receive direction from the main country office and their respective country heads. Be in charge with guiding and developing donor funded related projects in consultation with civil servants, policy makers and technical advisors (see above) and department staff.

Usage pattern: Will regularly select and use appropriate tools/methods especially as they may need to recommend appropriate options for government ministries and other partners. May also use it to collectively review methodology options with actors described in the workflow section above.

Social patterns: Draw on donor affiliated and other communities of practice with whom they regularly exchange on approaches, programming, etc. Will participate in professional exchanges and training with international organisations, other donor agencies, etc. Likely to interface directly with high level policy makers and civil servants on key strategic programming and planning decisions.

Comparator products/services: Information/advice from other donor country advisors is likely to have a strong influence on selection of tools and methodologies. Exposure to tools and approaches at donor-related workshops and training events will have some influence.

Common gripes: Lack of sufficient time, additional human resources and support, inappropriateness of tools to national contexts, more (peer) support needed.

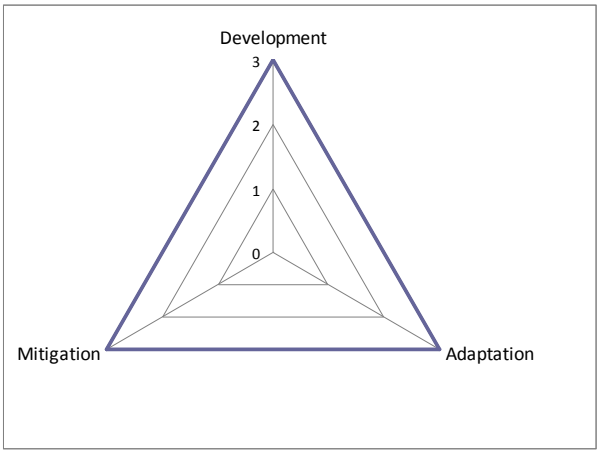
Wish lists: More time, ease of use, support.

Appendix D – Fiches Adaptation

D.1 ClimateWizard

Name of the tool: ClimateWizard
Category of tool: Adaptation Data and Information
Approach to tool: Problem Definition; Identification of Adaptation Options
Type of tool: Data / Information Generation
Purpose of the tool:
ClimateWizard is a web-based computer program which allows users to examine a country's past climate and assess what changes are predicted to occur in the future. It has been designed to be accessible to both technical and non-technical users and helps audiences to visualize the effects of climate change. ClimateWizard presents users with the opportunity to view historic temperature and rainfall maps for anywhere in the world, as well as view predictions of temperature and rainfall based on the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report. When analysing climate change predictions, there are three greenhouse gas emission scenarios (used by the IPCC) that can be selected, and there are 16 General Circulation Models (GCM) (and a variety of different ensembles) available to base ClimateWizard predictions on. Maps can be viewed online and downloaded.
Keywords: Online Resource; Adaptation; Climate Map; User-friendly

Geographic usage: Global use
Key area of focus:



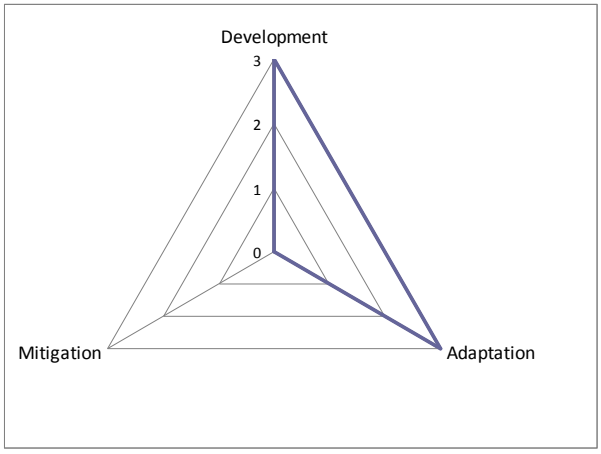
Accessibility / availability: Available online
Costs: No costs
Costs for access to the tool / data / training: None
Training requirements: Optional but recommended
Time needed for use: 30 minutes to a few hours, depending on user needs.
Language(s): English

Contact details:
For general queries: climatewizard@tnc.org
For project development queries: Chris Zganjar, The Nature Conservancy, czganjar@tnc.org
For scientific analysis queries: Evan Girvetz, University of Washington, girvetz@u.wasington.edu
For web development queries: George Raber, University of Southern Mississippi, george.raber@usm.edu
Website: http://www.climatewizard.org/

D.2 FAO CLIMPAG

Name of the tool: FAO CLIMPAG
Category of tool: Adaptation data and information / Adaptation knowledge-sharing
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options; Identification and selection of policies/strategies, Implementation of policies/strategies
Type of tool: Data and information / knowledge-sharing
Purpose of the tool:
CLIMPAG is a website aimed at bringing together the various aspects and interactions between *weather*, *climate* and *agriculture* in the general context of food security, based primarily on FAO work across these areas. Its focus is on adaptation and development, and it addresses international, national and sub-national scales of governance. The CLIMPAG website contains information under the headings of Advice and Warnings; Climate Change; Climatic Indicators; Data and Maps; Hotspots; Natural Disasters. Apart from the website, information is also available in hardcopy as well as CD Rom. Its main audience is national level policy makers, technical experts and development practitioners.
Keywords: Adaptation; Agriculture; Food security; Online;

Geographic usage: Global, National; Sub-national
Key area of focus:



Accessibility / availability: Available online, but also offer some off-line services (hardcopy, CD Rom).
Costs: No costs
Costs for access to the tool / data / training: None

Training requirements: No training required
Time needed for use: Not specified; depending on users needs.
Language(s): English, French, Spanish (part)

Contact details:
For questions or comments about the website, email FAO-Climate@fao.org
For other queries please contact:
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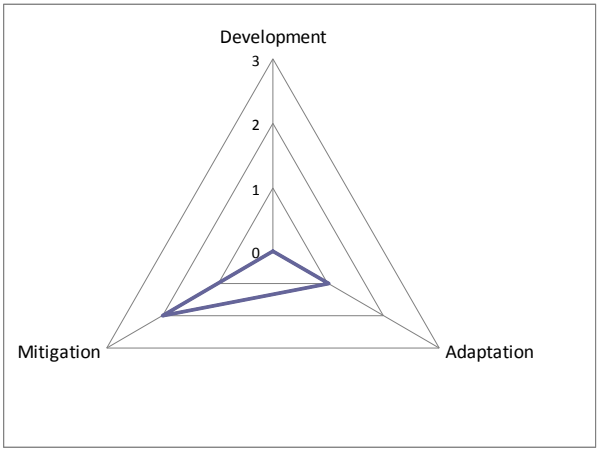
Website: http://www.fao.org/nr/climpag/

D.3 MAGICC/SCENGEN

Name of the tool: Model for the Assessment of Greenhouse-gas Induced Climate Change, and a Regional SCENario GENerator (MAGICC/SCENGEN) (Version 5.3)
Category of tool: Data/Information Generation
Approach to tool: Problem Definition; Identification of Adaptation Options.
Type of tool: Data / Information Generation
Purpose of the tool:
MAGICC/SCENGEN has been designed as an accessible piece of software that uses emissions scenarios for greenhouse gases, reactive gases, and sulphur dioxide in order to construct predictions of global-mean temperature, sea level rise, and regional climate. MAGICC is a coupled gas-cycle/climate model that has been used in all Intergovernmental Panel on Climate Change (IPCC) reports to produce projections of future global-mean temperature and sea level change. Version 5.3 reproduces the results given in the IPCC Fourth Assessment Report (AR4). SCENGEN is a regionalisation algorithm that uses a scaling method to produce climate and climate change information on a 2.5° latitude by 2.5° longitude grid. The regional results are based on results from 20 coupled atmosphere-ocean general circulation models (AOGCMs), which can be used in isolation or in any combination set by the user. This tool can be used to: evaluate the consequences of different mitigation policies; assist the development of adaptation policies by highlighting areas of vulnerability; support the development of regional climate scenarios; inform users about the implications of various socioeconomic development pathways; and provide easy access to up-to-date data derived from AOGCM experiments. It is accompanied by supporting documents available online.
Keywords: Modelling Software; Regional Climate Predictions; Online; Adaptation

Geographic usage: Global

Key area of focus:



Accessibility / availability: Available online for download, with supporting documents.

Costs: None

Costs for access to the tool / data / training: None

Training requirements: 3-5 days

Time needed for use: Depends on the user's needs

Language(s): English

Contact details:

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Boulder, CO,
80307-3000,
USA.
Email: wigley@cgd.ucar.edu

Website: http://www.cgd.ucar.edu/cas/wigley/magicc/

D.4 PRECIS

Name of the tool: Providing Regional Climates for Impact Studies (PRECIS)

Category of tool: Data and Information Generation

Approach to tool: Awareness Raising, Problem Definition, Identification of Adaptation Options

Type of tool: Data / Information Generation

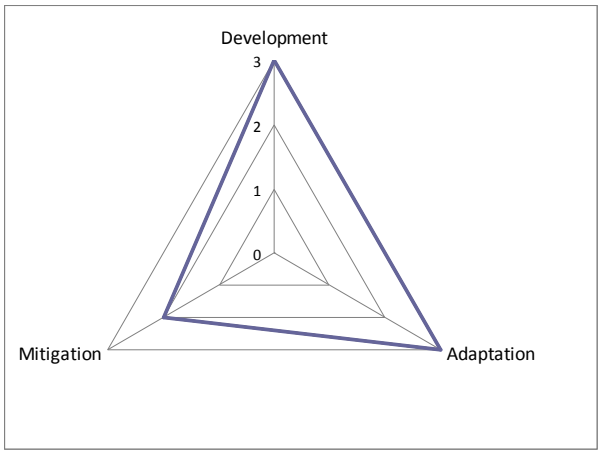
Purpose of the tool:

PRECIS is a regional climate modelling system developed by the Hadley Centre at the UK Met Office. It was designed with the intention of being provided free as a resource for scientists in developing countries, and has been used to assist the development of climate change scenarios in regions around the world, whilst utilising existing climate expertise and improving domestic capacity. Regional climate models (RCMs) are integral to adaptation planning as they add detailed information to the

large scale predictions made by General Circulation Models, helping to provide a more accurate representation of surface features. Information acquired from the use of RCMs, like PRECIS, is essential if countries are to adequately assess their vulnerability to climate change and plan adaptive measures. The tool is accompanied by an online handbook and technical manual that can be downloaded from the PRECIS website. Protocol dictates that in order to receive the tool, attendance is required at one of the PRECIS workshops held in different locations around the world. It runs on a Linux based PC and has been developed with a user-friendly interface.
Keywords: Regional Climate Modelling; Vulnerability;

Geographic usage:
Afghanistan, Algeria, Angola, Argentina, Azerbaijan, Bahrain, Bangladesh, Barbados, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Brunei, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Chad, Chile, China, Colombia, Congo, Costa Rica, Cote d' Ivoire, Cuba, Cyprus, Djibouti, Dominica, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Gabon, Georgia, Ghana, Greece, Guinea, Hungary, India, Indonesia, Iran, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Lesotho, Liberia, Madagascar, Malaysia, Malta, Mexico, Mongolia, Morocco, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palestine, Panama, Paraguay, Peru, Philippines, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia and Montenegro, Seychelles, Sierra Leone, Singapore, Somalia, South Africa, Sri Lanka, St. Lucia, Sudan, Suriname, Syria, Tanzania, Thailand, The Bahamas, The Gambia, Togo, Trinidad and Tobago, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Vietnam, Zambia, Zimbabwe.

Key area of focus:



Accessibility / availability: CD-ROM, with supporting documents available for download online.
Costs: No costs to developing countries but there are costs for institutes in UNFCCC Annex 2 countries (see below)
Costs for access to the tool / data / training: : No costs to developing countries for training / workshops, but travel and accommodation are not provided when workshops take place. Annex 2 country institutes are charged a €5,000 fee to attend a workshop and then are charged for the costs associated with providing boundary conditions for running PRECIS simulations.
Training requirements: 3-5 days

Time needed for use:
A typical experiment, covering a 100-by-100 grid box domain and including a representation of the atmospheric sulphur-cycle, run on one core processor, takes 2.5 months to complete a 30-year simulation. With four cores it will take about three weeks and eight cores about two weeks.

Language(s): English

Contact details:
General PRECIS Enquiries:
precis@metoffice.gov.uk
Website: http://www.metoffice.gov.uk/precis

D.5 Adaptation Learning Mechanism

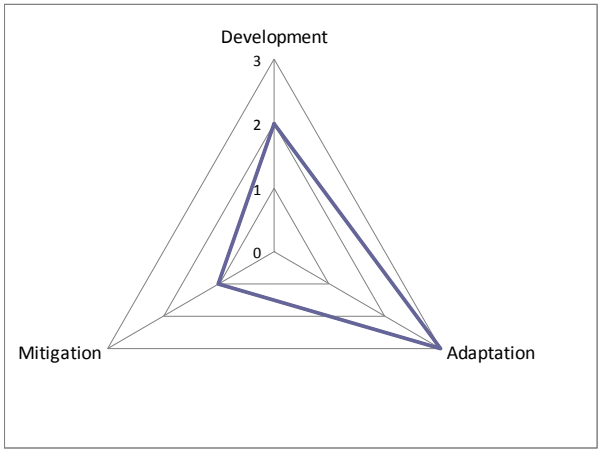
Name of the tool: Adaptation Learning Mechanism
Category of tool: Adaptation knowledge-sharing programs / databases
Approach to tool: Awareness Raising; Identification of Adaptation Options; Identification and selection of policies/strategies; Implementation of policies/strategies
Type of tool: Knowledge-sharing
Purpose of the tool:
In response to information gaps and to address existing adaptation knowledge needs, the United Nations Development Programme, along with other agency partners, launched the Adaptation Learning Mechanism (ALM) in 2007. The ALM represents a collaborative, global learning process, with leadership, facilitation and strong participation by Southern institutions. Seeking to provide stakeholders with a common platform for sharing and learning, the ALM bridges knowledge gaps by bringing relevant knowledge and stakeholders together to exchange information, experiences, and expertise. Additionally, the ALM complements the wide range of adaptation knowledge networks and initiatives already underway.

The ALM will develop tools and resources to support the following:

1. Adaptation practices – what can be done to adapt to climate change on the ground?
2. Integration of climate change risks and adaptation into development policy, planning and operations – how can policies and plans support adaptation over time?
3. Capacity building – how can people be better assisted in becoming equipped for adapting to climate change?

Keywords: Adaptation; Knowledge Sharing; Online;

Geographic usage: Global
Key area of focus:



Accessibility / availability: Available online.
Costs: No costs
Costs for access to the tool / data / training: None
Training requirements: None
Time needed for use: Designed for ongoing use, with limited time needed per usage.
Language(s): English, with Google translator plug-in

Contact details:
Andrea Egan
Knowledge Management and Pacific Liaison
andrea.egan@undpaffiliates.org

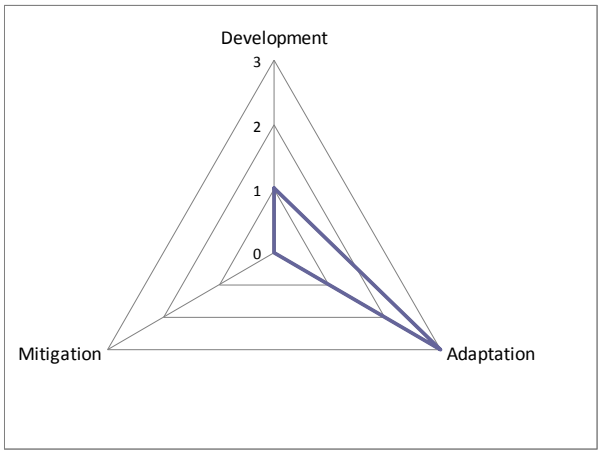
General Contact
Adaptation Learning Mechanism (ALM)
United Nations Development Program (UNDP)
Energy and Environment Group
Bureau for Development Policy
alm@undp.org
Website: www.adaptationlearning.net

D.6 AfricaAdapt

Name of the tool: AfricaAdapt
Category of tool: Adaptation knowledge-sharing programs / databases
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options
Type of tool: Knowledge-sharing

Purpose of the tool:
AfricaAdapt is a knowledge sharing network which focuses exclusively on Africa. This bilingual tool (English/French) aims to assist with the dissemination of knowledge relating to climate change adaptation for sustainable livelihoods. It was developed with the goal of providing stakeholders with a platform to facilitate learning, share resources and strengthen the community surrounding climate change adaptation in Africa. Though it is a website, AfricaAdapt also provides the following off-line services: radio-programming developed with community radio broadcasters across the continent, which is available in local languages; a mobile alert service, providing news updates to those without straight forward access to the internet; face-to-face meetings aimed at facilitating the exchange of ideas and best practices; and a CD-ROM and paper-based distribution service for news and resources regarding the network. There is also an innovation fund which offers small grants for new approaches to knowledge sharing.
Keywords: Adaptation; Knowledge Network; Online;

Geographic usage: Global
Key area of focus:



Accessibility / availability: Available online, but does offer some off-line services
Costs: No costs
Costs for access to the tool / data / training: None
Training requirements: No training
Time needed for use: 30 minutes to a few hours, depending on users needs
Language(s): English, French

Contact details:
For questions or comments about the website, email help@africa-adapt.net
For other queries please contact one of the following AfricaAdapt knowledge sharing officers:
ENDA-Tiers Monde
Dakar, Sénégal
Contact : Mamouda Moussa Na Abou
enda.energie@orange.sn

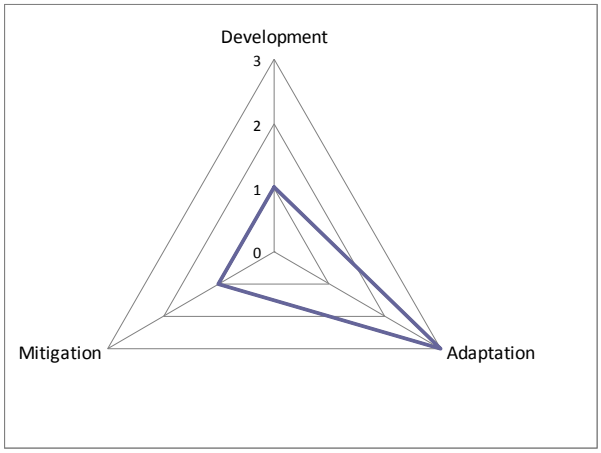
Forum for Agricultural Research in Africa (FARA)
Accra, Ghana
Contact : Jacqueline Nnam
jnnam@fara-africa.org

IGAD Climate Predection and Applications Centre (ICPAC)
Nairobi, Kenya
Contact : Abebe Tadege
Atadege@icpac.net
Website: http://www.africa-adapt.net/AA/

D.7 weADAPT

Name of the tool: weADAPT
Category of tool: Adaptation knowledge-sharing programs / databases
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options; Identification and selection of policies/strategies
Type of tool: Knowledge-sharing
Purpose of the tool:
weADAPT is an online 'open space' on climate adaptation issues (including the synergies between adaptation and mitigation) which allows practitioners, researchers and policy makers to access credible, high quality information and to share experiences and lessons learnt with the weADAPT community. It is designed to facilitate learning, exchange, collaboration and knowledge integration to build a professional community of practice on adaptation issues while developing policy-relevant tools and guidance for adaptation planning and decision-making.
The new release of weADAPT.org includes innovative new tools for 'knowledge integration', an "Adaptation Layer" - a Google Earth interface to show 'who is doing what, where' and to create 'adaptation stories', a new climate adaptation Knowledge Base, customised user and organisation profiles and adaptation decision support tools such as the prototype Adaptation Decision Explorer (ADx).
Keywords: Adaptation; Knowledge Network; Online;

Geographic usage: Global
Key area of focus:



Accessibility / availability: Available online. Requires Google Earth plug-in for Adaptation Layer
Costs: No costs
Costs for access to the tool / data / training: None
Training requirements: Simple browsing requires no training but use of all weADAPT functionality is likely to require some training (2-3 days)
Time needed for use: A few minutes for basic browsing. Considerably longer for contributing content and using more complex functions
Language(s): English, with some French and Spanish content

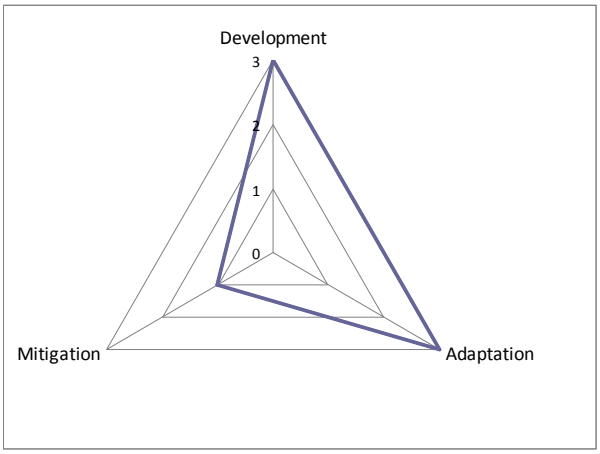
Contact details: For questions or comments about weADAPT, email info@weADAPT.org
Website: http://weadapt.org/

D.8 World Bank Climate Change Knowledge Portal

Name of the tool: World Bank Climate Change Knowledge Portal
Category of tool: Adaptation knowledge-sharing programs / Adaptation data and information
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options; Identification and selection of policies/strategies
Type of tool: Knowledge-sharing / Data and information generation
Purpose of the tool:
The World Bank Climate Change Knowledge Portal (CCKP) is intended to provide quick and readily accessible climate and climate-related data to policy makers and development practitioners. Its focus is on adaptation and development, but increasingly also incorporating aspects of mitigation. Its audience is broad and includes national level policy makers, in-country donors, development practitioners, and technical experts. The CCKP provides structured access to a comprehensive set of quality data, knowledge and analysis tools on climate change, using both World Bank and external sources. It is a tool for integrating environmental issues, green development, disaster risk management, and climate change in the development context. Data include global historical trends and long-term projections aggregated at different spatial and temporal resolutions, and are provided through various state-of-the-art GIS visualizations that displays and synthesize spatial data on climate and disaster risk data, impact maps, socio-economic data and mitigation efforts. The Portal is entirely internet-based.
Keywords: Adaptation; Climate Change Knowledge Network; Climate Data; Online

Geographic usage: Global, National, Sub-national, Watershed level

Key area of focus:



Accessibility / availability: Online
Costs: No costs
Costs for access to the tool / data / training: None
Training requirements: No training
Time needed for use: Up to two weeks, depending on users needs
Language(s): English

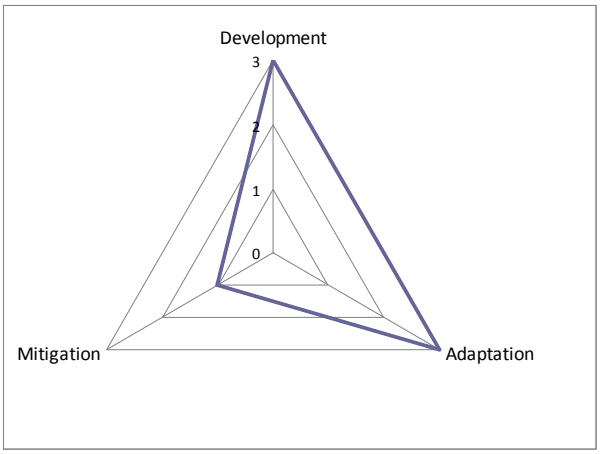
Contact details:
Ana E. Bucher or Habiba Gitay
Climate Change Unit, Environment Department
The World Bank
1818 H Street NW, Washington, DC 20433
Room MC5-154 Mail Stop: MC5-508
Phone: 202-458-5249 Fax: 202-522-2130
Email: abucher@worldbank.org or hgitay@worldbank.org
Website: http://climateknowledgeportal.worldbank.org

D.9 CVCA Care

Name of the tool: Climate Vulnerability and Capacity Analysis (CVCA) CARE Handbook.
Category of tool: Adaptation Assessment and Process Guidance Tool
Approach to tool: Awareness Raising, Problem Definition, Policy Selection
Type of tool: Process Guidance
Purpose of the tool:
This tool provides a framework for undertaking analysis of vulnerability and adaptive capacity at the community level. The handbook outlines the Climate Vulnerability and Capacity Analysis (CVCA) methodology, which was developed in order to facilitate the participation of community members in analysis that focuses on the implications of climate change upon their lives and livelihoods. Scientific

data and local knowledge is synthesized in order to build greater understanding about climate risks and adaptive strategies. The process aims to stimulate discussion within communities and develop links with other communities and stakeholders. Despite its community focus, the role of 'enabling environments' is also examined within the CVCA framework, so as to establish the implications of regional and national issues upon bottom-up adaptation strategies. This tool seeks to provide a base for the detection of practical strategies to assist with community-led adaptation to climate change.
Keywords: Community-Based Adaptation; Vulnerability; Climate Resilience

Geographic usage: Canada, Ghana, Angola, Mozambique, Lesotho, Niger, Ivory Coast, Togo, Benin, Mali, Kenya, Vietnam and Ethiopia.
Key area of focus:



Accessibility / availability: Available online and in a paper-based format
Costs: No cost
Costs for access to the tool / data / training: No cost
Training requirements: Optional but recommended
Time needed for use: Depending on user needs
Language(s): English, Spanish, French, Portuguese, Vietnamese, Bahasa Indonesia, Thai

Contact details:
Adaptation Coordinator
Tine Rossing
Office: +1 604 447 4616 (Canada)
rossing@careclimatechange.org
Website: www.careclimatechange.org/cvca/

D.10 CEDRA

Name of the tool: Climate Change and Environmental Degradation Risk and Adaptation Assessment (CEDRA)
Category of tool: Adaptation and decision-making guidance tool
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options; Identification of Selection of Policies; Implementation of Policies; Evaluation of Policies

Type of tool: Process Guidance

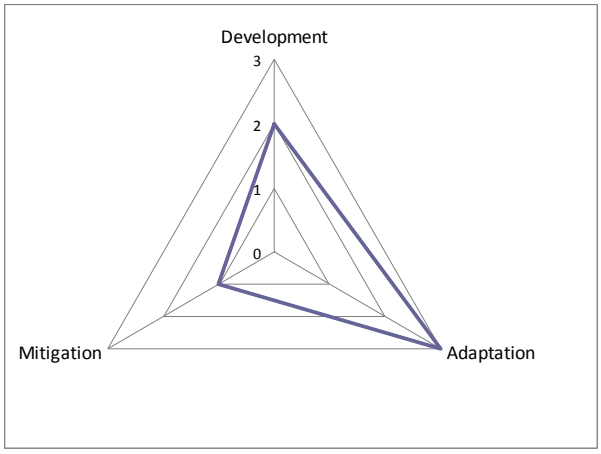
Purpose of the tool:

CEDRA is an environmental field tool that assists development agencies in carrying out analysis of potential environmental hazards at project locations, and provides guidance surrounding the adaptation of projects. It is intended to help development agencies engage with the science underpinning climate change and environmental degradation so as to inform the planning and revision of projects. The process described in the handbook is comprised of six practical steps, highlighting useful resources at each stage. A variety of adaptation options are discussed in order to provide a selection of approaches aimed at strengthening the resilience of development projects. Case studies are drawn upon to outline the interrelated nature of development and environmental change. CEDRA has been designed to be used by development practitioners with experience in planning and managing projects. It can be described as a risk based approach that combines community knowledge with scientific data in order to undertake participatory adaptation.

Keywords: Adaptation assessment; Environmental Field Tool; Participatory; Resilience;

Geographic usage:Bangladesh, Brazil, Burkina Faso, Democratic Republic of Congo, Haiti, Malawi, Nepal, Uganda

Key area of focus:



Accessibility / availability: Available online

Costs: No costs

Costs for access to the tool / data / training: None

Training requirements: Optional but recommended

Time needed for use:

Embarking upon the steps outlined should take an average of 22 working days. However, the process should be undertaken alongside other aspects of development planning, so it is likely to take place over the course of 3 months.

Language(s):

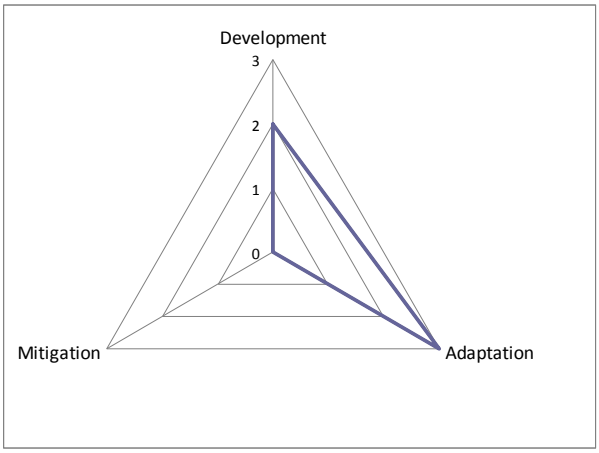
Bangla, English, Spanish, Portuguese, French, Burmese

Contact details:
Email: cedra@tearfund.org
Website: http://tilz.tearfund.org/Topics/Environmental+Sustainability/CEDRA.htm

D.11 GTZ Climate Proofing for Development

Name of the tool: Climate Proofing for Development
Category of tool: Adaptation decision-making guidance tools
Approach to tool: Identification of Adaptation Options; Identification of Selection of Policies
Type of tool: Process Guidance
Purpose of the tool:
'Climate Proofing for Development' was designed by GIZ (then GTZ) with the purpose of integrating climate considerations into planning at national, sectoral, project and local levels. It facilitates climate change orientated analysis of policies, projects and programmes in partner countries with the aim of highlighting the risks and opportunities climate change poses. By viewing development through a climate change lens, appropriate measures can be taken to decrease vulnerability and ensure that projects or programmes progress in a way that pays due consideration to the implications of environmental change. Climate Proofing for Development determines the bio-physical and socio-economic impacts of climate change in order to plan appropriate adaptation strategies. This process always requires expert support, process facilitation and tailor-made capacity development, which are services offered by GIZ/GTZ. This tool is accompanied by a brochure available for download online.
Keywords: Climate-Smart Development; Adaptation

Geographic usage: Global with practical experience in Mali, Morocco, Niger, the Philippines, Viet Nam.
Key area of focus:



Accessibility / availability: Available online
Costs: US$300+
Costs for access to the tool / data / training: None
Training requirements: This methodology is designed to be undertaken with expert support, so no training is required.

Time needed for use:
A few days may be sufficient in a single case, but not to implement an adapted version of Climate Proofing for Development in a given context. The timeframe needed for use will largely depend on what level the tool is being applied to.
Language(s): English

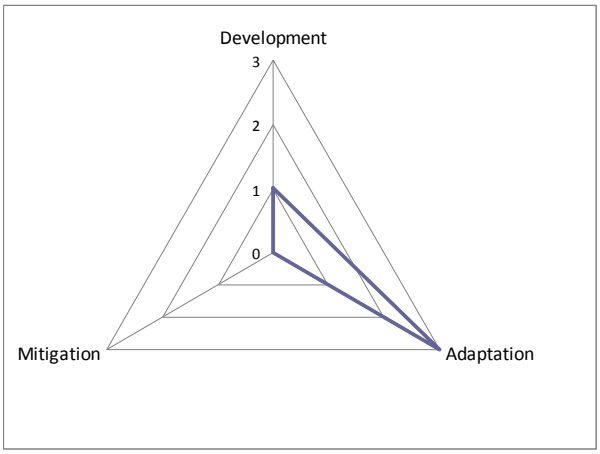
Contact details:
Christoph Feldkoetter
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Postfach 5180
65726 Eschborn
Telephone: +49 61 96 79-1299 (Germany)
Email: christoph.feldkoetter@giz.de
Website: http://www.gtz.de/climate
http://www.gtz.de/en/themen/umwelt-infrastruktur/umweltpolitik/31288.htm

D.12 Red Cross / Red Crescent Climate Guide

Name of the tool: Red Cross / Red Crescent Climate Guide
Category of tool: Adaptation assessment and process guidance tools
Approach to tool: Awareness Raising; Problem Definition; Identification of Adaptation Options; Implementation of policies/strategies
Type of tool: Process guidance
Purpose of the tool:
The Red Cross/Red Crescent Climate Guide presents five years of experiences from more than thirty national Red Cross and Red Crescent societies, in particular in developing countries. It relates the experiences of Red Cross and Red Crescent staff and volunteers all around the world trying to understand and address the risks of climate change.
The guide begins with the basics about climate change: the scientific consensus, the humanitarian consequences, and the general implications for the Red Cross and Red Crescent. This is followed by six thematic modules: Getting started, Dialogues, Communications, Disaster management, Community-based disaster risk reduction and Health. Each module begins with a background section with real-life Red Cross and Red Crescent experiences and perspectives, followed by a 'how-to' section with specific step-by-step guidance. The guide is available online as well as in hardcopy, and short factsheets summaries are also available.
Keywords: Adaptation; Knowledge Network; Online;

Geographic usage: National, Regional

Key area of focus:



Accessibility / availability: Available online, but also offers hardcopy material
Costs: No costs of tool itself, but costs incurred in implementation
Costs for access to the tool / data / training: None
Training requirements: None required prior to using the tool
Time needed for use: 12 weeks or more
Language(s): English, French, Arabic, Spanish, Russian

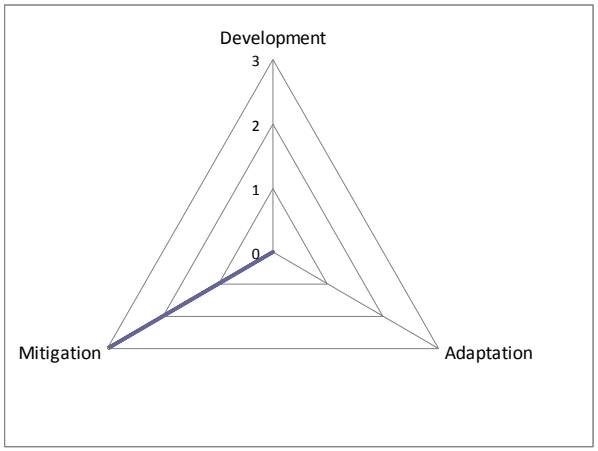
Contact details:
Maarten van Aalst, email: vanaalst@climatecentre.org
Red Cross/Red Crescent Climate Centre
PO Box 28120
2502 KC The Hague
The Netherlands
Website: http://www.climatecentre.org/site/publications/85

Appendix E – Fiches Mitigation

E.1 McKinsey MACC

Name of the tool: Marginal Abatement Cost Curve - MACC-McKinsey
Category of tool: GHG emission and energy models
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options
Type of tool: Data, Information generation
Purpose of the tool:
The McKinsey MACC tool provides information on the abatement potential, cost and investment of over 200 mitigation options with the possibility of various levels of granularity. The opportunities for emission reductions included in the MAC-curve take into account the investments and associated operating costs. It presents how much emissions can be abated per specific option and the associated amount of money it will cost or save you per tCO2e. Developing the MAC-curve is done in projects with McKinsey and a high number of local experts and stakeholders to account for local specifities. The projects include substantial awareness raising and capacity building on mitigation. McKinsey has also developed the Climate Desk tool for the global GHG abatement cost curve, which users can access a license for. Over 100 academics and other experts have been granted a free license to the tool.
Keywords: Mitigation, Costs, Emission, Abatement

Geographic usage: Used in global assessment and in more than 20 countries, e.g. United States, United Kingdom, China, India, Brazil, Germany, Russia, Poland, Belgium, Switzerland, Czech Republic, Sweden, Australia, Israel.
Key area of focus:



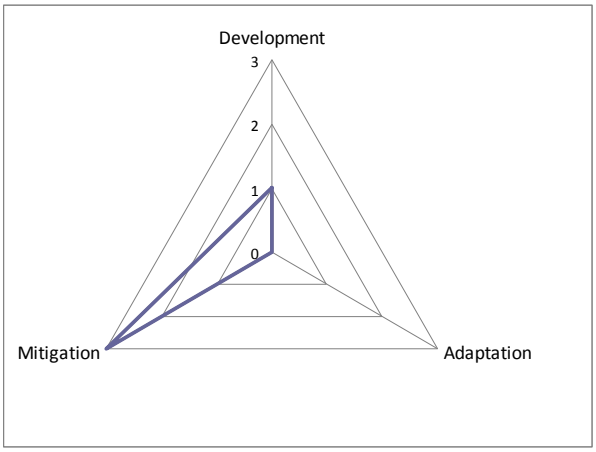
Accessibility / availability: Global Assessment: Online via Climate Desk; national GHG project only via McKinsey
Costs: More than $2000
Costs for access to the tool / data / training: More than $2000
Training requirements: Special training is required that will take eight days or more
Time needed for use: 2-4 months
Language(s): English

Contact details: sustainability@mckinsey.com; Dr. Jens Dinkel; Jens_Dinkel@mckinsey.com;
Website: http://solutions.mckinsey.com/climatedesk

E.2 Non-Annex 1 Marginal Abatement Cost curve - NAMAC-ECN

Name of the tool: Non-Annex 1 Marginal Abatement Cost curve - NAMAC-ECN
Category of tool: Assessment of mitigation potential / resource potential
Approach to tool: Identification of mitigation and/or adaptation options; Identification and selection of policies
Type of tool: Data, Information generation
Purpose of the tool:
The ECN NAMAC curve tool provides information on the cost of many mitigation options for non-Annex 1 countries. The opportunities for emission reductions included in the MAC-curve take into account the investments and associated costs. A marginal abatement cost curve states the specific costs of mitigation of the different options. It presents how much tCO_2-emissions can be abated per specific option and thereby the amount of money it will costs or save you per tCO_2. The curve results from compiled bottom-up country based studies. The output is available on their website. It is about providing information and not making new MAC-curves.
Keywords: Mitigation, Costs, Emission, Abatement

Geographic usage: Used in more than 10 countries.
Key area of focus:



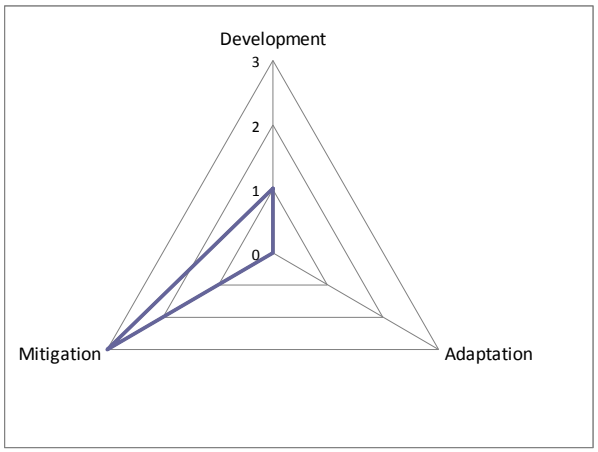
Accessibility / availability: Online.
Costs: No costs
Costs for access to the tool / data / training: No costs
Training requirements: No training is required
Time needed for use: 0-2 weeks (for gathering data from the website)
Language(s): English

Contact details: Stefan Bakker; bakker@ecn.nl; +31 (224) 564021
Website: http://www.ecn.nl/nl/units/ps/tools/modelinstrumentarium/namac/#c8721

E.3 Geospatial Toolkit

Name of the tool: Geospatial Toolkit
Category of tool: Assessment of mitigation potential / resource potential
Approach to tool: Awareness raising; Identification of mitigation and/or adaptation options; Identification and selection of policies
Type of tool: Data, Information generation
Purpose of the tool: The Geospatial Toolkit (GsT) is an NREL-developed map-based software application that integrates resource data and other geographic information systems (GIS) data for integrated resource assessment. A key point of the geospatial toolkit is to help people identify the most economically viable areas for deployment of renewable energy technologies. The non-resource, country-specific data for each GsT comes from a variety of agencies within each country as well as from global datasets. (The new version of the GsT also integrates HOMER for all countries, an optimisation model for distributed power. Due to the GsT's integration with HOMER, the application is only available on Windows platforms.)
Keywords: Potential, Resources, Renewable energy technologies

Geographic usage: Afghanistan, Bangladesh, Bhutan, China, El Salvador, Ghana, Guatemala, Honduras, India, Nepal, Nicaragua, Oaxaca, Sri Lanka, Brazil and Pakistan.
Key area of focus:



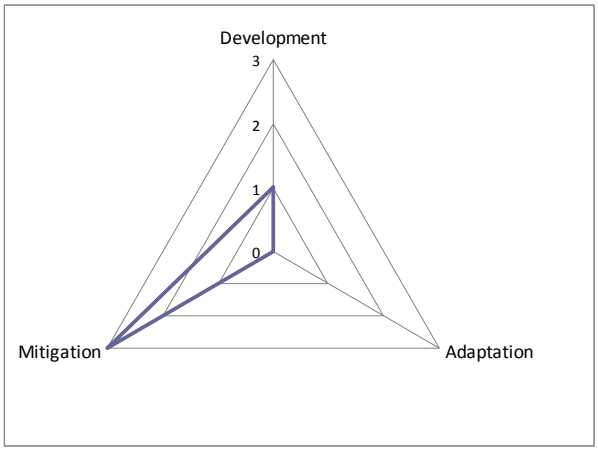
Accessibility / availability: Online.
Costs: No costs
Costs for access to the tool / data / training: No costs
Training requirements: No training is required.
Time needed for use: 0-2 weeks, but if a new datasets is required it may take up to one year.
Language(s): English

Contact details: Shannon Cowlin; Shannon.Cowlin@nrel.gov; +1 303 384 7523
Website: http://www.nrel.gov/international/geospatial_toolkits.html

E.4 SWERA RREX

Name of the tool: SWERA RREX
Category of tool: Assessment of mitigation potential / resource potential
Approach to tool: Awareness raising; Identification of mitigation and/or adaptation options
Type of tool: Data, Information generation
Purpose of the tool: The SWERA Renewable energy Resource EXplorer (RREX) is an on-line Geographic Information System (GIS) tool for viewing renewable resource data. It encompasses a range of solar and wind datasets and maps. It relies on satellite and terrestrial measurements, numerical models, and empirical and analytical mapping methods. Results are integrated into a computer-based geo-referenced information system containing relevant infrastructure data, such as roads and transmission lines, and can be easily imported into common geographic-information-system software packages. Through this interactive system, users can view several renewable resource data sets available through SWERA. RREX reports annual data when you click on the map. Users can view monthly data values from all available data sets at a given site by clicking on the desired location on the map and choosing the "Graph Data" option.
Keywords: Geographic Information System, Resource data.

Geographic usage: Worldwide (over 10 countries and datasets for many countries).
Key area of focus:



Accessibility / availability: Online.
Costs: No costs.
Costs for access to the tool / data / training: No costs
Training requirements: No training is required.
Time needed for use: 0-2 weeks if datasets are available
Language(s): English

Contact details: UNEP GRID team with assistance from USGS located at the EROS Center, Michelle Anthony; +1 605 594 6848
Website: http://swera.unep.net/index.php?id=swera_web_mapping

E.5 Gains

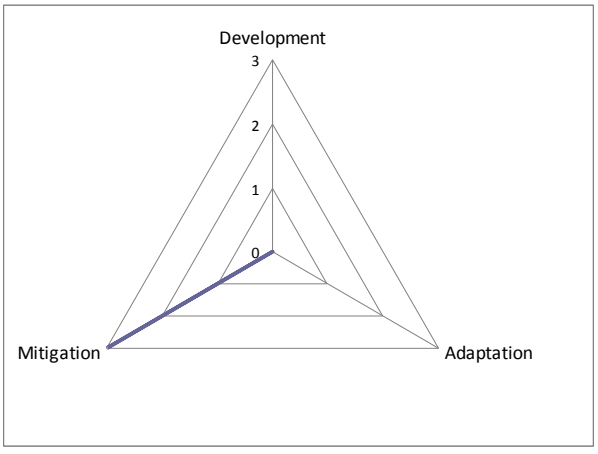
Name of the tool: GHG-**A**ir pollution **IN**teractions and **S**ynergies (GAINS)
Category of tool: GHG Emission and Energy Models
Approach to tool: Identification of mitigation and/or adaptation options;Identification and selection of policies; Implementation of policies; Evaluation of policies
Type of tool: Data, Information generation

Purpose of the tool:
The GAINS Model, developed by the International Institute for Applied Systems Analysis, is a transparent scientific policy tool that estimates emission rates of Kyoto greenhouse gases individually and as aggregates, both for historic years as well as for the future, and identifies cost-effective mitigation measures at the country-level. GAINS estimates emissions of air pollutants, as well as their health and ecosystem impacts, such as acidification, eutrophication and mortality from particulate matter and tropospheric ozone. Historic emissions are calibrated to international emission inventories and scenarios are based on information supplied by individual countries, as well as international sources. The GAINS Model assesses emissions on a medium-term time horizon, emission projections are specified in five year intervals through the year 2030. Options and costs for controlling emissions are represented by several hundred emission reduction technologies.

The model can be operated in the 'scenario analysis' mode, i.e., following the pathways of the emissions from their sources to their impacts. In this case the model provides estimates of regional costs and environmental benefits of alternative emission control strategies. The model can also operate in the 'optimization mode' which identifies cost-optimal allocations of emission reductions in order to achieve specified GHG emissions ceilings, deposition levels or concentration targets. The model is online and can be used for viewing activity levels and emission control strategies, as well as calculating emissions and control costs for those strategies.

Keywords: Air pollution, GHG emissions, Ecosystem, co-benefits

Geographic usage: Worldwide (mostly country level); Annex 1, Europe, Russia, China, India, South Asia, Rest of the World
Key area of focus:



Accessibility / availability: Online, but registration is needed.
Costs: No costs

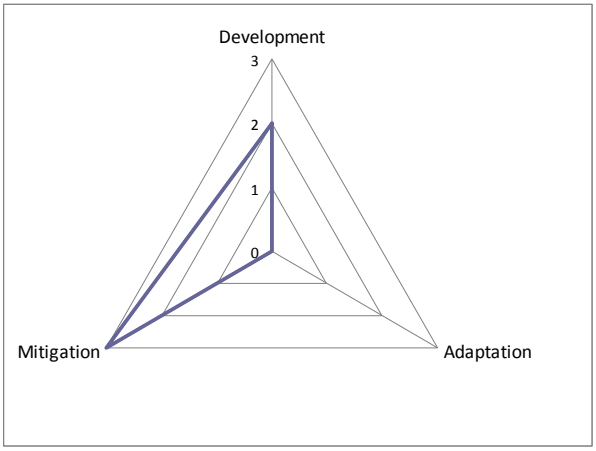
Costs for access to the tool / data / training: No costs.
Training requirements: No training required.
Time needed for use: 0-2 weeks
Language(s): English

Contact details: Markus Amann; amann@iiasa.ac.at; +43 2236 807
Website: http://gains.iiasa.ac.at/index.php/home-page/241-on-line-access-to-gains
(http://gains.iiasa.ac.at/index.php/online-access/online-calculator)

E.6 ENPEP-BALANCE

Name of the tool: ENPEP-Balance
Category of tool: GHG Emission and Energy Models
Approach to tool: Problem definition;Identification of mitigation and/or adaptation options; Identification and selection of policies;Implementation of policies; Evaluation of policies
Type of tool: Data, Information Generation
Purpose of the tool:
The nonlinear, equilibrium ENPEP-BALANCE model matches the demand for energy with available resources and technologies. Its market-based simulation approach allows ENPEP-BALANCE to determine the response of various segments of the energy system to changes in energy prices and demand levels. The model relies on a decentralized decision-making process in the energy sector and can be calibrated to the different preferences of energy users and suppliers. Basic input parameters include production and consumption levels, and prices; base year energy statistics, including production and consumption levels, and prices; projected energy demand growth; and any technical and policy constraints.
Keywords: Energy Price, Energy Demand, Model.

Geographic usage: Over 60 countries in regions: Africa, South America, North America, Asia, East and South Europe, Middle East.
Key area of focus:



Accessibility / availability: Online and on CD-Rom, email CEEESA via: http://www.dis.anl.gov/about/contact.html?id=ceeesa
Costs: No costs for the tool.
Costs for access to the tool / data / training: Training costs are $1500, (Introductory)
Training requirements: Optional, but recommended. The introductory course takes five days.
Time needed for use: Longer than three months.
Language(s): English

Contact details: http://www.dis.anl.gov/about/contact.html?id=ceeesa
Website: http://www.dis.anl.gov/projects/Enpepwin.html

E.7 LEAP

Name of the tool: Long-range Energy Alternatives Planning System (LEAP)
Category of tool: GHG emission and energy models
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options; Identification and selection of policies; Evaluation of policies
Type of tool: Data, information generation

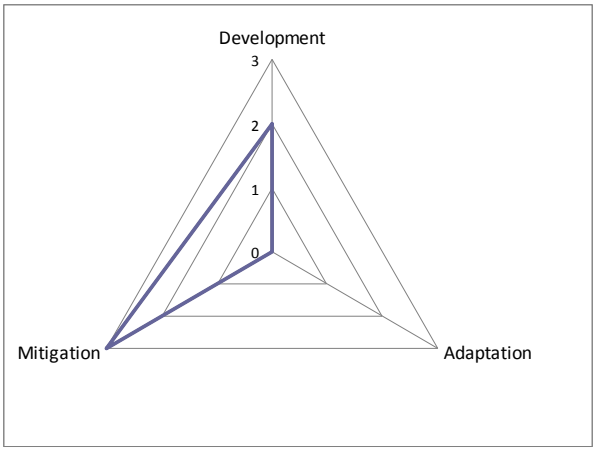
Purpose of the tool:
LEAP is a software tool used to analyse energy policy and to assess climate change mitigation. It can track energy consumption, production and resource extraction in all sectors of an economy and it can be used to account for both energy sector and non-energy sector greenhouse gas (GHG) emission sources and sinks. Further LEAP can analyse emissions of local and regional air pollutants, enabling it to do studies of the climate co-benefits of local air pollution reduction. The tool can be used at many different scales ranging from cities and states to national, regional and global applications. Therefore the tool is used by a wide range of organizations, like government agencies, academics, non-governmental organisations, consulting companies, and energy utilities.

LEAP can be used to create models of different energy systems and it supports a wide range of energy modeling methodologies including top-down econometric modelling, bottom-up end-use analysis and least-cost optimisation. It also allows data and results from more specialised models to be incorporated. Most studies using the tool have a timeframe from 20 to 50 years of forecasting.

Keywords: Energy model, Energy Sector, Emissions, Pollution

Geographic usage: Worldwide, downloaded in over 190 countries.

Key area of focus:



Accessibility / availability: Online.
Costs: Depends on users, ranges from $0 for students and for developing country-based Government, NGO and academic organisations up to $3000 for a two year, non-consulting license for private organisations. Consulting licenses require a personal inquiry to SEI.
Costs for access to the tool / data / training: Depends on users, ranges from $0 for students and for developing country Governments, NGO and academic organisations up to $3000 for a two year, non-consulting license for private organisations. Consulting licenses require a personal inquiry to SEI.
Training requirements: Yes, training is required. Basic training normally takes four days.
Time needed for use: Ranges from a few days up to many months, depending on the project.
Language(s): English, Chinese, Spanish, French, Portuguese, Romanian and Greek. Coming up: Italian.

Contact details: Dr. Charles Heaps, leap@sei-us.org; +1 (617) 627-3786 (x3)
Website: http://www.energycommunity.org

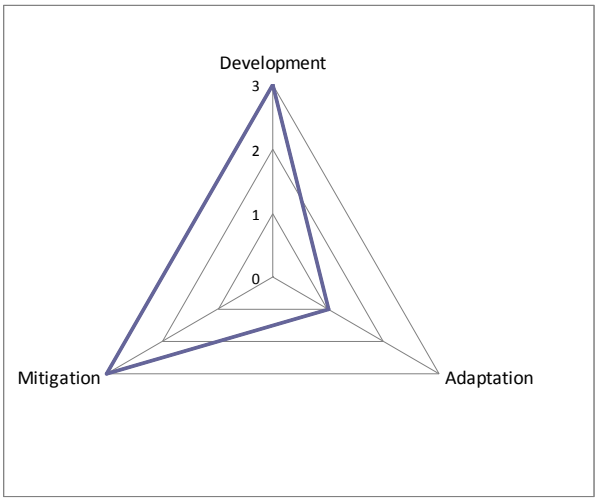
E.8 MARKAL/TIMES

Name of the tool: MARKAL/TIMES
Category of tool: GHG Emission and Energy Models
Approach to tool: Identification of mitigation and/or adaptation options; Identification and selection of policies; Implementation of policies; Evaluation of policies
Type of tool: Data, Information generation

Purpose of the tool:
MARKAL and TIMES generate technical-economic models of global, regional, national and local energy systems. TIMES is the recent evolution of MARKAL. Users define the Reference Energy System, from primary energy resources to demand for energy services. TIMES models represent the partial equilibrium evolution of the system over a user defined time horizon, with variable time intervals. Based upon the characterisation of hundreds of energy technologies and demand devices, MARKAL and TIMES models calculate the optimal mix of technologies and commodities. These models enable you to evaluate energy plans, environmental policies, climate mitigation scenarios and

new technologies in trade-off modes. Scenario dependent energy balances and inventories of GHG emissions can be projected. Several variants are available, including stochastic for calculating hedging strategies, general equilibrium versions, lumpy investments, energy security risk. Global TIMES models, such as the TIMES Integrated Assessment Model (TIAM), include a full representation of the climate equations and build scenario constraints to a predefined global atmosphere temperature increase.
Keywords: Energy system, technical-economic modeling, scenarios.

Geographic usage: More than 200 licensed users across the world
Key area of focus:



Accessibility / availability: Online and on CD-Rom
Costs: Free to purchase
Costs for access to the tool / data / training: Range between $0 and $9600 per added part. For the costs of specific categories, see: http://www.etsap.org/TOOLS/ETSAP_SW_Guidelines.pdf
Training requirements: Optional, but recommended. 3-5 days training course.
Time needed for use: 0-2 weeks if model already available, two or more months to build a model from scratch
Language(s): English

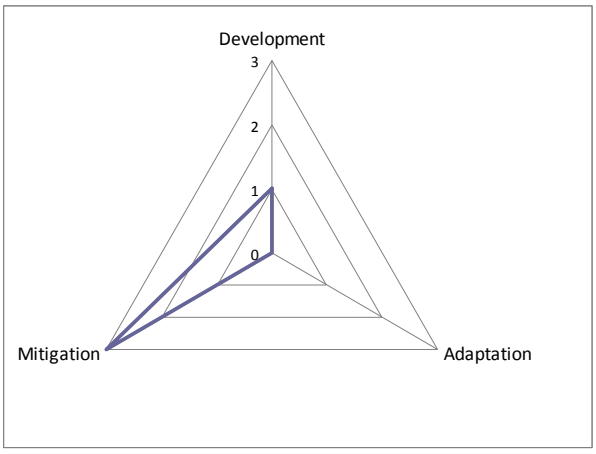
Contact details: support@etsap.org
GianCarlo Tosato, IEA-ETSAP Operating Agent, gct@etsap.org ; +39 335 5377675
Uwe Remme; IEA desk officer, Uwe.Remme@iea.org ; +33 140576713
Website: http://www.iea-etsap.org/

E.9 RETScreen

Name of the tool: RETScreen
Category of tool: GHG Emission and Energy Models
Approach to tool: Identification of mitigation and/or adaptation options; Identification and selection of policies; Evaluation of policies
Type of tool: Data, Information Generation

Purpose of the tool:
The RETScreen Clean Energy Project Analysis Software is a unique decision support tool developed with the contribution of numerous experts from government, industry, and academia. The software, provided free-of-charge, can be used worldwide to evaluate the energy production and savings, costs, emission reductions, financial viability and risk for various types of Renewable-energy and Energy-efficient Technologies (RETs). The software (available in multiple languages) also includes product, project, hydrology and climate databases, a detailed user manual, and a case study based college/university-level training course, including an engineering e-textbook.
Keywords: RETs, Energy production, Analysis

Geographic usage: Worldwide, it is downloaded in 222 countries.
Key area of focus:



Accessibility / availability: Online, free downloadable. It is also available on CD-Rom when requested.
Costs: No costs.
Costs for access to the tool / data / training: No costs, training available at website.

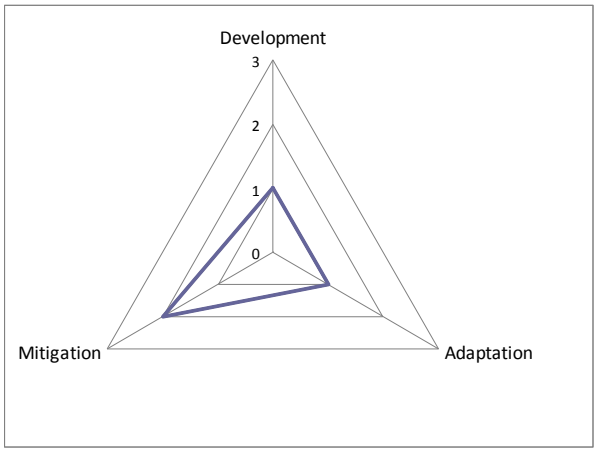
Training requirements: Optional, but recommended. Available on website.
Time needed for use: Depends on user and project. If data is available then the time required to use the tool is 1-2 hours.
Language(s): English, French and 34 more languages available.

Contact details: Phone +1-450-652-4621; Facsimile: +1-450-652-5177; E-mail: retscreen@nrcan.gc.ca
Website: http://www.retscreen.net/ang/home.php (English) http://www.retscreen.net/ (Choose language)

E.10 Reegle

Name of the tool: Reegle
Category of tool: Low carbon development / technology platforms or databases
Approach to tool: Awareness raising; Identification of mitigation and/or adaptation options; Identification and selection of policies.
Type of tool: Knowledge sharing
Purpose of the tool:
An innovative information portal for up-to-date information on renewable energy, energy efficiency and climate compatible development. Reegle is designed as an independent information dissemination tool and specialist search engine in the fields of renewable energy, energy efficiency and climate compatible development. As a distribution hub for high-quality data it makes information more accessible in a user-friendly, intuitive format. Its main features include the comprehensive country energy profiles combining data from different sources such as UN and World Bank and providing important insight into policy and regulation on individual country level. The actor's catalog includes the most important stakeholders globally, and the extensive glossary on renewables and climate helps deepening understanding. Reegle currently relies on over 1000 authoritative sources and 9 knowledge partners.
Keywords: Clean energy, Energy Information, Search engine.

Geographic usage: Worldwide, it is a website. (Over 10 countries)
Key area of focus:



Accessibility / availability: Online and RDF format
Costs: No costs
Costs for access to the tool / data / training: No costs
Training requirements: No

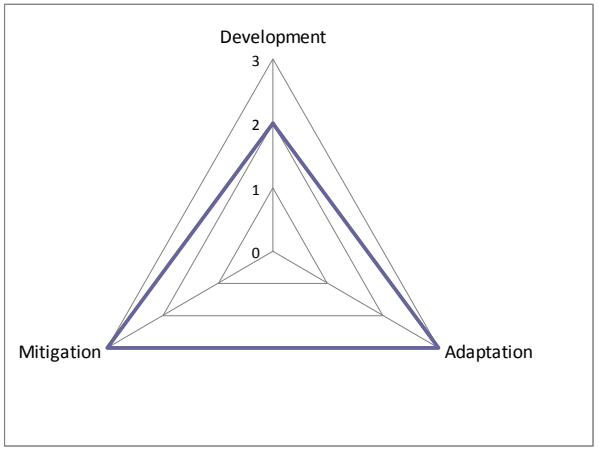
Time needed for use: User dependent, less than a day. As an information dissemination tool, it can be used whenever required to gain insight
Language(s): English

Contact details: +43 1 26026-3714; office@reegle.info
Website: http://www.reegle.info/

E.11 ClimateTechWiki

Name of the tool: ClimateTechWiki
Category of tool: Low carbon development / technology platforms or databases
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options; Identification and selection of policies; Implementation of policies
Type of tool: Knowledge sharing
Purpose of the tool:
The ClimateTechWiki website offers information on technology transfer and on the wider context of low emission and low vulnerability development. The website is a platform for a wide range of stakeholders from both developing and developed countries involved in these topics e.g. NGOs, scientific/academic communities, manufacturers, (green) finance community and media. Further, ClimateTechWiki offers detailed information on a broad set of mitigation and adaptation technologies. Users can register what enables them to upload new technology case studies or participate in forum discussions.
Keywords: Mitigation/Adaptation Technologies; Technology Transfer.

Geographic usage: Worldwide, it is a web site. (Over ten countries)
Key area of focus:



Accessibility / availability: Online, and considering an app. for mobile phones.
Costs: No costs
Costs for access to the tool / data / training: No costs
Training requirements: No

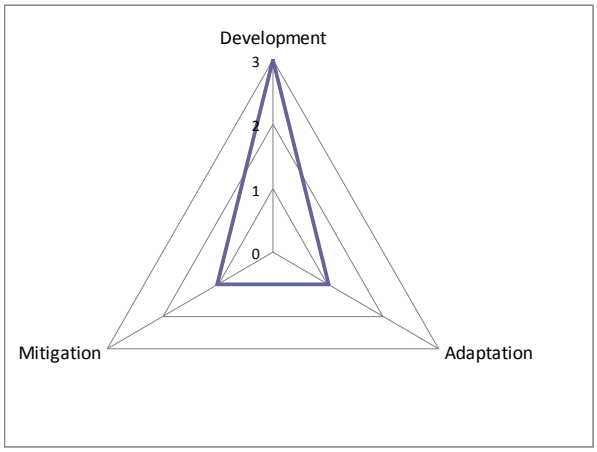
Time needed for use: User dependent, less than a day. It can be accessed whenever information is required.
Language(s): English

Contact details: Hilary McMahon, hilary.mcmahon@undpaffiliates.org, Tel: +1 212 906 6755
Website: http://climatetechwiki.org/

E.12 HEDON

Name of the tool: HEDON
Category of tool: Low carbon development / technology platforms or databases
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options
Type of tool: Knowledge sharing
Purpose of the tool:
HEDON informs and empowers practices on household energy, by addressing knowledge gaps, facilitating partnerships and fostering information sharing. The web site tries to be a place where practitioners, policy-makers, funders, and business-owners actively pursue a cleaner, affordable and more efficient household energy sector. They can unite to share their experiences, learn from one another, and create new knowledge.
Keywords: Household Energy, Information sharing, Stakeholder platform, Learning.

Geographic usage: Worldwide, it is a web site. (over 10 countries)
Key area of focus:



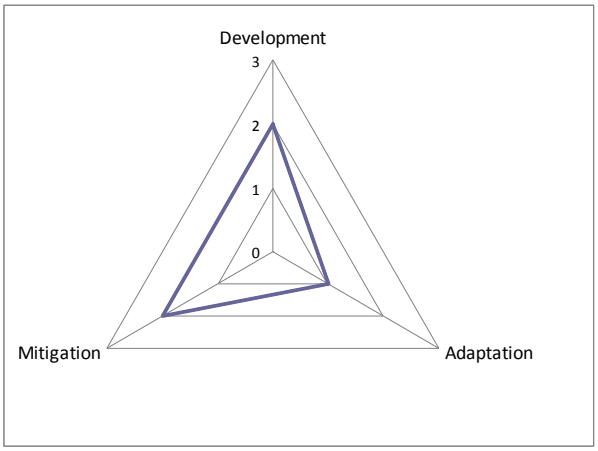
Accessibility / availability: Online and Hardcopy
Costs: No costs.
Costs for access to the tool / data / training: No costs.
Training requirements: No
Time needed for use: Dependent on user, less than a day. It can be accessed whenever information is required.
Language(s): English, and if wanted partly Spanish, French and Chinese.

Contact details: On website http://www.hedon.info/contact
Website: http://www.hedon.info/

E.13 OpenEI

Name of the tool: OpenEI
Category of tool: Low carbon development / technology platforms or databases
Approach to tool: Awareness raising;Problem definition; Identification of mitigation and/or adaptation options;Identification and selection of policies; Implementation of policies
Type of tool: Knowledge sharing
Purpose of the tool:
OpenEI is a website that tries to connect people to current knowledge on energy resources. The website shares information, data and visualizations that help decision-makers to come to more informed decisions. The website is funded by the US Department of Energy and developed and operated by the US National Renewable Energy Laboratory. The website offers an open platform for its users where new knowledge can be shared.
Keywords: Energy Information, Energy Data, Technology.

Geographic usage: Worldwide, it is a website. (Visitors from 168 different countries)
Key area of focus:



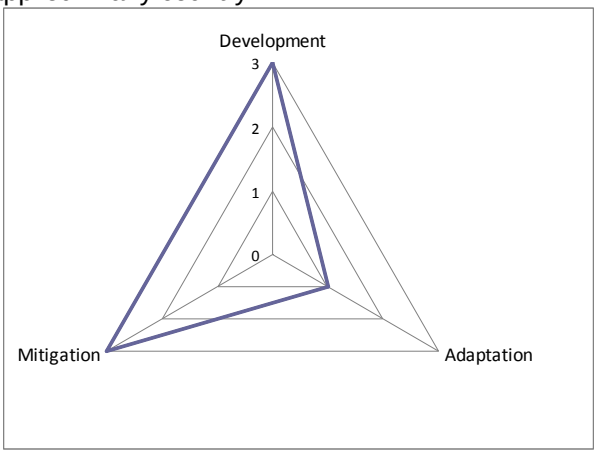
Accessibility / availability: Online
Costs: No costs.
Costs for access to the tool / data / training: No costs.
Training requirements: No training required for website itself.
Time needed for use: 0-2 weeks (likely to take less than a day).
Language(s): English

Contact details: Sadie Cox; Sadie.Cox@nrel.gov; +1 (303) 384 7391
Website: http://en.openei.org/wiki/Main_Page

E.14 LEDS framework and toolkits

Name of the tool: LEDS framework and toolkits (US National Renewable Energy Laboratory)
Category of tool: Low Emissions Development Strategies
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options; Identification and selection of policies; Implementation of policies; Evaluation of policies
Type of tool: Process Guidance
Purpose of the tool:
The LEDS framework and toolkits supports the creation and implementation of country-driven, analytically rigorous low emission development strategies (LEDS). Building on a review of similar methodologies and LEDS experiences internationally, it provides a generalized framework to guide countries through the development of LEDS. It provides toolkits for the various stages of the LEDS process. LEDS will enable countries to transition to low carbon economic development resulting in sustained growth in employment and investment, increased financial flows through carbon markets, reduced greenhouse gas (GHG) emissions, and other social, economic, and environmental benefits. The LEDS framework and toolkits are available on the OpenEI platform – http://openei.org/LEDS. This wiki platform allows users to add information and tools to the site that are used for various low emissions development planning activities. The US National Renewable Energy Laboratory, with funding from the US Department of Energy, continues to develop the LEDS framework and toolkits as new information becomes available.

Geographic usage: Can be applied in any country.
Key area of focus:



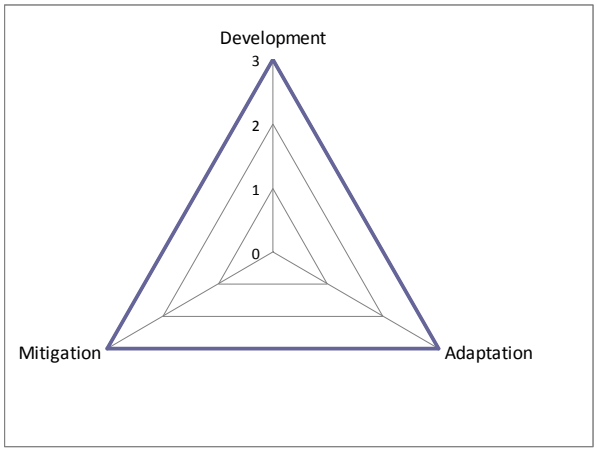
Accessibility / availability: Online.
Costs: No costs.
Costs for access to the tool / data / training: No costs.
Training requirements: No, but there are webinars.
Time needed for use: 1-2 years
Language(s): English and a Google plug-in to translate.

Contact details: Sadie Cox; Sadie.Cox@nrel.gov; +1 (303) 384-7391
Website: http://en.openei.org/wiki/Gateway:Low_Emission_Development_Strategies

E.15 MAPS

Name of the tool: Mitigation Action Plans and Scenarios, MAPS.
Category of tool: Low Emission Development Strategies
Approach to tool: Awareness raising;Problem definition; Identification of mitigation and/or adaptation options; Identification and selection of policies; Evaluation of policies
Type of tool: Process guidance
Purpose of the tool:
This methodology is a process guidance methodology towards a national approach to greenhouse gas reduction. A multi-stakeholder approach allows research based scenarios to be identified. These scenarios are designed to produce the information and options required by decision-makers that participate in the formulation of a national approach to greenhouse gas reduction.
The stakeholders involved in this bottom-up process are experts in the different disciplines that are required to come up with a solid scenario and should be government mandated. MAPS will provide support in the form of scenario modeling, research, process design, stakeholder management and in some financial resources as well.
Keywords: Scenario(s), Mitigation, Development, GHG reduction.

Geographic usage: South Africa, Developing Countries/Emerging Economies (Brazil, India, China). (6-9 countries)
Key area of focus:



Accessibility / availability: Partly by website, partly hardcopy. (Presentation)
Costs: No costs.
Costs for access to the tool / data / training: No costs.
Training requirements: Special training is required and more than eight days.
Time needed for use: More than three months
Language(s): English

Contact details: Stefan Raubenheimer; stef@southsouthnorth.org; +27 (0) 824915465
Website: (presentation) http://prod-http-80-800498448.us-east-1.elb.amazonaws.com/w/images/f/fa/MAPS_General_Presentation_(3).pdfv

E.16 ESMAP LCGCS

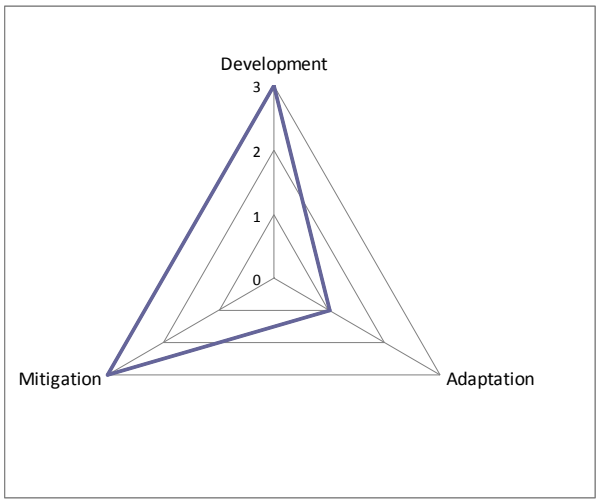
Name of the tool: ESMAP Low Carbon Growth Country Studies
Category of tool: Low Emissions Development Strategies
Approach to tool: Awareness raising; Problem definition;Identification of mitigation and/or adaptation options
Type of tool: Process Guidance

Purpose of the tool:
ESMAP's Low Carbon Growth Studies (Pilot Project 2007–09) helped the governments of middle-income-countries to assess their development goals and priorities for GHG mitigation. The studies considered the additional costs and benefits of lower carbon growth and how to finance such measures.

Since there is no single approach to the Low Carbon Growth Country Studies, each new study will be determined by the country's government and local stakeholders and tailored to the country's economic circumstances. Each country leads its own study in its local context. This approach equips each country to plan and implement responses to the unique challenges posed by climate change on its people and ecosystems. ESMAP supports these efforts through: Policy response, Technical assistance, Knowledge transfer and Funding to support modeling of carbon pathways.

Keywords: Development, Low Emissions, Climate-Resilient

Geographic usage: Different tools are used in more than 10 countries, e.g. Brazil, China, India, Indonesia, Mexico, South Africa and Poland.
Key area of focus:



Accessibility / availability: Online, CD Rom, Hardcopy
Costs: No costs.
Costs for access to the tool / data / training: No costs.
Training requirements: Special training is required, taking 3-5 days.
Time needed for use: 1-2 years
Language(s): English

Contact details: Oliver Knight; oknight@worldbank.org; (+1) 202-473-3159
Website: http://www.esmap.org/esmap/LCGS

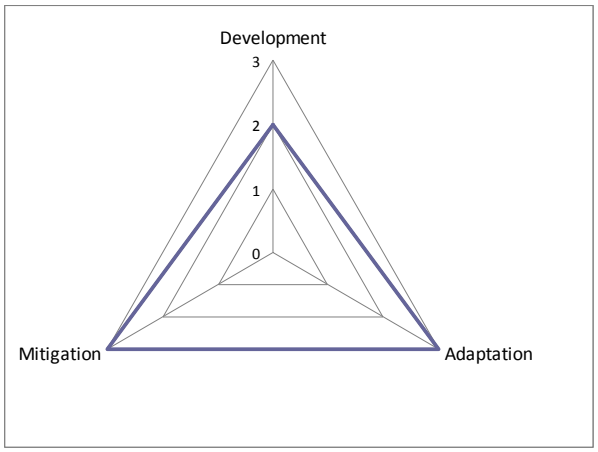
Appendix F – Fiche TNA (Adaptation and Mitigation)

F.1 TNA Handbook

Name of the tool: United Nations Development Program (UNDP) Technology Needs Assessment (TNA) handbook (2010)
Category of tool: Technology Needs Assessment (TNA)
Approach to tool: Awareness raising; Problem definition; Identification of mitigation and/or adaptation options; Identification and selection of policies
Type of tool: Process Guidance
Purpose of the tool:
The UNDP Technology Needs Assessment handbook (2010) explains the process surrounding the submission of Technology Needs Assessments to the United Nations Framework on Climate Change (UNFCCC) Secretariat. TNAs are undertaken in order to evaluate and prioritise technological needs for the mitigation of greenhouse gases and adaptation to climate change, so as to facilitate sustainable development. The handbook has been built upon lessons learnt surrounding TNAs over the past decade and provides a comprehensive step-by-step framework for undertaking a TNA. Guidance is provided surrounding the following: organisational and administrative processes required for TNA implementation; the formulation of development priorities in light of climate change; the identification/prioritisation of sectors in regards to their contribution to mitigation and adaptation; the identification/prioritisation of relevant low carbon technologies with the aim of maximising development goals, reducing greenhouse gases emissions and boosting adaptive capacity. It also summarises ways in which a country can contribute to the development and transfer of relevant technologies.
Keywords:
Technology Transfer; Mitigation; Adaptation; Sustainable Development;

Geographic usage:
Albania, Antigua and Barbuda, Armenia, Azerbaijan, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, Cambodia, Cape Verde, Chad, Chile, China, Colombia, Comoros, Congo, Cote D'Ivoire, Croatia, Democratic Republic of the Congo, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Georgia, Ghana, Republique de Guinee, Guyana, Haiti, Indonesia, Islamic Republic of Iran, Jamaica, Jordan, Kenya, Lao People's Democratic Republic, Lebanon, Lesotho, Madagascar, Malawi, Mali, Malta, Mauritania, Mauritius, Namibia, Niger, Niue, Paraguay, Peru, Philippines, Republic of Moldova, Saint Kitts and Nevis, Saint Lucia, Samoa, Senegal, Seychelles, South Africa, Sri Lanka, Tajikistan, Thailand, the former Yugoslav Republic of Macedonia, Togo, Tunisia, Turkmenistan, Uganda, Uzbekistan, Viet Nam, Zimbabwe.

Key area of focus:



Accessibility / availability: Available online, on CD Rom, in hardcopy and on USB-sticks.
Costs: No costs to acquire the tool.
Costs for access to the tool / data / training: More than $2000
Training requirements: Training is optional, but recommended. Approximately 3-5 days of training
Time needed for use: More than three months. (8-24 months, depending on resources).
Language(s): English, Chinese, Spanish, French.

Contact details:
Bert van der Plas (Climate Change Secretariat (UNFCCC), BVanderPlas@unfccc.int
Website:
http://unfccc.int/ttclear/pdf/TNA%20HANDBOOK%20EN%2020101115.pdf
http://unfccc.int/secretariat/items/1629.php

Appendix G – Survey for Tool Developers

CDKN User-orientated comparative analysis of climate compatible development planning methodologies

Survey on input on the tools from technology developers

The survey is divided into three parts. Each part represents a different type of question which is described at the beginning of each section. Please fill in the yellow cells and, if needed, use the space for additional specification provided for each question for any other details.

Questions Part 1

Please fill in the table below for using the following scoring system from 0-3.

Score	What this score means
0	Not relevant for us/we do none of this
1	We do some of this
2	We do a lot of this
3	This is the most important aspect for us. It is a defining characteristic of our tool/service

Question	Score	Additional specifications/ notes (optional)
Key area of focus: To what extent does the tool address the following areas?		
• adaptation		
• mitigation		
• development		
Policy Cycle: Which step(s) of the policy cycle does the tool cover/ support?		
• Awareness raising		
• Problem definition		
• Identification of mitigation and/or adaptation options		
• Identification and selection of policies		
• Implementation of policies		
• Evaluation of policies		
• Other – please specify		
Main governance level addressed: Which governance level does the tool aim to support (please score)?		
• International		
• National		
• Regional		
• Other – please specify		
Accessibility: In which format is the tools available. Please score according to the relevance of each format.		
• Internet		
• CD Rom		
• Hardcopy		
• Other format (specify)		
Stakeholder involvement: Which stakeholder groups' participation is needed in the application of the tool?		
• national policy makers		
• donors		
• private sector		
• civil society		
• NGOs		
• scientific / academic communities		
• other (specify)		
Main audience: Which audience is the tool addressing with its output or results?		
• national policy makers		
• in-country donors		
• technical experts		
• other (specify)		

Questions Part 2

Please fill in the table below using the scoring from 0-3 as described for each question separately.

Question	Score	Additional specifications/notes (optional)
Geograpical usage: How many countries has the tool been used in (best estimate)? ***Score description:*** 0 0-2 countries 1 3-5 2 6-9 3 10 or more		
Output monitoring and evaluation: To what extent does the tool include monitoring and evaluation of its output/outcome? ***Score description:*** 0 None 1 Implicit 2 Explicit 3 Integral part of tool		
Costs: Please score separately for each of the following questions using your best estimates. ***Score description:*** 0 free 1 up to $500 2 $500-$2000 3 More than $2000		
• How much do tool users have to pay for acquiring the tool? (e.g. software licensing, purchase of hardcopies/CD-Roms)		
• What are the estimated training costs per person prior to using the tool?		
• What are the estimated costs of using the tool through to completion? (after training and acquisition of the tool)		
Training requirements (1): To what extent is special training required to use the tool? ***Score description:*** 1 Required 2 Optional but recommended 3 None required		
Training requirements (2): To what extent are the tool developers/owners involved in training? ***Score description:*** 0 Training of users always carried out by tool developers 1 Tool developers carry out training of trainers (ToT), who then train users 2 Both 1 and 2 3 Tool developers not involved with training		

Training requirements (3): How much training is required? ***Score description:***			
0	1-2 days		
1	3-5 days		
2	6-8 days		
3	More than 8 days		
Time for implementation: How long does it take to complete the tool from start to finish (best estimate)? ***Score description:***			
0	up to 2 weeks		
1	2-4 weeks		
2	5-12 weeks		
3	12 weeks+		
Independence of implementation: Can the tool be implemented by the user independently or are partner organisations (esp. the tool developer) needed? ***Score description:***			
0	Do it yourself – the tool is intended to be implemented entirely by the user		
1	It is optional to work with partner organisations.		
2	User must work with partner organisations		
3	Implementation has to be completely outsourced to partner organisations		

Questions Part 3

Please fill in the table below by providing answers in the specified field.

Question	Specification (Answer)
Sector covered: Is the tool sector-specific? If yes, please specify which sector(s) the tool is aimed at	
Case studies and guidance material: Is the tool accompanied by guidance material or case studies?	
• Guidance material (please specify)	
• Case studies material (please specify)	
Language: Which language(s) is the tool available in?	
Availability of financing: Do you or any other institution provide funding for users of the tool? If yes, please specify	
• At what stage(s)?	
• How many users have been funded so far?	
• How many will be funded over the coming year?	
Extended coverage: Can the tool be used in other areas than those intended (e.g. geographical, sectoral, etc…)?	

Appendix H – Survey for Users of the Tool

CDKN Climate compatible tools project – User-oriented survey

Hello,

Welcome to this survey for the CDKN climate compatible tools project. We would greatly appreciate if you could spare about 10 minutes of your time for this survey.

The survey is part of a new project funded by the Climate and Development Knowledge Network CDKN. The project aims to provide a comparative analysis of climate compatible tools and methodologies. Climate compatible development is development that minimises the harm caused by climate impacts, while maximising the many human development opportunities presented by transitions to a low emissions, resilient future.

Many climate compatible planning tools and methodologies have been developed and are in use across the world. But as yet, there is no comprehensive way for decision-makers to tell which methodologies may be most appropriate to their interests and local circumstances.

This project aims to close the information gap and enable decision-makers in developing countries to select more appropriate methodologies for their needs.

We are conducting this survey to understand better what tools and methodologies are being used by our target group and how appropriate they are for planning climate compatible development.

Your participation will be a great help for advancing the project and for improving our knowledge for planning climate compatible development.

Thank you very much for your participation in this survey

Part 1: Information about the user

This section is intended to provide some information about you as the user, such as your key expertise and the organisations you are working for.

Please tick the relevant boxes that apply best to your specific situation.

1.1 What is your key area(s) of expertise? Tick all that apply.

- Adaptation
- Mitigation
- Development

1.2 What type of organisation are you working with?

Government
Donor agency
Multilateral agency
Private sector
NGO
Local community
Other (please specify)

1.3 Are you any of the following? If yes, please tick the relevant box.

Policy maker
Civil servant
Technical expert
Consultant
In-country donor

1.4 Are you currently involved in projects with a developing country focus?

Yes
No

1.5 In which region(s) are you currently working? Tick all that apply.

Africa
Asia
Europe
Latin America
North America

Part 2: Tools / methodologies for climate compatible development

For this survey, we are considering tools and/or methodologies which help with the identification, prioritisation, implementation or sharing of decisions and actions on climate change and development. They can be used by different users or scales (geographical or governance).

Section 2. 1: Using the text boxes below, please tell us about your experience with climate change and/or methodologies.

2.1.1 Which tools and/or methodologies do you use in your work relating to climate change for example, CRiSTAL for adaptation (www.cristaltool.org) or LEAP for mitigation (http://www.energycommunity.org/default.asp?action=47)?

2.1.2 Which key areas do these tools / methodologies address, for example community-based adaptation or low carbon development planning?

2.1.3 From the tools / methodologies mentioned by you, which **one** would you rate as the most useful?

Please explain why.

2.1.4 From the tools / methodologies mentioned by you, which **one** would you rate as the least useful?

Please explain why.

2.1.5 Are there any tools / methodologies you would like to use, but you don't have access to them?

Yes

If yes, which one(s)?
If yes, why can't you access them?

No

2.1.6 Are there any tools / methodologies you would like to use, but you require training before using them?

Yes
No

If yes, which one(s)?

Section 2. 2: ***The most useful tool and/or methodology for climate compatible development***

You have just selected a climate change related tool or methodology you find the most useful in your work. We will now ask a few questions about the tool / methodology selected by you. Please rate your experience of this tool / methodology on a scale from 1 to 5 or with multiple choice answers where appropriate.

2.2.1 How easy is the most useful tool / methodology to handle on a scale from 1 to 5, with 1 being the easiest and 5 being the most difficult? Please tick the relevant box.

1	2	3	4	5
easy				difficult

2.2.2 How much training does the most useful tool / methodology require on a scale from 1 to 5, with 1 being no training and 5 being highly intensive training? Please tick the relevant box.

1	2	3	4	5
no training				intensive training

2.2.3 How accessible is the most useful tool / methodology on a scale from 1 to 5, with 1 being very accessible (through internet, manuals, CDs) and 5 being very difficult to access? Please tick the relevant box.

1	2	3	4	5
very easy access				difficult access

2.2.4 Are there any costs associated with accessing this tool / methodology?

Yes

No

Don't know

2.2.5 How well does the most useful tool / methodology address each of the issues below on a scale from 1 to 5, with 1 being high attention to the issue and 5 being no attention? Please tick the relevant boxes.

Development	1	2	3	4	5
Adaptation	1	2	3	4	5
Mitigation	1	2	3	4	5
Climate compatible development	1	2	3	4	5

Part 3: Further comments

Do you have any further comments you would like to share with us?

Thank you very much for taking the time to fill in this questionnaire