

# SUSTAINABLE ENERGY



ARCHIVE PHOTO FROM INFORSE. AMAGI 2-POT IMPROVED COOK STOVE BY IDEA, SRI LANKA





## IMPACTS OF CLIMATE CHANGE

Impacts of climate change are increasingly being felt by people around the world and impacts are projected to increase in the coming years. Changing weather patterns, rising temperatures and increasing occurrence of droughts and floods are typical impacts making life more difficult among the poor in the Global South. Climate change challenges poverty reduction and resilience. For all interventions, it is important to target the most vulnerable as part of the approach as they are the most exposed to climate change impacts.

# HOW TO USE THIS CLIMATE INTEGRATION TOOL

This climate integration tool is primarily intended for assisting organisations, which are not having climate change actions as their core area of operation. As CISU, we want to **support our member organisations to further integrate climate action in their development work.** Integrating climate actions is defined as the process of inclusion of climate change related actions into sector implementation, outcomes and policies.

### How to use this tool

The climate tool has two main sections, one on **ENTRY POINTS** with **KEY QUESTIONS FOR YOUR ANALYSIS** related to climate action integration when developing your intervention. Here you will also find inspiration on where to look for relevant information.

The second section **OPPORTUNITIES FOR INTEGRATION** has examples and practical

inspiration on **ACTIVITIES AND APPROACHES**, as well as examples on outcomes and indicators for climate action integration.

### When should we think climate?

In the intervention preparation phase, ask yourselves and your partners the following questions to find out whether climate actions are relevant:

- **Is the target group impacted by climate change?**
- **Is the thematic focus impacted by or impacting on climate change?**

If you can answer yes to any of these questions, this climate tool can provide inspiration on how to get started with integrating climate actions in your intervention!

## CLIMATE ACTION

It covers adaptation, mitigation, risk reduction and resilience building. It is linked to disaster risk reduction and closely linked to green economy and environmental management.

## ADAPTATION

Climate change adaptation is the processes by which human beings and societies adjust to changes in climate by making changes in production systems and social and economic organisation in order to reduce vulnerability to changing climatic conditions. Adaptation is closely linked to building resilience of societies and contributes to people's adaptive capacity. In many ways, it resembles good sustainable development.

## MITIGATION

Mitigation is limited to the processes by which human beings and societies address the various human activities with potential to reduce emission of greenhouse gas. With CISU funded interventions having a focus on poverty reduction, the focus in climate action integration will naturally be on adaptation. Mitigation should be understood mainly as a co-benefit in the process.

ARCHIVE PHOTO FROM IAS, KENYA 2019



# HOW-TO-GUIDE ON INTEGRATION OF CLIMATE ACTION IN DEVELOPMENT WORK



## ENTRY POINTS

Development interventions addressing sustainable energy are working within a sector that experiences major impacts from climate change. Many activities related to integration of climate action will address adaptation as well as mitigation.

The energy sector has major impact on both climate change and on vulnerability of communities. Thus, the energy sector must improve significantly in terms of access to clean and affordable energy.

### Sector Policies

In seeking answers to the questions, different entry points can be used. The entry points for seeking information on integrating climate action include the energy **sector policies, plans and programmes** for the specific countries.

### National Climate Plans

Other entry points are **the NAPs, the NAPAs, the NDCs and the National Communications** for the respective countries. The NAPs can be accessed here: [UNFCCC-NAPs](#). The NAPAs can be accessed here: [UNFCCC-NAPAs](#). The NDCs can be accessed here: [UNFCCC-NDCs](#), and the National Communications can be accessed here: [UNFCCC - National Communications](#). All the documents have information relevant to the energy sector. Typically, they have information on actions to address climate action integration in the energy sector.

## TYPICAL IMPACTS FROM CLIMATE CHANGE

- Droughts and changing weather patterns impact ecosystems and decrease access to wood fuels, biomass and hydro power
- Reduced capacity for provision of clean and affordable energy solutions
- Increase in GHG emission through fossil and wood fuel consumption
- Increased vulnerability of local communities due to limitations in energy access

## KEY QUESTIONS FOR YOUR ANALYSIS

When seeking to integrate climate action in sustainable energy, it is relevant to consider the following questions:

- What are the impacts on energy supply that climate change has and is likely to have in the intervention area?
- What obstacles are there for better access to more sustainable energy sources? – and will the planned activities contribute to increased access to low-carbon energy sources?
- What are the strategies used by communities to manage risks associated with access to energy? – and what are the livelihoods-energy-climate linkages for different groups within the communities?
- Are there underlying reasons for vulnerability related to energy access including poverty, gender and marginalisation? – Are there opportunities and locally available capacities?
- How is the institutional and policy environment related to the energy sector and especially in relation to access to clean and affordable energy by the poor?

### World Bank

Another entry point, where a good amount of relevant data on climate actions can be found is the **World Bank Climate Change Knowledge Portal**. The portal can be accessed through this link: [WB CC knowledge - country profiles](#) (go to country heading and select a country). Here you will find the climate and adaptation profile of each country with data such as: natural hazard affecting the country, the climate future, the current and future impacts and adaptation options. This information might help you integrate climate change information and climate action into your intervention.

### Local Development Plans

Important entry points are **local development plans**. The local development plans – typically the district or municipal development plans can have climate related actions described in the sections on energy.

### Other Entry Points

Other plans/documents include possible **Disaster Risk Reduction Plans** for the area (commune, district, province). They can have relevant climate actions for the energy sector. In some cases, different assessments covering the area including **vulnerability assessments** or **participatory poverty assessments** exist. Here, access to energy could be included.

Check also with other CSOs in the area, what material they might have. Some of the most relevant tools addressing climate action integration within the energy sector include: [EUEI Energy](#), [ESMAP Energy](#).

# CHECKLIST



Information sources in sustainable energy	To be found? Yes/No	Consulted? Yes/No	Relevance of information? High/Medium/Low
Sector policies, strategies, plans			
Country documents submitted to UNFCCC – NDC, NAPA, NAP, National Communications			
World Bank CC Knowledge Portal			
Local development plans			
Disaster Risks Reduction plans			
Vulnerability assessments/Poverty Assessments			
Planning for undertaking Vulnerability Assessment			



## OPPORTUNITIES FOR CLIMATE INTEGRATION

There are several opportunities for integrating climate action within sustainable energy. The opportunities are first and foremost related to climate change adaptation but often also include good mitigation benefits. Especially within access to clean and more efficient energy and in relation to management of woody biomass for more efficient use as charcoal and firewood.

The focus for integrating climate action should be on building resilience of the poor. Improving access to more sustainable and healthier energy is an important aspect of building resilience among local communities. Promoting improved access to sustainable energy is closely linked to agriculture/natural resources and to health and water. Focus on participation and inclusion of the most vulnerable, including access and rights of women and marginalised groups, must be part of the approach.

## ACTIVITIES AND APPROACHES

- Promote access to **clean cooking fuels**, including improving sustainability of charcoal sector and reducing health risks especially among women and children. This is adaptation and mitigation. Related to capacity development and strategic services.
- Support **diversification of energy supply** including renewables-based mini grids or small-scale energy installations in rural areas (reaching the many poor that are off-grid). Covers adaptation and mitigation. related to advocacy and capacity development. Could also be part of strategic services.
- Support **small-scale hydro** power systems. Mainly adaptation. Related to advocacy and possibly capacity development.
- Support access to household level **solar photovoltaic systems**. This is adaptation and mitigation. Related to advocacy and capacity development.
- Support **energy efficiency** investments in production facilities. Mainly mitigation with some aspects of adaptation. Mainly related to advocacy and capacity development.
- Introduce **drought resistant wood-fuel** species. Adaptation and mitigation. Part of capacity development and strategic services.
- Improve **forest and woodland management** for improved and sustainable charcoal and firewood management. It has adaptation as well as mitigation impacts and is related to advocacy, capacity development and strategic services.
- Contribute to land use planning for more **sustainable production of wood fuel and biofuels**. Ensuring that food-security and local resilience is addressed. Addresses adaptation and mitigation and relates to advocacy and capacity development.
- Improved **catchment management** in relation to different sizes of hydro-power generation. This is adaptation and mitigation. Relates to advocacy and capacity development.
- Promote low-carbon energy sources for **efficient water** use and **improved irrigation**. Adaptation and mitigation, to be done in relation to capacity development and strategic services.
- Promoting **policies and plans** within sustainable energy that are climate proofed and take into consideration changing climate. Directed at local government and water and sanitation sector. Related to advocacy.
- Addressing **institutional capacity development** for energy sector stakeholders to increase their capacity in supporting climate resilience issues in the sector. Related to capacity development but also include advocacy.
- Promote **awareness** on sustainable energy and climate impacts. Related to advocacy and capacity development.
- Including **energy** issues for improved resilience in farmer and adult **training processes** such as farmers field schools and technical training. To be addressed through capacity development activities.
- Promoting **better supply, access and climate proofing** of energy infrastructure. Include energy issues in disaster risk reduction strategies to reduce the negative impacts of hazards on energy supply. Related to advocacy, capacity development and strategic services.
- Consider opportunities of linking to **carbon offsetting** systems. Primarily related to advocacy.

## MONITORING: FORMULATION OF INDICATORS

## CHECKLIST



When integrating climate action in a sustainable energy intervention, it is important to reflect the impact of the selected approaches in the expected outcomes and results of the intervention. Have you for example selected diversification of energy supply, you should seek to include improved access by the target group to low-carbon energy sources in the outcomes and results.

With regards to indicators, you need to reflect on whether the monitoring set-up includes indicators on improved access to sustainable energy and improved adaptive capacity or resilience of the target group? And whether the indicators include monitoring of the institutional, planning and policy environment for adaptation in the energy sector?

### Examples of climate action indicators within sustainable energy interventions

- Increase in access to healthy and clean energy
- Improved resilience of energy supply under changing climate
- Improved institutional support to low-carbon energy access for poor communities

Integration activities in sustainable energy	To be found? Yes/No	Consulted? Yes/No
Access to clean, modern cooking fuels		
Diversification of off grid energy supply - mini grids, small-scale installations		
Promoting small-scale hydro systems		
Household access to solar photovoltaic systems		
Energy efficiency investments in production facilities		
Drought resistant wood-fuel species		
Improve forest and woodland management		
Sustainable production of wood fuel and biofuels		
Catchment management in relation to hydro-power generation		
Low-carbon energy sources for efficient water use and improved irrigation		
Promoting policies and plans within sustainable energy		
Addressing institutional capacity development for energy sector		
Promote awareness on sustainable energy and climate impacts		
Include energy issues for resilience in farmer and adult training		
Better supply, access and climate proofing of energy infrastructure		
Linking to carbon offsetting systems		



# SUSTAINABLE ENERGY IN RURAL DISTRICTS

Promoting access to sustainable energy and improved housing in vulnerable rural districts in Sri Lanka is the core focus of a CISU member organisation and their partner. For a new intervention, the partners have decided to integrate climate actions.

In the information by Sri Lanka to UNFCCC, in the World Bank Climate Change Knowledge Portal, and in the energy sector documents, it is stressed **that local and low cost technologies for rural areas** including **access to better wood stoves** are relevant adaptation measures in the country. Furthermore, it has positive impact on local resilience. And also have important mitigation co-benefits.

In the district development plans, information on specific energy related plans are found including information on specific initiatives related to household cooking energy.

The activities are to be addressed in relation to capacity development and strategic services.

The objectives and outputs of the proposed intervention are formulated so that they include improved access of the most vulnerable to cleaner cooking fuels and stoves. Indicators are revolving around number of households with access to cleaner cooking fuels and better stoves.

*The practical example is constructed based on experiences from interventions of different CISU members organizations.*