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Development and Energy in Africa: Inception Report

Contract no.: EIE-2003-201 DEA

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Abstract

This Inception Report refers to the COOPENER project "Development and Energy in Africa (DEA)" initiated on 1 May 2005. The purpose of the report is to present in concise form the approach to implementing the project agreed through discussion among all partners, further detailed specification of assumptions, deliverables and timing beyond that presented in the approved project document (Annex 1 to the Grant Agreement).

The 30-month project is implemented by Risoe National Laboratory, Denmark as project coordinator, in collaboration with the Energy Centre of the Netherlands (ECN), and in partnership with six African Centres:

- Botswana: EECG
- Ghana: KITE
- Mali: Mali Folkecenter (MFC)
- Senegal: ENDA-Energy
- Tanzania: TATEDO
- Zambia: CEEEZ

The overall objectives of the project are:

- that national energy policy is better informed to take into account the complex linkages between energy interventions and social and economic development, and
- that energy interventions are better designed to contribute to real development needs, especially poverty alleviation and income generation, and otherwise achieving the Millennium Development Goals.

The immediate objectives of DEA are:

- to establish and apply an Assessment Framework for evaluating development and poverty impacts of energy interventions, and
- to engage in a dialogue with energy policy makers and other stakeholders on the basis of the framework, with a view to incorporating these issues in energy policy.

There are no significant changes in the project context from the original project document. Identification and assessment of development impacts (poverty alleviation, MDG impact, etc.) of increasing energy access remains a high priority at global and national level.

A Kick-Off Workshop was held at Risø on 30-31 May 2005. All presentations are available on the project website at www.deafrica.net. The two-day workshop achieved its objective of bringing all project partners together to discuss the background for the project and the common approach, assign responsibilities and agree on detailed actions and a timetable for the first 6 months. The workshop provided an opportunity for all staff to become fully acquainted with the project and the partners.

The report was prepared by Gordon Mackenzie (project coordinator) with contributions from with contributions from Fatima Denton, Henk Harmsen (ECN), Nicoline Haslev-Hansen, Miriam Hinostroza and Wilson Wasike

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Preface

Development and Energy in Africa (DEA) is a project under the European Commission's Intelligent Energy - Europe programme COOPENER. Ultimately DEA aims to "support decision makers with the implementation of more sustainable energy policies, ..." in line with the key action VKA 11.1 of the COOPENER programme. The project will do this by identifying and quantifying, where possible, the elements of concrete energy interventions that contribute to sustainable development (SD) and systemising this in an Assessment Framework which can enhance policy to promote energy for sustainable development.

The principal aims of the Development and Energy in Africa (DEA) project are (i) to identify and examine the developmental impacts of energy innovations and actions linked to improving energy access and poverty alleviation and (ii) to use the information obtained to improve on-going and future energy interventions through the energy policy makers and institutions in the countries concerned.

Specific energy activities in six African countries (Botswana, Ghana, Mali, Senegal, Tanzania and Zambia) will be examined with respect to development impacts and a methodological framework developed to feed results back into the conception and design of new projects. The Project is aimed at national energy- and development-policy makers, initially in the six participating African countries, but with a view to wider application in Sub-Saharan Africa. The project is also relevant for international and national energy, development and environment practitioners.

The purpose of this Inception Report is:

- to document any changes to the project plan since the Grant Agreement Annex 1 (the project document)
- to present a concise description and plan of the project
- to ensure common understanding and ownership by all project partners
- to invite comments and recommendations from the Advisory Committee (AC)
- to revise draft on the basis of AC comments and/or include AC comments and recommendations

1 Introduction

This Inception Report refers to the COOPENER project “Development and Energy in Africa (DEA)” initiated on 1 May 2005. The purpose of the report is to present in concise form the approach to implementing the project agreed through discussion among all partners, further detailed specification of assumptions, deliverables and timing beyond that presented in the approved project document (Annex 1 to the Grant Agreement).

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The immediate objectives of DEA are

- i. to establish and apply an Assessment Framework for evaluating development and poverty impacts of energy interventions, and
- ii. to engage in a dialogue with energy policy makers and other stakeholders on the basis of the framework, with a view to incorporating these issues in energy policy.

2 Changes in project context

There are no significant changes in the project context. Identification and assessment of development impacts (poverty alleviation, MDG impact, etc.) of increasing energy access remains a high priority at global and national level, for example as highlighted in the MDG report (UN Millennium Project 2005).

3 Inception period

The initial 2-month Inception Period comprised a kick-off workshop, intensive discussion among project partners, consultation with the Advisory Committee, and updating and elaboration of the project details, approach and work programme, culminating in this report.

3.1 Kick-off workshop

The Kick-Off Workshop was held at Risø on 30-31 May 2005. It had been envisaged in the Annex 1 that first project workshop would take place in one of the targeted African countries. However due to personnel factors (key Risøe staff taking leave of absence and maternity leave) it was decided to hold the meeting at Risøe.

The workshop programme and the list of participants are included in Appendix A. All presentations are available on the project website at www.deafrica.net.

In conclusion, the two-day workshop achieved its objective of bringing all project partners together to discuss the background for the project and the common approach, assign responsibilities and agree on detailed actions and a timetable for the first 6 months. In addition, due to the unforeseen impending absence of two key Risøe staff, the workshop provided an opportunity for new staff to become fully acquainted with the project and the partners. Table 3.1 shows the key decisions made at the workshop regarding immediate actions.

Table 3-1 Key decisions at Kick-off meeting

Work Package	Decision/task	responsible
WP 1: Management	Draft Inception Report to be circulated by end June.	Risø/Gordon Mackenzie
WP 2: Literature review	Draft outline for literature review to be circulated by 21 June. Feedback from partners to be sent by 27 June. Final outline circulated 28 June.	Risø/Nicoline Haslev-Hansen
WP 3: Catalogue of energy interventions	Draft ToR to be circulated by 17 June. Feedback from partners to be sent by 24 June. Final ToR circulated 30 June.	ECN/Henk Harmsen
WP 4: Consultations	Send a plan for the country specific consultations	six centres send to Risø/Fatima Denton by 8 July.
WP 5: Assessment Framework	Circulate internally a zero draft of the PAF approach by 20 June.	Risø/Miriam Hinojosa, Wilson Wasike
Other deliverables	develop a working paper on policy to be circulated by 8 July. Risø will develop a Project Information Sheet to be circulated by 22 June.	Risø/Fatima Denton

3.2 Development of Information Sheet

A decision was taken at the Kick-off Workshop to prepare a project information sheet for immediate distribution to all interested parties. The information sheet is included in Appendix B.

3.3 Discussion of policy issues at kick-off meeting

The kick-off meeting provided the opportunity to revisit the objectives of the project and ensure that matters relating to scale of energy interventions, content of energy catalogue, value addition and finality, choice of technology and methodological issues were given greater thought, and agreement reached on responsibilities of partner institutions and key deliverables.

The example of a multisectoral approach of using energy as an entry point and applied to all sectors of development seemed to have gained much currency among the participants. Four questions demonstrated the richness and diversity of the 2-day workshop:

1. How can we develop synergies between energy and health, energy and education, energy and other critical sectors?
2. Under what conditions can energy services help achieve development objectives and reduce poverty?
3. What policy gaps can be exploited to influence policies and thus replicate successful energy initiatives?
4. How can we add value to energy projects within the overall framework of DEA and what opportunities can be exploited?

1. Building synergies – the multisectoral approach - The implementation of energy projects, policies and programmes in a separate cluster has exacerbated incoherencies in policy and created several missed opportunities. Energy is a socio-economic tool which has the potential to reduce poverty, empower local communities, create livelihood options and afford greater quality of life to people living in the margins of development. Energy can be linked to all development sectors and has the ability to further realise all the Millennium Development Goals even if it is not a stated goal in itself. Absence of energy services can hamper and reduce the quality of education in the same way that lack of modern energy services can limit healthcare access to the poor.

The multisectoral approach could work well by identifying energy needs and services for each sector. This, coupled with close collaboration with key ministries such as the Finance Ministry could provide the advocacy tools necessary to influence energy policies.

2. Energy services and socio-economic development - What types of energy intervention should be showcased in the catalogue and how do we define this especially given the fact that small scale energy projects are themselves subjected to varying appreciation and interpretation? By focussing on energy service delivery we can see the real impacts on poverty alleviation. Who is energy poor? Invariably the emphasis is on the rural poor and little consideration is given to urban and peri-urban poor whose consumptive and unsustainable energy patterns can have serious environmental and poverty implications for the rural poor.

3. Policies and replication of successful energy initiatives - Replication can be done more successfully if projects can be implemented within a coherent development framework. Replication would mean having concrete examples of initiatives that have had positive impacts in terms of job creation and reduction of drudgery, that are able to bring empowerment to women and men either through energy saving devices or simply by saving time. The multifunctional platform has been tested in Ghana, Mali and Senegal and is deemed “successful” in helping women save time and energy instead of devoting long arduous work on food processing activities.

5. Value additions – exploiting new opportunities - The catalogue of energy initiatives should be seen as an opportunity to develop tools that could help assess and measure projects. It is also important to explore what kinds of energy interventions have an impact on target objectives. Doing this would mean establishing very clear outcomes in terms of the finality we want to get to. Thus, we need to establish some parameters related to before and after interventions i.e. questions such as ‘what was the household composition?’, ‘what was the healthcare provision?’ are all worth posing. The Assessment Framework would need to be refined. A number of energy policies tend not to be pro-poor so the DEA Assessment Framework will present an opportunity to evaluate energy interventions that could help alleviate poverty. Both the user of the catalogue and the time span are important factors to consider. The catalogue should give some indication about interventions and make proposals about indicators that are applicable depending on the different countries.

Key Quotes

- Monitoring and Evaluation - *“We cannot assess everything”*
- Orientation – *“We need a ladder – but we need to know where we want to go”*
- Value Addition - *“We keep calling on the same people and there is such a thing as workshop fatigue”*
- Linkages - *“Energy is not an isolated sector”*
- Empowerment – *“Energy is a basic right”*

Recurrent Messages

- Energy interventions and initiatives should be grounded in local realities
- Effective energy policies would to some extent depend on the quality of information that is given to policy makers
- Energy services have to make financial sense in order to alleviate poverty
- Integrated rural development approach is about making cross linkages and ensuring that energy is linked to key development sectors

4 Work packages, approach and organisation

The general approach to the project as a whole is unchanged from that described in the Grant Agreement Annex 1. The core element of the project is the development of an Assessment Framework developed in WP5 and refined in WP7 on the basis of the case studies WP6.

The organisation of the project remains as illustrated in the Grant Agreement Annex 1, Appendix A. Risoe remains the lead institution, coordinating all but one of the Work Packages, with ECN taking responsibility for Work Package 3. The six African Centres, formally associated to the project as sub-contractors, play an important role in carrying out the national catalogue of energy interventions and the case studies. Moreover the Centres are closely involved in the development of the assessment framework and related tasks throughout the project through close contact with Risoe and ECN. The assigned staff members of all institutions are shown in table 3.1.

The Advisory Committee announced in the Annex 1 remains unchanged. The role of the committee will in general be to provide comment and expert advice on all substantive outputs of the project. No physical meetings of the Committee are foreseen with all necessary communication taking place electronically. Terms of Reference for the Committee are attached in Appendix C.

Table 4-1 Assigned staff from EU partner institutions and the African Centres (sub-contractors)

name	institution	responsibility/role
Gordon A. Mackenzie	Risoe (Denmark)	Project coordinator
Nicoline Haslev-Hansen	"	Literature review (until 30 June 2005)
Fatima Denton	"	Consultation/dissemination
Miriam Hinostroza	"	Assessment Framework
Wilson Wasike	"	Assessment Framework
Niels-Erik Clausen	"	Catalogue
Henk Harmsen	ECN (Netherlands)	Catalogue (WP3 coordinator)
Peter P. Zhou	EECG (Botswana)	Director/coordinator
Musamba Kaonga	"	
Farai Maiswa	"	
Boitumelo Motoma	"	(administration)
Harriette Amissah-Arthur	KITE (Ghana)	Director
Kwafu Wiake	"	Coordinator
Jamilla Agyeman	"	
Ibrahim Togola	MFC (Mali)	Director/coordinator
Ousmane Ouattara	"	
Sécou Sarr	ENDA (Senegal)	Coordinator
Jean Philippe Thomas	"	
Estomih Sawe	TaTEDO (Tanzania)	Director
Gisela Ngoo	"	Coordinator
Geoffrey Sanga	"	
Francis D. Yamba	CEEEZ (Zambia)	Director/coordinator
Lilian Zulu	"	
Gilbert Phiri	"	

4.1 WP1: Management

The DEA project is very complex from a management point of view, involving two EU partners, six African sub-contractors, as well as national stakeholders in the target countries, and a large number of intermediate outputs in a sequence of activity

over a period of 30 months, with strict reporting deadlines throughout. The Grant Agreement Annex 1 document includes a number of inter-related management tools aimed ultimately at ensuring timely delivery of all the various project components. These comprise the LFA matrix, the Assumptions Monitoring form, the List of Deliverables and the Performance Indicators.

The fundamental tool in planning the project is the LFA matrix, combined with the Assumptions Monitoring Form and the Project Implementation Plan (MS-Project GANTT diagram). The LFA Matrix and the Assumptions Monitoring Form allow project management to track and correct any inconsistencies in project due to design as well as external factors which may affect performance. These tools have been updated and expanded, where appropriate, during the Inception Period and the latest versions are attached in Appendices D, E and F.

With regard to day-to-day management and monitoring of the project, it is more convenient and operational to focus on the following tools:

- **Outputs and Quality Assurance (Appendix D)**
The specific outputs, derived from the List of Deliverables, are listed in a table in chronological order of “due date” and the table is updated as outputs are completed (or delayed) and checked by the officers responsible for Quality Assurance.
- **Performance Indicators (Appendix E)**
 - i) Key activities for all Work Packages are listed with indication of due dates and completion dates. The table will be completed as the project progresses and the latest version included in progress reports.

4.2 WP2: Literature Review

The Literature Review work package is scheduled to take place during the three months immediately following the Inception Period. A draft outline for the review was presented and discussed at the kick-off meeting and thereafter refined to the following structure.

Purpose

- The literature review feeds the development of the Preliminary Assessment Framework and provides an overview of available methods for analysing development, poverty and energy linkages and of results in this area.

Activities

- Conduct a literature survey on energy and development, methodologies used to assess their interlinkages and creating an overview of existing indicators for evaluation of these interlinkages.
- On the basis of the literature survey, classify and discuss the various methods and indicators currently available, pointing out advantages, disadvantages, areas of application, etc.

Output

A report consisting of a critical examination of literature on energy and development at global level with focus on Africa and the six target countries, addressing particularly:

- Development-energy links

- Methodologies and indicators for measuring the impact of energy interventions/innovations on poverty/development

Timing and partners involved

- Literature review to be carried out July- September 2005.
- Risoe: 154 hours
- ECN: 62 hours
- Centres: 186 hours (31 each)

Content

The review studies material that

- Theoretically describes the linkages between energy and development
- Empirically proves linkages between energy and development
- Analyses if (and how) energy interventions positively impact development
- Measures the impact of energy interventions on poverty alleviation
- Analyses how to scale up successful energy interventions
- Analyses how to get the attention of policymakers, financiers and other stakeholders to put time and money into energy

Focus

- Quantitative and qualitative impacts of energy interventions on poverty alleviation and development.
- Working primarily within economic assessment, supplemented by sociology, political and environmental science
- Material from scientific journals and research institutions as well as material from international organisations dealing with energy and development.
- Perspective: Macro-, meso- and micro-level, however the empirical analysis focuses on small- and medium scale enterprises, bringing the focus on the micro-level to the forefront.
- Technology neutral, however the emphasis on small scale/micro enterprises automatically narrows the technology choice (excludes for instance large power plants, nuclear power, large dams).
- Not geographically limited. Relevant case studies or analysis from other countries than the 6 involved – and other regions than SSA – included when relevant.
- The literature specifically reviewed is published between 1995 and 2005. This does not exclude that older methods and approaches are included in so far as they still carry relevance and/or validity for the current analysis

Categories

- The initial search identifies analyzing within the following categories in the area of energy and development:
- Approach
- Measure of energy poverty
- Impact on poverty alleviation and development
- MDGs

Other ongoing projects and initiatives

There are several ongoing donor initiatives in the area: AREED, EUEI (incl. PDF and the Energy Facility), ESMAP, GVEP, GNESD, REEEP etc., and bilateral support. The activities and results of these initiatives will be included in so far as they have any relevance or bearing on the main content as described above.

4.3 WP3: Catalogue of Energy Interventions in Target Countries

The Catalogue has two purposes:

- to identify and characterise relevant energy interventions in the countries as an input to the development of the Assessment Framework, indicating the spread of intervention types and the data availability that the Assessment Framework should be able to address.
- to provide candidates for Case Studies to test the Assessment Framework when it has been developed.

The six Centres will be responsible for collecting information on energy interventions in their countries, and compiling a national catalogue. This will be done on the basis of a Terms of Reference developed by ECN with assistance from Risø. The Terms of Reference are included in Appendix H.

4.4 WP4: Consultation with National Policy Makers and Stakeholders

The first formal contact with national policy makers and stakeholders will be at the first series of national workshops scheduled to take place in the country capitals during September 2005. It was agreed at the kick-off meeting that these workshops should be kept relatively short to a maximum of one day. These first workshops will serve to introduce the project to the national stakeholders and to relate DEA to other activities in the countries. Before and after the national workshops, informal and targeted contact between the Centres and relevant stakeholders will take place to discuss and determine the real needs for the Assessment Framework, to identify potential projects for study and to keep stakeholders informed on progress.

The schedule for the First National Workshops in the four Anglophone countries was provisionally set by the end of the Inception Period. Workshops in the two Francophone countries are tentatively scheduled for mid-October.

country	date	venue
Ghana	1 or 2 September 2005	Accra
Botswana	5 or 6 September 2005	Gaborone
Zambia	8 or 9 September 2005	Lusaka
Tanzania	12 or 13 September 2005	Dar es Salaam

4.5 WP5: Development of Preliminary Assessment Framework

The Assessment Framework will be approached in a similar way to that used in earlier Methodological Framework tasks carried out by the lead institution (Halsnæs et al. 1999). The main body of work on WP5 is still planned to follow completion of WP2, WP3 and WP4, starting by October 2005. On the basis of initial discussions at the Kick-off Workshop, a preliminary six-step structure has been developed and is shown below. This outline will be further refined as the framework is developed further, especially as input is received from WP2, WP3 and WP4.

Step 1: Define and specify nature of energy interventions and the baseline

The catalogue (WP3) and national consultations (WP4) will provide information on energy interventions and the baseline for each of the projects. A major challenge in

the present case will be the concept of baseline¹. In a mitigation study, the baseline against which the policy intervention is measured is essentially the business-as-usual case. In assessing the development impact of a concrete action (energy intervention) which has already been implemented or taken place, it will be necessary to recall and quantify the situation before the intervention.

Step 2: Assess the availability and quality of data on each energy intervention

Step 3: Delineate basic analytical tools and review strengths and weaknesses of each
Examples of basic analytical tools include: correlation tests, regression model, and field data collection/analysis (or detailed micro-based analysis). Secondly, consider links between data and analytical tools for each energy intervention with a view to making a choice.

Step 4: Define the objective function and generate agreement/consensus on quantitative targets and indicators of development impacts due to implemented/proposed energy interventions.

Logically, the entry point is to start with the general objective function of human wellbeing (i.e., a general aggregate measure that includes sub-elements such as access, freedom, empowerment etc.)², then select some arguments in this function, and link the selected arguments to analytical tools for measurement purposes.

Indicators make the process of assessment manageable. They will facilitate the testing of identified hypotheses on energy intervention impacts upon development and poverty alleviation. Some criteria will be considered to adequately select the indicators: not to attempt to provide a total picture of 'reality' where all possible impacts are rigorously quantified nor to narrow down the numbers and types of indicators in a preconceived straightjacket. Examples of development indicators include: time savings and revenue generated before and after energy intervention.

Step 5: Apply the analytical tool to assess the extent to which changes in each indicator is attributable to the energy intervention.

Regardless of the type of indicator being analysed, attributing improvements in any of the indicators to an energy intervention is a complicated analytical task. Furthermore, efforts to help clarify issues of attribution, the assessment (i.e., how each development indicator fared/fairs before and after the intervention) ought to be categorized as either a direct or indirect result of the intervention services. This categorization is meant to differentiate energy services that have had a direct impact on people's lives from those that require additional interventions in order to facilitate development.

Step 6: Define output format

The output format for the Assessment Framework will depend on the analytical tools applied in assessing development impacts of an energy intervention.

¹ Other methodological challenges anticipated include: interdependencies, causality, accounting for direct benefits, socio-economic differences and challenges specific to the analytical tools selected (e.g., sample sizes as well as data definition and gaps).

² An example of a recent development-oriented methodological framework inspired by work on human wellbeing and empowerment is that by Halsnæs and Verhagen (2005).

4.6 WP6: Case Studies

The choice of which interventions or projects to focus on will be made at a later stage, after each national catalogue is completed and when the Preliminary Assessment Framework is nearing completion. Nevertheless, during the collection of data for the national catalogues and the national consultation, potential cases will be noted. For each country at least two or three case study examples will be required.

4.7 WP7: Refinement of Assessment Framework

There is no change from the Annex 1. The Assessment Framework will be refined on the basis of the results of case studies and feedback from the national teams and stakeholders.

4.8 WP8: Dissemination

There is no change from the Annex 1. The project website has been established at www.deafrica.net and hosted by Risoe. The website comprises a public site with general information and documentation about the project as well as an intranet for project participants with facilities for uploading files and discussion groups. In the course of the initial stages of the project the site will be moved to one of the African Centres for maintenance and hosting after the necessary arrangements have been made and capacity developed.

4.9 WP9: Common Dissemination

There is no change from the Annex 1.

5 Quality Assurance procedure

The Quality Assurance (QA) procedure involves a detailed list of all outputs (deliverables) from the work packages, included in Appendix D of this report. Each output produced by one of the EU partner institutions (Risoe or ECN) will be systematically checked by a senior staff member of the other institution, problems or comments noted and returned for correction. The QA record will be included in Progress, Interim and Final Reports.

6 References

Halsnæs, K, Callaway J.M., Meyer, H.J. and Markandya, A. (1999) Methodological Guidelines, Main Reports: Economics of Greenhouse Gas Limitations. UNEP, Risø National Laboratory, Roskilde, 1999

UN Millennium Project (2005). Investing in Development: A Practical Plan to Achieve the Millennium Development Goals. New York.

Halsnaes, K. and Verhagen, J. (2005) "Development Based Climate Change Adaptation and Mitigation – Conceptual Issues and Lessons Learned in Studies in Developing Countries". Working Paper. Mimeo. UNEP Risø Centre, Risø National Laboratory, Denmark

Appendix A. Kick-off workshop programme and participants

30-31 May 2005

Risø National Laboratory, Denmark

Programme

Monday 30 May	
9.00 – 9.45	Welcome and general introduction to the project <i>Gordon Mackenzie, Risø</i> Including: <ul style="list-style-type: none"> • Introduction of participants • Context of the project • Project overview: major components and focal areas • Organisation of the work • Overview of outputs, workshops, etc.
9.45 – 10.00	Key issues on links between energy and development
10.00 – 10.45	Expectations for the DEA project <ul style="list-style-type: none"> • Views from the 6 African Centres on how they view the DEA project in their own country and institutional context • Perceived problems in implementation • Discussion of structure and roles
10.45 – 13.00	Small scale energy interventions in project partner countries: <ul style="list-style-type: none"> • Links between these and poverty alleviation/development • Links to national energy and development policies Presentations by each of the 6 African centres (15 min. each) Botswana – Peter Zhou Ghana – Harriette Amissah Arthur Mali – Ousmane Ouattara Senegal – Sécou Sarr Tanzania- Estomih Sawe Zambia – Francis Yamba
13.00 – 14.00	Lunch
14.00 – 14.30	Methodological framework: Using the experience and expertise gained from past and present work at UNEP Risø Centre <i>Kirsten Halsnæs, Risø</i>
14.30 – 15.15	Literature review: Main findings in the literature related to key linkages between energy, poverty, and development, assessment methods and indicators. <i>Nicoline Haslev-Hansen, Risø</i>
15.15 – 16.00	Work Plan: Implementation of Work Packages 2 to 5. Focus on next 6 months. <ul style="list-style-type: none"> • Literature Review • Consultation • Catalogue • Assessment Framework <i>Gordon Mackenzie, Risø</i>

Tuesday 31 May	
9.00 – 9.30	Recap of first day: expectations, approach, structure <i>Fatima Denton, Risø</i>
9:30 – 10.30	Development of the Assessment Framework (Work Package 5) <ul style="list-style-type: none"> • Quantitative and qualitative assessment of the poverty alleviation and development impacts of small scale energy interventions • Indicators for consistent and transparent information on these impacts in relation to the country case studies. <i>Miriam Hinostroza and Wilson Wasike, Risø</i>
10:30 – 12.15	Mapping of energy interventions (Work Package 3) <ul style="list-style-type: none"> • General introduction and scoping of the activity • Purpose of the catalogue • Input from Assessment Framework team • TOR • Country activities • Compilation of catalogue • Discussion of Case Studies <i>Henk Harmsen (ECN)</i>
12.15 – 13.00	Lunch
13.00 – 14.00	Policy relevant questions <i>Fatima Denton, Risø</i>
14.00 – 16.00	Inception report <ul style="list-style-type: none"> • Updating the project document • Work package details • Deliverables • Timing • Possible bilateral discussions with Centres to address specific issues <i>Gordon Mackenzie, Risø</i>

List of participants

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Appendix B. DEA Information Sheet



Development and Energy in Africa

Understanding and improving the development impacts of energy interventions

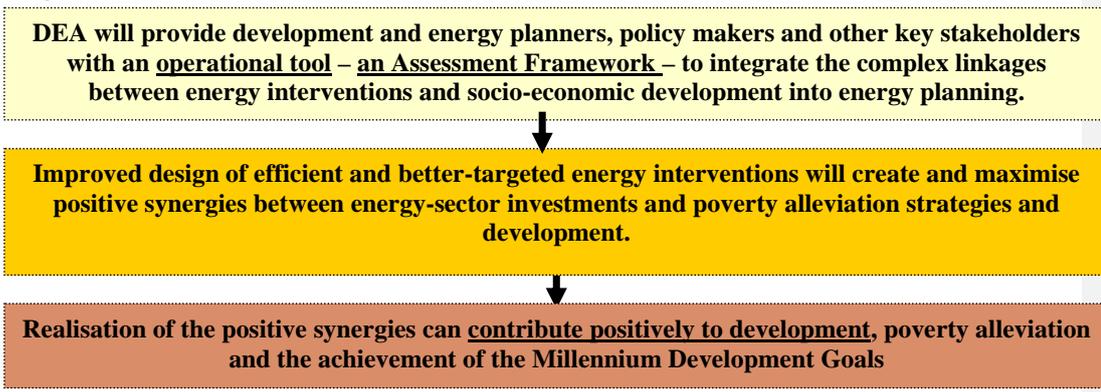


Access to energy is an essential, though not sufficient, input in the process of development and poverty alleviation. The DEA project aims (i) to identify and examine the developmental impacts of energy interventions linked to improving energy access and poverty alleviation, and (ii) to contribute to enhancing the development impacts of on-going and future energy interventions, particularly small-scale interventions in rural and peri-urban settings.

An energy intervention is an explicit project, policy or innovation – either technological or institutional – that affects energy demand and/or supply in a country. Better understanding of development-poverty-energy linkages, and embodiment of this knowledge in an operational tool, can facilitate better planning toward energy interventions with higher development and poverty alleviation outcomes. The project involves six Sub-Saharan African countries: Botswana, Ghana, Mali, Senegal, Tanzania and Zambia. The resulting analysis and the tool will, however, be applicable to other African countries and developing countries in general.

Q1: *What will be the key output?*

A: A methodological framework that will help policy makers trace out the causal chain of effects that lead from an energy intervention to a poverty reduction outcome. Particular attention will be paid to identifying the links in that chain and the situational factors that can affect the strength of those linkages.



Q2: *Who will develop this tool?*

A: Six centres from the target countries will function as the core implementers in their respective countries: EECG – Botswana, KITE – Ghana, MFC – Mali, ENDA – Senegal, TATEDO – Tanzania and CEEEZ – Zambia. Two European institutions complete the consortium: Risø National Laboratory, Denmark (project coordinator) and ECN, the Netherlands. Funding is through the COOPENER programme, a component of the European Commission’s Intelligent Energy Europe programme with co-funding by the Governments of Denmark and the Netherlands through Risø and ECN respectively.

Q3: *How will the tool be developed?*

A: The project will develop an Assessment Framework (**the tool**) for quantitatively and qualitatively evaluating the development and poverty alleviation impacts of energy interventions and projects, in particular small-scale energy projects, which are targeted at improving rural and peri-urban energy access. The Assessment Framework will be both based on and applied to in-depth research as well as case studies and analysis of a catalogue of energy interventions in the six project countries. Secondly, the project will engage policy makers and other stakeholders in systematic dialogues in

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kind of energy
interventions are
we talking
about?

order to increase awareness and build human capacity on the development and poverty alleviation impacts of energy interventions.

Q4: *When will the tool be available?*

A: The DEA project was launched on 1 May 2005 and will run for 30 months. It is expected that the Assessment Framework will be ready for testing in the countries by the end of 2005.

Q5: *How will the tool be applied?*

A: Key stakeholders will be involved throughout the project to ensure that the development of the Assessment Framework reflects the realities of Sub-Saharan Africa. The consultations will include bilateral meetings and national workshops. As the project proceeds, information will be further disseminated. In particular the results of the case studies, carried out by the six centres using the Assessment Framework, will be presented and discussed in dissemination workshops. Towards the end of the project a regional workshop, with invited participants from other African countries, will serve to broaden awareness of the Assessment Framework and its application to a broader stakeholder audience.

Country	Institution	Web site	Contact person
Denmark	Risø National Laboratory, Energy for Development	www.e4d.net	Gordon Mackenzie (gordon.mackenzie@risoe.dk)
Netherlands	Energy research Centre of the Netherlands, Policy Studies Unit (ECN)	www.ecn.nl	Henk Harmsen (h.harmsen@ecn.nl)
Botswana	EECG	N/A	Peter Zhou (pzhou@global.bw)
Ghana	The Kumasi Institute of Technology, Energy and Environment (KITE)	www.kiteonline.net	Frank Atta-Owusu (faowusu@kiteonline.net)
Mali	Mali Folkecenter (MFC)	www.malifolkecenter.org	Ibrahim Togola (ibrahim.togola@malifolkecenter.org)
Senegal	Environment and Development Action in the Third World (ENDA)	www.enda.sn	Sécou Sarr (energy2@enda.sn)
Tanzania	Tanzania Traditional Energy Development and Environment Organisation (TATEDO)	www.tatedo.org	Gisela Ngoo (energy@tatedo.org)
Zambia	Centre For Energy, Environment and Engineering Zambia Ltd. (CEEEZ)	N/A	Francis Yamba (ceeez@coppernet.zm)

For further information, please contact the centre in your country – see above - or the project coordinator:

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Appendix C. Terms of Reference for Advisory Committee of DEA project

The role of the Advisory Committee is to provide comments, advice and suggestions on the project as it progresses, based on members' own particular area of expertise. It is envisaged that most communication can be electronic, with occasional telephone conferences. Physical meetings are unlikely to be held over the course of the project, unless the opportunity arises at an international meeting. The committee's input will be sought in conjunction with the preparation of the substantive outputs, the work programme, the literature study, the preliminary assessment framework, the case study reports, the final report, etc.

Documents will be circulated to the committee, discussed and revised as appropriate, and necessary actions taken to implement recommendations where required. Involvement of the Advisory Committee is covered under WPI Project Management.

Substantive outputs in the form of electronic documents prepared by the project participants will be distributed in draft form by Project Management (Riso) to the members of the Advisory Committee, with a request to submit comments and suggestions for improvement within a reasonable time, normally 14 days.

The members of the Advisory Committee of the DEA project were chosen to cover the following relevant aspects of the project:

- Academic expertise in economic assessment of energy-development issues
- Expert knowledge of African energy issues
- Involvement in EU member state energy programmes
- Involvement in energy/gender issues

Additional members may be nominated and invited during the course of the project on the basis of needs and incoming proposals. At the outset of the project, the Advisory Committee comprises:

Dr Lawrence Agbemabiese, Energy Branch, UNEP's Division of Technology, Industry and Economics, Paris

Programme Officer, responsible for programmes related to energy SME development in Africa. Expertise in integrated resource planning, small enterprise development focusing on policies, regulations and stakeholder capacity-building. Research activities include an investigation of how development paradigms influence the evolution and sustainability of energy regimes.

Mr Anders Arvidson, Stockholm Environment Institute, Sweden

Senior research fellow and programme leader of the Climate and Energy Programme at SEI with ten years of experience in working with issues related to energy, environment and development with a particular focus in developing countries.

Ms Alison Bannister, Future Energy Solutions, AEA Technology, UK

Principal consultant and manager/ technical expert on several UK DFID energy research projects examining various aspects of energy, poverty and Sustainable

Livelihoods with 10 years experience in development, environment and energy, mainly in Africa

Dr Joy Clancy, Technology for Sustainable Development Section (TSD/TDG), University of Twente, The Netherlands

Reader (Associate Professor). Worked for the TDG since 1989. Research has related to transfer of energy technologies to and within developing countries with a particular focus on rural areas and gender issues. Currently involved with a climate change project on community forestry. Founder member of ENERGIA (the international network on gender and sustainable energy).

Prof. Anil Markandya, University of Bath, UK

Economist: Long-standing academic experience in the field of sustainable development related to energy in developing countries, and as other issues related to energy and the environment.

Mr Monga Mehlwana, CSIR, South Africa.

Energy Specialist with considerable experience in energy interventions in rural and peri-urban Africa, facilitator in EUEI workshops, and knowledge of the ARRED programme as independent reviewer.

Dr. Patrick Milimo, MDG Centre, Millennium Project, Nairobi

Environment Policy advisor, with over 24 years experience of developing strategies and concepts that breach existing gaps between policy and lack of effective implementation.

Prof. P.R. Shukla, Indian Institute of Management, Ahmedabad, India

Energy Economist with expertise in the energy and development area, contributing *i.a.* the Asian experience on energy/development impacts.

Dr Youba Sokona, Director, Sahara and Sahel Observatory, Tunis, Tunisia

Renowned African energy expert, co-founder of AREED, former director of ENDA-Energy.

Appendix D. Outputs and Quality Assurance (QA) record

The following tables *B-1* and *B-2* supplement the corresponding list of deliverable in the Grant Agreement Annex 1. An indication is given in the third column of the party responsible for the deliverable. In most cases this is the Project Coordinator (Risoe), while in some cases it is ECN or the African Centre sub-contractors (Centres). Following the Quality Assurance (QA) procedure, all project outputs (deliverables) will be systematically checked and any problems or comments noted and returned for correction. In the case of outputs from one of the two EU institutions, a senior staff member of the other institution will perform the check, while for the African Centres, the appropriate EU institution will be responsible. The QA record will be included in Progress, Interim and Final Reports. Table *B-1* shows the outputs with specific delivery dates (in chronological order) while table *B-2* covers the outputs with delivery throughout the project or as required.

Table B-1 Project outputs and QA record: specific delivery dates

WP	Task	Deliverable (responsible)	Type Of Deliverable	Due date (month)	Actual date delivered	Quality Assurance check (name and signature)
WP1	1.1	Summary slides (Risoe)	summary slides	1	22.06.05	N/A
WP 1	1.1	Kick-off (inception) report (Risoe)	Technical Report	2		
WP 1	1.6.1	Kick-Off Meeting (Risoe)	Project Meeting Report included in Inception Report	2	31.05.05	N/A
WP3	3.1	TOR for Catalogue of Energy Interventions (ECN)	Technical Report / Intermediate Product	3		
WP8	8.1.1	establish website at Risoe (Risoe)	web site	3	01.06.05	
WP8	8.2	Popular presentation material (Risoe)	dissemination material (updated regularly)	3		
WP4	4.1	Material for national consultation meetings and workshops (Centres)	technical report / intermediate product	4		
WP4	4.2.2	National Workshops # 1 (Centres)	workshop	4		
WP4	4.2.3	Country Reports - Description of development impacts(Centres)	technical report / intermediate product	4		
WP8	8.1.2	establish African website (Risoe + Centre)	web site	4		

WP	Task	Deliverable (responsible)	Type Of Deliverable	Due date (month)	Actual date delivered	Quality Assurance check (name and signature)
WP3	3.2	Documentation of energy interventions in each country (Centres)	Technical Report / Intermediate Product	5		
WP4	4.2.1	Country Reports - Policy makers' comments and requirements (Centres)	technical report / intermediate product	5		
WP4	4.2.4	Synthesis report on policy makers' needs for Assessment Framework (Risoe)	technical report / intermediate product	5		
WP2	2.2	Literature Review report (Risoe)	Technical Report / Dissemination Product	6		
WP3	3.3	Energy project catalogue – indicating the broad spread of energy interventions (ECN)	Technical Report / Dissemination Product	6		
WP5	5.1.1	Classification of main linkages between energy and poverty (Risoe)	technical report chapter / intermediate product	6		
WP8	8.3	Promote project approach to stakeholders: through consultation process (WP4) (Centres)	project activity/consultations	6		
WP8	8.8	Establish contact and liaise with EU Member State programmes in the energy sector in the target countries and subsequently in other countries of the region (through 8.6 and 8.7). (Risoe)	dissemination activities	6		
WP 1	1.3.1	Progress Report #1 (Risoe)	Technical/Management Report	7		
WP5	5.1.2	Selection and design of relevant assessment procedure(s) (Risoe)	technical report chapter / intermediate product	7		
WP5	5.1.3	Identification and development of indicators for evaluation (Risoe)	technical report chapter / intermediate product	8		
WP5	5.1	Preliminary Assessment Framework (PAF) (Risoe)	technical report / intermediate product	9		
WP5	5.1.4	Outline of how the evaluation can feed back into the design and implementation of future energy interventions (Risoe)	technical report chapter / intermediate product	9		
WP5	5.2	Draft PAF report for comments (Risoe)	draft technical report / intermediate product	10		
WP 1	1.3.2	Progress Report # 2 (Risoe)	Technical/Management Report	12		

WP	Task	Deliverable (responsible)	Type Of Deliverable	Due date (month)	Actual date delivered	Quality Assurance check (name and signature)
WP 1	1.6.2	Mid-Term Meeting (Risoe) (develop case studies TOR)	Project Meeting	12		
WP4	4.3	Country Reports - Summaries of progress to inform policy makers throughout process (Risoe)	dissemination product	12		
WP5	5.3	Finalise PAF on basis of comments (Risoe)	final technical report / intermediate product	12		
WP6	6.1	Common structure (TOR) for the case studies (see 1.6.2) (Risoe)	technical report / intermediate product	12		
WP6	6.2	Practical arrangements for case studies (Centres)	specification/agreements	13		
WP6	6.3	Conduct case studies, fieldwork, data analysis, etc. (Centres)	project activity	16		
WP6	6.4	Report Case Studies (Centres)	technical report / intermediate product	17		
WP6	6.5	National Workshops # 2 (Centres)	workshop	17		
WP 1	1.3.3	Progress Report # 3 (Risoe)	Technical/Management Report	18		
WP6	6.6	Case Study Synthesis Report (Risoe)	technical report	19		
WP 1	1.4	Interim Report (Risoe)	<ul style="list-style-type: none"> • Interim Technical Implementation Report • Interim Financial Statement 	20		
WP7	7.1	Adjust/refine methodological approach on basis of case studies. (Risoe)	project activity project meeting (see 1.6.3)	21		
WP7	7.2	Draft report on methodological approach (Risoe)	technical report	22		
WP 1	1.3.4	Progress Report # 4 (Risoe)	Technical/Management Report	24		
WP7	7.3	Final report and manual on methodological approach (Risoe)	technical report dissemination material	24		
WP8	8.4	Presentation material on project results after completion of the Assessment Framework (Risoe)	dissemination material	24		
WP8	8.5	National Workshops # 3	workshop	24		

WP	Task	Deliverable (responsible)	Type Of Deliverable	Due date (month)	Actual date delivered	Quality Assurance check (name and signature)
		(Centres)	workshop proceedings			
WP8	8.7	Disseminate and promote methodology, results, etc. beyond the project completion date. (Risoø)	dissemination activities	25		
WP 1	1.6.3	Final Project Meeting (Risoø)	Project Meeting	27		
WP8	8.6	Regional (African) Workshop. (Risoø)	workshop workshop proceedings	27		
WP 1	1.5	Final Report (Risoø)	<ul style="list-style-type: none"> • Final Technical Implementation Report • Final Financial Statement 	30		

Table B-2(a) Project outputs and QA record: delivery throughout project or as required

WP	Task	Deliverable (responsible)	Type Of Deliverable	Due date	Actual date delivered	Quality Assurance check (name and signature)
WP4	4.2	Consultation meetings (Bilateral and informal meetings with key stakeholders, in particular the multi-sector energy committees.) (Centres)	bilateral meetings	throughout		
WP8	8.2	Popular presentation material (Risoø)	dissemination material	throughout		
WP8	8.1.3	maintain websites during and beyond project (Risoø + Centre)	web site	throughout		
WP8	8.8	Establish contact and liaise with EU Member State programmes in the energy sector in the target countries and subsequently in other countries of the region (through 8.6 and 8.7). (Risoø)	dissemination activities	throughout		
WP9	9.1	Contribution, upon request of the Commission, to the development of online information systems under EC management. (Risoø)	dissemination activities	as required		
WP9	9.2	Participation, upon request of the Commission, at contractors' meetings and conferences in association with the EIE and other relevant programmes, EU-wide exhibitions, etc. (Risoø)	dissemination activities	as required		
WP9	9.3	Contribution, upon request of the Commission, to the preparation of common presentation material related to EIE actions. (Risoø)	dissemination activities	as required		

Appendix E. Performance Indicators

WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
WP1 Project Management					
	1.1 Inception Phase	Inception Report describes realistic project content, schedule and responsibility	By end of Inception Phase: Detailed work plan formulated Methodological Approach discussed and understood Responsibilities assigned Schedule updated and agreed	end month 2	
	1.2 Project Monitoring	Regular status updates received from project partners Constructive advice and criticism received from Advisory Committee Necessary adjustments to project content, approach and/or schedule on advice from Advisory Committee	status updates from partners (at least) every month feedback from Advisory Committee after Progress and Interim Reports, and other relevant milestones	every month as appropriate	
	1.3 Progress Reports	Progress, Interim and Final Reports provide realistic and honest evaluation of status of each Work Package and project participant.	delivered on schedule	month 7, 12, 18, 24	
	1.4 Interim Reports		delivered on schedule	month 20	
	1.5 Final Report		delivered on schedule	month 30	
	1.6 Project Meetings	participation by all relevant project team members clear documented outcome of meetings, especially decisions on way forward	goals of meetings achieved	month 2, 12, 27	
	1.7 Project Administration	project resources used effectively budget/schedule revisions implemented as appropriate	project goals achieved within budget and time	N/A	
WP2 Literature Review					
	2.1: Literature survey on assessment methodologies for energy and development	coverage of all relevant approaches, focussing on impacts of small-scale energy interventions (confirmation from Advisory Committee on coverage)	survey completed on schedule	month 5	
	2.2: Classify and discuss the methods and indicators	detailed discussion of available material and identification of needs, providing adequate input for development of operational	classification completed on schedule	month 6	

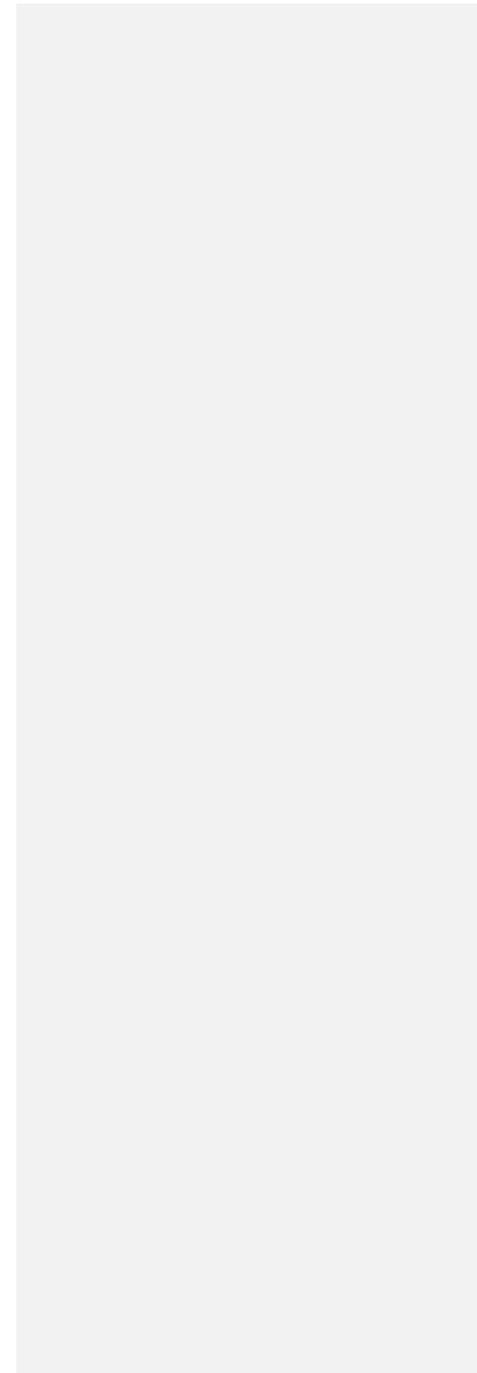
WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
		approach in WP5			
WP3 Catalogue of Energy Interventions in target countries					
	3.1 Formulate Terms of Reference for the Catalogue of Energy Interventions	comprehensive and operational TOR for catalogue, clearly specifying area of interest	TOR ready as required	month 3	
	3.2 Each country team will compile a of relevant energy interventions	number of documented energy intervention cases, with associated information	at least 10 energy interventions per country with documentation of purpose, status, impacts, etc.	month 5	
	3.3 Compile catalogue	classified catalogue covering all energy interventions from target countries, identifying main types of energy projects, possible impacts, need for further data, etc.	catalogue completed on schedule	month 6	
WP4 Consultation with national policy makers and stakeholders, before, during and after formulation of the Assessment Framework					
	4.1: Prepare material for workshops: presentation material on project concepts, focussing on special circumstance of each country with respect to energy and development, as well as the international context.	concise and relevant material on project approach and rationale, designed at level of detail appropriate for high-level decision makers and professionals from energy and relevant sectors	5-10 page country paper power point slides for presentation	month 4 month 4	
	4.2: Arrange and hold bilateral consultations and workshops with relevant policy makers and stakeholders in the target countries, prior to development of the Preliminary Assessment Framework. In particular National Workshops # 1 in each country.	number and relevance of informal consultations with ministries and stakeholders, through multi-sector energy committees set up under EUEI workshop process (or equivalent in Botswana) number and relevance of policy makers and stakeholders attending national workshop #1 expression of interest from attendees in terms of perceived needs for assessment framework (documented in workshop proceedings, bilateral meeting reports, country reports) country teams assist stakeholders to identify potential and actual development impacts of energy interventions synthesis of policy makers' needs	country teams consult with at least: Ministries for Energy, Finance/Development, Agriculture, SME Development, rural Development, or equivalent 10 high-level stakeholders (director level) from energy and other relevant sectors attend workshop development impact potential associated with all identified energy interventions needs identified so that preparation of PAF can proceed 20-40 page document from each country	month 4 month 4 month 5 month 5	
	4.3 Inform policy makers and stakeholders through	stakeholders remain interested and committed to project	country teams revisit relevant ministries and stakeholders,	month 12-14	

WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
	development process.		reporting progress	month 18-20	
WP5 Development of Preliminary Assessment Framework (PAF)					
	5.1: Develop and document a Preliminary Assessment Framework (PAF)	PAF documented in a comprehensive and operationally applicable report	PAF completed on schedule	month 9	
	5.1.1 Classification of the main linkages between energy and poverty according to type of intervention	The module must adequately answer the question: "What are the poverty/development links between the energy intervention types (as listed in the catalogue 3.3)?"	10-20 page chapter	month 6	
	5.1.2 Selection and design of relevant assessment procedure(s) for a given type of energy intervention	The module must adequately answer the question: "How can these impacts/links be assessed?"	10-20 page chapter	month 7	
	5.1.3 Identification and development of indicators for evaluation of the impacts of the energy intervention on poverty and broader development aspects.	The module must adequately answer the question: "How can this assessment approach be operationalised through a relatively small number of indicators?"	10-20 page chapter software tool	month 8	
	5.1.4 Outline of how the evaluation can feed back into the design and implementation of future energy interventions.	The module must adequately answer the question: "How can the assessment feed back into the project/intervention design process?"	10-20 page chapter	month 9	
	5.2 Write draft report and send for comments (to Advisory Committee and others)	Has the Advisory Committee adequately reviewed the document?	50-100 page draft document with appendices, software tool, etc.	month 10	
	5.3 Finalise PAF on basis of comments	Have the comments been incorporated in the PAF approach and the report.	50-100 page final document with appendices, software tool, etc.	month 12	
WP6 Case Studies to test the Assessment Framework					
	6.1: Common structure (TOR) for case studies	Project group agree on specification of case studies to test the PAF Case studies must cover range of energy intervention types and settings	Set of Case Studies broad enough to test all aspects of PAF	month 12	
	6.2: Make practical arrangements, preliminary study, etc. for case studies	Country teams are able to select sufficient number of relevant Case Study examples to test PAF	10 potential per country	month 13	
	6.3: Conduct case studies, fieldwork, data analysis, etc.	Number of case studies carried out Indication of relevance of PAF in different kinds of energy intervention as represented by Case Studies	3-5 case studies per country	month 16	
	6.4: Report Case Studies	Each country team describes and discusses critically the Case Studies and relevance of PAF	50-100 page detailed document from each country team	month 17	
	6.5 National Workshop # 2	number and relevance of policy makers and stakeholders attending	10 high-level stakeholders (director level) from energy	month 17	

WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
		National Workshop #2 indications from attendees on relevance of the PAF (as illustrated in Case Studies) for assessing development impacts and improving project design	and other relevant sectors attend workshop reaction from all attending stakeholders on relevance of PAF and Case Studies, suggestions for improvement		
	6.6: Write report synthesising Case Studies	extent to which report captures results of case studies, stakeholder reactions on relevance of PAF, suggestions for improvement Advisory Committee comments on the relevance, sensitivity and applicability of the PAF and Case Studies for assessing development impacts.	report completed on schedule documented suggestions for improvement of PAF from national stakeholders and Advisory Committee	month 19	
WP7 Analyse case studies, Refine methodology and Report results					
	7.1: Adjust/refine methodological approach on basis of case studies.	address all comments and suggestions from 6.6	checklist based on 6.6	month 21	
	7.2: Write draft report on methodological approach, discuss with partners	assessment from project group on relevance, applicability, whether all comments and suggestions from 6.6 adequately addressed	all comments addressed	month 22	
	7.3: Write final report and manual on methodological approach	Advisory Committee and stakeholder comments on final report and manual: report comprehensive ? manual understandable and operational	all comments addressed	month 24	
WP8 Dissemination					
	8.1: Set up web site Risoø Africa	check web sites	web sites operational on schedule	month 3 month 5	
	8.2: Prepare popular presentation material (targeted to well-defined groups of stakeholders) The literature review The consultations The energy project catalogue Description of the Assessment Framework	presentation material available and appropriate to the target groups	presentation material available on schedule	month 6	

WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
	8.3 Promote project approach to stakeholders: through consultation process (WP4)	number of national stakeholders engaged in discussion through bilateral consultations and workshops number of relevant comments and suggestions from stakeholders	see WP4	month 7-23	
	8.4: Prepare presentation material on project results after completion of the Assessment Framework, emphasising the use to which the Assessment Framework is being put, opinions of national stakeholders, etc.	presentation material available and appropriate to the target groups	presentation material available on schedule	month 24	
	8.5 National Workshops # 3	number and relevance of policy makers and stakeholders attending National Workshop #3 continued interest from attendees on relevance of the refined AF (as illustrated in Case Studies) for assessing development impacts and improving project design	15 high-level national stakeholders (director level) per country	month 25	
	8.6 Regional (African) Workshop	number and rank of national stakeholders attending from participating countries number of other country representatives attending number of other organisations attending (Member States, other donors, multi-laterals, regional organisations)	2high-level stakeholders from each participating country 10 high-level participants from other countries, financed through other sources, attracted by relevance of activity	month 27	
	8.7: Disseminate and promote methodology, demonstrate applications, and discuss further application and extension to other countries/regions, etc. This may include presentations as side events at large conferences etc. To continue beyond the formal project completion date using own resources of the partners.	number of other countries contacted and expressing interest in the assessment methodology	promote approach in at least 9 other African countries (through EUEI workshop follow-up in West and S/E Africa)	month 25-30+	
	8.8 Establish contact and liaise with EU Member State programmes in the energy sector in the target countries and subsequently in other countries of the region (through 8.6 and 8.7).	number of Member State agencies expressing interest in the approach	2 EU Member State programmes expressing positive interest in the approach (in addition to Danish and Dutch)	throughout	

WP	Task	Performance Indicator	Target	Date Due (month x)	Date completed
WP9 Common dissemination activities					
	9.1: Contribution, upon request of the Commission, to the development of online information systems under EC management.	N/A	contribution as requested	as required	
	9.2: Participation, upon request of the Commission, at contractors' meetings and conferences in association with the EIE and other relevant programmes, EU-wide exhibitions, etc.	N/A	participation as requested	as required	
	9.3: Contribution, upon request of the Commission, to the preparation of common presentation material related to EIE actions.	N/A	material provided as requested	as required	



Appendix F. LFA Matrix

Description (narrative summary)	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>Overall Objective</p> <p>1. that national energy policy is better informed to take into account the complex linkages between energy interventions and social and economic development</p> <p>2. that energy interventions are better designed to contribute to real development needs, especially poverty alleviation and income generation, and otherwise achieving the Millennium Development Goals.</p>	<p>1. Future energy projects/interventions have a measurable impact on poverty alleviation (This is probably impossible to measure, for various reasons: no baseline, complex system with many factors contributing to poverty, etc.)</p> <p>2. The approach is used or considered by governments and development agencies in design or assessment of energy interventions.</p>	<p>1. Review</p> <p>2. Monitor energy policy implementation in target countries through close contact with governments</p>	<p>1. That the methodology, if applied correctly, actually leads to better-designed energy interventions that address the central developmental issues of poverty, income generation, etc.</p> <p>2. That the methodology is adopted by one or more developing country institutions as part of the approach to designing, monitoring and analysing energy interventions. Close contact between target country partners and target country governments is essential. The methodology must be visible.</p>
<p>Immediate Objectives</p> <p>1. to establish and apply an Assessment Framework for evaluating development and poverty impacts of energy interventions,</p>	<p>Documents produced by the project, reviewed and of sufficient quality for dissemination</p>	<p>1. Review documents</p>	<p>That the Main Outputs of the Work packages are achieved</p>
<p>2. to engage in a dialogue with energy policy makers and other stakeholders on the basis of the framework, with a view to incorporating these issues in energy policy.</p>	<p>Positive response from target groups in dissemination exercise as to the relevance and applicability of the methodology</p>	<p>2. Review target group response</p>	<p>target groups agree to enter dialogue</p> <p>the "right" people participate</p> <p>discussions are followed up by action</p> <p>there is political will to incorporate SD issues more into energy projects and policy</p>

Description (narrative summary)	Objectively Verifiable Indicators	Means of Verification	Assumptions
• WP1 Project Management	1. Agreed outputs and deadlines achieved, resources allocated appropriately and flexibly, all reports completed and submitted according to plan.	1. Output and assumptions monitoring form	1. that forms are sufficiently detailed and filled in regularly by project management
• WP2 Literature review	2. The survey and analysis must present a comprehensive overview of the current state of assessing energy interventions with respect to. SD, in particular making reference to present practices of main development agencies	2. Review literature survey document	2. that the review is carried out rigorously and comments fed back to authors
• WP3 Catalogue of energy interventions	3. Catalogue must be as exhaustive and detailed as possible for each country	3. Examine catalogue for completeness	3. that good communication between team members, regarding requirements for catalogue
• WP4 Consultation (before, during, after AF development)	4. Consultations must be effective	4. Document and review outcomes of consultation meetings	4. that policy makers and stakeholders interested in AF and willing to invest time
• WP5 Provisional Assessment Framework	5. Provisional Assessment Framework must be operational and relevant to the countries' requirements	5. Review PAF documentation and manual	5. that a comprehensive, operational and meaningful AF is possible and reflects country needs - critical review taking account of operationality, country needs and reality.
• WP6 Case Studies	6. Case Studies must test the PAF thoroughly and be well documented	6. Critically Review Case Study reports	6. that Case Study TOR is thorough and realistic, case studies completed according to TOR and reviewed in depth
• WP7 Analyse case studies, Refine methodology and Finalise the Assessment Framework	7. Refined AF has to properly take into account experience of Case Studies and be operational	7. Documentation of a refined approach taking into account case studies and s/h input	7. that the case studies are thorough and relevant to the AF, that methodology can be refined on that basis,
• WP8 Dissemination	8. Dissemination material must be understandable and relevant, and properly targeted to relevant audience.	8. Review material and dissemination results, assess impact.	8. that the dissemination material reaches the intended audience that forms are sufficiently detailed and filled in regularly by project management
• WP9 Common Dissemination	9. Dissemination material must be understandable and relevant, and properly targeted to relevant audience.	9. Review material and dissemination results, assess impact.	9. that the dissemination material reaches the intended audience

Description (narrative summary)	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>WP1. Project Management</p> <p>1.1: Inception Phase, including Kick-Off meeting, discuss project plan with Advisory Committee, revise as necessary</p> <p>1.2: Monitor project activities through visits, email, etc.</p> <p>1.3: Prepare Progress Reports (technical - 6 monthly), discuss with Advisory Committee, revise and implement as necessary</p> <p>1.4: Prepare Interim Report (technical and financial), with Advisory Committee, revise and implement as necessary.</p> <p>1.5: Prepare Final Report (technical and financial) discuss with Advisory Committee, revise before submission.</p> <p>1.6: Meetings – Preparation for and participation in project meetings</p> <p>1.7: Project administration</p>	<p>Agreed outputs and deadlines achieved, resources allocated appropriately and flexibly, all reports completed and submitted according to plan.</p> <p>1.1 Inception Report</p> <p>1.2 Regular monitoring reports</p> <p>1.3 Progress Reports</p> <p>1.4 Interim Reports</p> <p>1.5 Final Report</p> <p>1.6 Meeting reports</p> <p>1.7 Management reports (included in progress and interim reports)</p>	<p>1.1 Inception Report reviewed, revised and accepted</p> <p>1.2 Monitoring reports circulated and approved</p> <p>1.3 Progress reports reviewed, revised and accepted</p> <p>1.4 Interim report reviewed, revised and accepted</p> <p>1.5 Final report reviewed, revised and accepted</p> <p>1.6 Meeting reports reviewed, revised and accepted</p> <p>1.7 Management reports reviewed, revised and accepted</p>	<p>Management remains in regular contact with all project partners, prepares reports in a timely manner, and reviews, revises and submits reports as required.</p>
<p>WP2. Literature review</p> <p>2.1: Conduct a literature survey on energy and development, methodologies used to assess their interlinkages and creating an overview of existing indicators for evaluation of these interlinkages.</p> <p>2.2: On the basis of the literature survey, classify and discuss the various methods and indicators currently available, pointing out advantages, disadvantages, areas of application, etc.</p>	<p>The survey and analysis must present a comprehensive overview of the current state of assessing (small-scale) energy interventions w.r.t. SD, in particular making reference to present practices of main development agencies</p> <p>Literature Survey Report</p>	<p>Advisory Committee reviews Literature Review</p>	<p>Literature Review completed on schedule and submitted to Advisory Committee for review.</p> <p>Advisory Committee members are able to review Report and return comments.</p>

<p>WP3. Catalogue of energy interventions</p> <p>3.1 Formulate Terms of Reference for the Catalogue of Energy Interventions based on initial recommendations of Assessment Framework team, informed by literature survey. Special emphasis on what information must be obtained.</p> <p>3.2 Each country team will compile a catalogue (or database) of relevant energy interventions, including AREED and similar projects, with particular focus on projects implemented within the past five years that are intended to address the energy needs of rural and peri-urban populations. Emphasis should also be put on projects that have a productive or income-generating effect.</p> <p>3.3 Compile synthesis catalogue</p>	<p>Catalogue must be as exhaustive and detailed as possible for each country</p> <p>3.1 Catalogue Terms of Reference</p> <p>3.2 Country reports</p> <p>3.3 Synthesis catalogue report</p>	<p>3.1 Catalogue TOR reviewed by project team and revised where necessary</p> <p>3.2 Country reports reviewed by ECN/Risø</p> <p>3.3 Compiled Catalogue reviewed by project team and Advisory committee</p>	<p>3.1 TOR are achievable by country teams and provide a basis for documenting relevant energy interventions.</p> <p>3.2 Country teams succeed in obtaining relevant information for a range of energy interventions</p> <p>3.3 Adequate material in the country reports</p>
<p>WP4. Consultation with national policy makers and stakeholders</p> <p>4.1: Prepare material for workshops: presentation material on project concepts, focussing on special circumstance of each country with respect to energy and development, as well as the international context.</p> <p>4.2: Arrange and hold bilateral consultations and workshops with relevant policy makers and stakeholders in the target countries, prior to development of the Preliminary Assessment Framework. In particular National Workshops # 1 in each country.</p> <p>4.3 Inform policy makers and stakeholders through development process.</p>	<p>Consultations must be effective</p> <p>4.1 general and country-specific information material for workshops</p> <p>4.2 reports on consultations and workshops</p> <p>4.3 updated information material as project progresses (as 4.1)</p>	<p>4.1 Project management reviews material</p> <p>4.2 Project reviews workshop and consultation reports</p> <p>4.3 Project management reviews and monitors updating of material</p>	<p>4.1 Country teams are fully informed on project aims and approach and provided with relevant general material from management.</p> <p>4.2 Relevant stakeholders commit time and interest to the project</p> <p>4.3 Centres actively engage policy makers and stakeholders in the process</p>

<p>WP5. Preliminary Assessment Framework (PAF)</p> <p>5.1 Develop and document a Preliminary Assessment Framework (PAF)</p> <ul style="list-style-type: none"> - The team will develop ideas for a practically applicable assessment method. The approach will include the following main elements: - Classification of the main linkages between energy and poverty according to type of intervention, leading to; - Selection and design of relevant assessment procedure(s) for a given type of energy intervention - Identification and development of indicators for evaluation of the impacts of the energy intervention on poverty and broader development aspects. - Outline of how the evaluation can feed back into the design and implementation of future energy interventions. - This will be documented in a draft methodological manual, with software tools, forms, etc. as appropriate. <p>5.2 Write draft report and send for comments</p> <p>5.3 Finalise PAF on basis of comments</p>	<p>Preliminary Assessment Framework must be operational and relevant to the countries' requirements</p> <p>5.1 technical reports 5.1.1 to 5.1.4 prepared as specified in deliverables list</p> <p>5.2 PAF draft report</p> <p>5.3 PAF final report</p>	<p>5.1 technical reports reviewed and discussed by project team</p> <p>5.2 Review by Advisory Committee</p> <p>5.3 PAF final report revised and submitted</p>	<p>5.1 Risø staff available for the task and follow time schedule.</p> <p>5.2 Advisory Committee have time to review draft PAF</p> <p>5.3 AF team are able to revise PAF to meet comments of Advisory Committee.</p>
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<p>WP6 Case Studies</p> <p>6.1: Project team meeting with the purpose to agree on a common structure for the case studies</p> <p>6.2: Make practical arrangements, preliminary study, etc. for case studies</p> <p>6.3: Conduct case studies, fieldwork, data analysis, etc.</p> <p>6.4: Report Case Studies</p> <p>6.5: Discuss with stakeholders at National Workshop # 2</p> <p>6.6: Write report synthesising Case Studies</p>	<p>Case Studies must test the PAF thoroughly and be well documented</p> <p>6.1 Common structure (TOR) for the case studies – report on project meeting</p> <p>6.2 specifications and agreements</p> <p>6.3 project activity</p> <p>6.4 case study country reports</p> <p>6.5 country workshop reports documenting stakeholder reaction to case study assessments</p> <p>6.6 synthesis report</p>	<p>6.1 entire project team reviews and approves common structure</p> <p>6.2 management monitors country arrangements for case studies</p> <p>6.3 monitoring by management</p> <p>6.4 management and AF team review country reports</p> <p>6.5 management and AF team review workshop reports</p> <p>6.6 synthesis report reviewed by Advisory Committee</p>	<p>6.1 PAF completed on time so that requirements for case studies can be specified</p> <p>6.2 country teams have sufficient information and resources to plan and arrange case studies</p> <p>6.3 management maintains close contact with country teams</p> <p>6.4 case studies completed and reported as planned</p> <p>6.5 relevant stakeholders attend workshop and have constructive input to discussion</p> <p>6.6 country case studies successfully summarised and compiled, and Advisory Committee able to review document</p>
<p>WP7. Analyse case studies, Refine methodology and Report results</p> <p>7.1: Adjust/refine methodological approach on basis of case studies.</p> <p>7.2: Write draft report on methodological approach, discuss with partners</p> <p>7.3: Write final report and manual on methodological approach</p>	<p>Refined AF has to properly take into account experience of Case Studies and be operational</p> <p>7.2 draft report on methodological approach</p> <p>7.3 final report</p>	<p>7.2 Review by all project partners and key stakeholders</p> <p>7.3 Review by Advisory Committee</p>	<p>7.1 Meaningful conclusions from Case Study lead to revision of PAF.</p> <p>7.2 Methodological approach found to be relevant by stakeholders</p> <p>7.3 Advisory Committee are able to review the report.</p>

<p>WP8. Dissemination</p> <p>8.1: Set up web site on the project, utilise and maintain throughout the project, and maintain after project completion in conjunction with dissemination/outreach activities.</p> <ul style="list-style-type: none"> • Main website to be established at African site with mirror sites as appropriate. • One local coordinator of the website will be identified, based on experience with similar activities. <p>8.2: Prepare popular presentation material (targeted to well-defined groups of stakeholders) to promote the purpose and aims of the project, for information while the project is under way, dissemination at national and regional fora, over project period.</p> <ul style="list-style-type: none"> • Presentation material will comprise information on the various areas of project input: • The literature review – summarising the need for assessment of SD impacts and implications for project implementation and the need for an innovative approach • The consultations – indicating policy makers’ and stakeholders’ own needs with respect to how energy innovations are related to SD and what information and tools are needed • The energy project catalogue – indicating the broad spread of energy interventions • Description of the Assessment Framework approach, adapted and enhanced as the framework takes shape <p>8.3 Promote project approach to stakeholders: through consultation process (WP4)</p>	<p>Dissemination material must be understandable and relevant, and exercise must be properly targeted.</p> <p>8.1 Established web site</p> <ul style="list-style-type: none"> • at Risø • in African partner country <p>8.2 Presentation material</p> <p>8.3 Reports from consultations</p>	<p>8.1 check on internet</p> <p>8.2 Review presentation material</p> <p>8.3 Review consultation reports and liaise with Centres</p>	<p>8.1 African host: personnel and financial resources available for web sourcing</p> <p>8.2 Identification of stakeholders, resources available to prepare material</p> <p>8.3 Centres engage with relevant stakeholders in dialogue</p>
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<p>8.4: Prepare presentation material on project results after completion of the Assessment Framework, emphasising the use to which the Assessment Framework is being put, opinions of national stakeholders, etc.</p>	<p>Presentation material</p> <ul style="list-style-type: none"> - brochures, pamphlets - website - contributions at conferences, meetings 	<p>Review material</p>	<p>8.4 Meaningful results from application of the Assessment Framework, national stakeholders sufficiently interested to provide input.</p>
<p>8.5 Arrange and hold workshops, consultations and capacity-building activities in the target countries to illustrate and apply the Assessment Framework. This will be addressed particularly in the set of 6 National Workshops # 3 held after the Assessment Framework has been tried and tested through the Case Studies (WP6), and refined (WP7), approx. month 25.</p>	<p>Workshop reports</p>	<p>Review workshop reports</p>	<p>8.5 Meaningful results from application of the Assessment Framework, national stakeholders sufficiently interested to provide input.</p>
<p>8.6 Regional (African) Workshop: A workshop bringing together all country teams and key stakeholders from each participating country will be held towards the end of the project, after the set of National Workshops #2. Venue will be one of the participating countries. Depending on the available budget, participants from other African countries and other COOPENER activities may be invited.</p>	<p>Workshop report</p>	<p>Review workshop report</p>	<p>8.6 Project has succeeded in developing a useful Assessment Framework and tested it in the case Studies. Stakeholders from other African countries sufficiently interested to participate in discussion.</p>
<p>8.7: Disseminate and promote methodology, demonstrate applications, and discuss further application and extension to other countries/regions, etc. This may include presentations as side events at large conferences etc. To continue beyond the formal project completion date using own resources of the partners.</p>	<p>List of presentations of project at meetings, conferences, etc. Record on website of project results</p>	<p>Review list Inspect website</p>	<p>8.7 Project has succeeded in developing a useful Assessment Framework and tested it in the case Studies.</p>
<p>8.8 Establish contact and liaise with EU Member State programmes in the energy sector in the target countries and subsequently in other countries of the region (through 8.6 and 8.7).</p>	<p>Evidence of contact to MS programmes</p>	<p>Review evidence</p>	<p>8.8 Proactive attitude from all project partners with regard to contacting other programmes.</p>

<p>WP9. Common Dissemination</p> <p>9.1: Contribution, upon request of the Commission, to the development of online information systems under EC management.</p> <p>9.2: Participation, upon request of the Commission, at contractors' meetings and conferences in association with the EIE and other relevant programmes, EU-wide exhibitions, etc.</p> <p>9.3: Contribution, upon request of the Commission, to the preparation of common presentation material related to EIE actions.</p>	<ul style="list-style-type: none"> a. contribution as requested b. reports of meetings etc. c. requested material 	<ul style="list-style-type: none"> a. review of contribution b. review of reports c. review of material 	<p>9.1, 9.2, 9.3 Clear and timely requests from Commission regarding required contributions.</p>
<p>Inputs</p> <p>Risoe 2252 person hours</p> <p>ECN 950 person hours</p> <p>EECG 617 person hours</p> <p>KITE 617 person hours</p> <p>MFC 617 person hours</p> <p>ENDA 617 person hours</p> <p>TATEDO 617 person hours</p> <p>CEEEZ 617 person hours</p>			

Appendix G. Assumptions Monitoring Form

Assumptions on which the Objectives and Main Outputs of Work Packages depend.	Comment	Is this assumption fulfilled?
<p>Overall objective 1</p> <p>That the methodology, if applied correctly, actually leads to better-designed energy interventions that address the central developmental issues of poverty, income generation, etc.</p> <p>Overall objective 2</p> <p>That the methodology is adopted by one or more developing country institutions as part of the approach to designing, monitoring and analysing energy interventions. Close contact between target country partners and target country governments is essential. The methodology must be visible.</p>		
<p>Immediate objective 1</p> <p>That the Main Outputs of the Work packages are achieved</p> <p>Immediate objective 2</p> <ul style="list-style-type: none"> • target groups agree to enter dialogue • the “right” people participate • discussions are followed up by action • there is political will to incorporate SD issues more into energy projects and policy 		
<p>Main Outputs of Work Packages</p> <ol style="list-style-type: none"> 1. that forms are sufficiently detailed and filled in regularly by project management 2. that the review is carried out rigorously and comments fed back to authors 3. that good communication exists between team members, regarding requirements for catalogue 4. that policy makers and stakeholders are interested in the AF and willing to invest time 5. that a comprehensive, operational and meaningful AF is possible and reflects country needs - critical review taking account of operability, country needs and reality. 6. that the Case Study TOR is thorough and realistic, case studies completed according to TOR and reviewed in depth 7. that the case studies are thorough and relevant to the AF, that methodology can be refined on that basis, 8. that the dissemination material is appropriately targeted and reaches the intended audience 9. that common dissemination activities 		

Assumptions on which the Objectives and Main Outputs of Work Packages depend.	Comment	Is this assumption fulfilled?
Detailed Assumptions		
1.1 Management remains in regular contact with all project partners, prepares reports in a timely manner, and reviews, revises and submits reports as required.		
2.1 Literature Review completed on schedule and submitted to Advisory Committee for review. 2.2 Advisory Committee members are able to review Report and return comments. 3.1 TOR are achievable by country teams and provide a basis for documenting relevant energy interventions. 3.2 Country teams succeed in obtaining relevant information for a range of energy interventions 3.3 Adequate material in the country reports		
4.1 Country teams are fully informed on project aims and approach and provided with relevant general material from management. 4.2 Relevant stakeholders commit time and interest to the project 4.3 Centres actively engage policy makers and stakeholders in the process 5.1 Risø staff available for the task and follow time schedule. 5.2 Advisory Committee have time to review draft PAF 5.3 AF team are able to revise PAF to meet comments of Advisory Committee. 6.1 PAF completed on time so that requirements for case studies can be specified 6.2 country teams have sufficient information and resources to plan and arrange case studies 6.3 management maintains close contact with country teams 6.4 case studies completed and reported as planned 6.5 relevant stakeholders attend workshop and have constructive input to discussion 6.6 country case studies successfully summarised and compiled, and Advisory Committee able to review document 7.1 Meaningful conclusions from Case Study lead to revision of PAF. 7.2 Methodological approach found to be relevant by stakeholders 7.3 Advisory Committee are able to review the report. 8.1 African host: personnel and financial resources available for web sourcing 8.2 Identification of stakeholders, resources available to prepare material 8.3 Centres engage with relevant stakeholders in dialogue 8.4 Meaningful results from application of the Assessment Framework, national stakeholders sufficiently interested to provide input. 8.5 Meaningful results from application of the Assessment Framework, national stakeholders sufficiently interested to provide input. 8.6 Project has succeeded in developing a useful Assessment Framework and tested it in the case Studies. 8.7 Stakeholders from other African countries sufficiently interested to participate in discussion. 8.8 Project has succeeded in developing a useful Assessment Framework and tested it in the case Studies. 9.1, 9.2, 9.3 Clear and timely requests from Commission regarding required contributions		

Appendix H. TOR for Catalogue

ECN-I--05-000

Catalogue of energy interventions

Terms of Reference for data collection

Henk Harmsen, ECN

JUNE 2005

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APPENDIX A DEVELOPMENT AND ENERGY IN AFRICA (DEA) ERROR!
BOOKMARK NOT DEFINED.

1 Introduction

The DEA project (Development and Energy in Africa) aims at developing an operational tool (an assessment framework) that facilitates improved design of energy interventions. A fact sheet of this project is included in the Annex of this document.

2 Scope of work

A catalogue will be made of energy interventions in 6 African countries. This catalogue will help the DEA project to develop an assessment framework for future energy interventions.

2.1 What is an energy intervention?

An energy intervention is any policy measure that affects energy demand and/or supply in a country. This can be a project, a policy or an innovation. An innovation can be either technological or institutional.

2.2 Which energy interventions will be included in the catalogue?

The project will concentrate on **energy interventions** that:

Have been finalized within the **last 5 years** (1999-2005). Interventions that have been finalized before 1999 are preferably not included.

1. Aim on **rural and semi-urban population**. Energy interventions that have effects mostly on urban populations are preferably not included.
2. Have an **effect on incomes** of the rural and semi-urban population. Energy interventions can have effects on income (reduced/increased costs, income generation/loss).

2.3 Who will collect the data?

Data on energy interventions will be collected by project partners in Botswana, Ghana, Mali, Senegal, Tanzania and Zambia. ECN will collect and process the data.

2.4 What is the time schedule?

Data on energy interventions will start in July 2005. All data must be collected before end of September 2005. During these 3 months, ECN will start to compile the catalogue. Therefore, preliminary results will be ready before September 2005.

2.5 What resources are available?

Each organization has a budget of 1 man month available for data collection.

2.6 In what language do we need to complete this questionnaire?

The questionnaires may be completed in either English or French. We prefer English, since the project language is English.

3 Data collection

3.1 General considerations

In the following sheets you will find questionnaires to complete on each energy intervention that your organization has selected to include.

In order to assure the data quality, please keep in mind the following:

1. Always include the **data source and reference**. Also, indicate **who** has collected the data.
2. Make sure that there is a **clear link between the data you collect and the energy intervention**. For example, if there is deforestation, is that caused by the project or by something else? If you are not sure, say so in your questionnaire.
3. Are the data **publicly available or confidential**? We will consider data publicly available unless you state otherwise in your questionnaire.
4. Clearly indicate **when** the data were recorded that you are now collecting. Where they recorded *before* the intervention started (baseline), *during* the intervention (monitoring) or *after finalization* of the intervention (monitoring and evaluation)? Ideally, we would like to have data from all stages (before, during and after energy intervention).

3.2 Which data will be collected?

You will find details on the data to be collected in the attached questionnaire. Complete this questionnaire for each energy intervention. The table below contains an overview of the type of information we would like to see and why we would want that information.

What we want to know	Why we want to know this
Brief project description	Short paragraph allowing the reader to have a quick overview on what the intervention is about
Why and by whom was the energy intervention initiated	We will want to compare the content of the intervention with the objectives. This will help to judge whether an effect is the desired outcome or a side-effect
What is it that the interventions wants to achieve, and what has been achieved	This allows us to compare the objective of the intervention with the results. If there is a difference, the reader wants to know why.
Project ownership and budget	There is often a party that fund and a party that executes the intervention. We wants to know who was involved. Also, we want to know what the available resources were, and what the actual spending was. If there is a large difference the reader will want to know why.
When did the project start, when was it completed	Only interventions are included that have been completed after 1999. The information allows the reader to see the duration of the energy intervention.
What is the geographical scope	The intervention may be country-wide (national policy) or regional (e.g. a project).

What we want to know	Why we want to know this
Target group	Does the project specifically address the needs of rural and/or semi-urban people, or is this a side-effect?
Link with other (energy) policy frameworks and interventions	Is the intervention an isolated action, or has it clear links with other (national) energy policies and policies in other areas (e.g. agriculture, education)?
Baseline data	What was the situation before the energy intervention started? This will allow us to see if the present situation is a result of the intervention (causality).
Monitoring	How was the desired outcome of the intervention monitored? Was there a monitoring program? If yes, how often did monitoring take place (frequency)? The absence of a monitoring program can lead to underachieved objectives, undesired outcomes, etc.
Income generation potential	The intervention might have resulted in new jobs (or job loss), for example due to new products and services. If this is the case, how are benefits or losses distributed over the population (we are interested in rural and semi-urban population).
Social and development impacts of the intervention	Has the intervention changed the type of energy or access to energy of the rural and/or semi-urban population? Did the intervention change the price of energy? Where these effects foreseen, or are they side-effects?
Environmental effects	The intervention may have positive or negative effects on the environment (e.g. reduced deforestation, reduced greenhouse gas emissions). Are the effects foreseen (included in objectives/project description) or are they side-effects?
Evaluation	Has the intervention been evaluated? If yes, what are the results thereof? An evaluation should also assess whether outcomes can be attributed to the intervention itself or not. If there has not been an evaluation, we would like to know if this is planned in the future. Even in the absence of an evaluation, there might be lessons learnt already: what went well? What can be improved? Is there potential for repeating this type of intervention elsewhere?

4 Questionnaire

Complete one questionnaire by energy intervention. Always indicate data source, reference, and year of collection and by who the data were collected.

Nr	General information	Answer
1	Give a brief description of the intervention (1 paragraph).	
2	Intervention history a. Who initiated this intervention? b. Why?	
3	When did the intervention take place? a. start year b. year of completion	
4	What was the main objective of the intervention? <i>Examples:</i> <ul style="list-style-type: none">• <i>Hardware (e.g. 10000 solar panels), or</i>• <i>Capacity (100 people trained in improved stove-making)</i>• <i>Income generation</i>• <i>Other</i>	
5	Have the main objectives been achieved? a. State achievements b. Compare with (4) above c. Are they different? d. If yes, why?	
6	Who has funded the project?	
7	Who has executed the project?	
8	What was the budget of the intervention?	
9	What were the real expenses?	
10	What was the geographical scope of the intervention? a. Indicate: national, regional, local b. Indicate name of region or locality	
11	What is the target group of the intervention? a. Type of group: rural, semi-urban, no focus b. Size of population affected by intervention	

Nr	General information	Answer
12	<p>Are there links with other policy frameworks? <i>For example:</i></p> <ul style="list-style-type: none"> • <i>Intervention is part of larger energy policy framework (which?)</i> • <i>Intervention is part of framework with other policies (e.g. agriculture, education)</i> • <i>Other</i> 	
13	<p>How was the progress of the intervention monitored?</p> <ol style="list-style-type: none"> a. Was there a baseline study (situation before the project)? b. Was the progress on main objectives monitored during the project (how, which frequency)? 	
14	<p>What was the effect on income by the intervention?</p> <ol style="list-style-type: none"> a. Has the intervention resulted in new jobs (or job losses)? b. If yes, how many? How was this estimated? c. How are losses/benefits distributed over the population? Are there groups who suffered/benefited more than others? d. Were effects on income taken into account in the project design/objectives? e. Were effects on income monitored during or after the intervention? 	

Nr	General information	Answer
15	<p>What was the effect on the environment?</p> <p>a. Has the intervention had any effect on forest cover? <i>Examples:</i></p> <ul style="list-style-type: none"> • <i>Decreased deforestation</i> • <i>Increased deforestation</i> • <i>Forestation</i> <p>b. What was % of people using biomass before and after the intervention?</p> <p>c. Which type of fuel was the target population using before and after the intervention?</p> <p>d. Are there any local effects on environment? Consider the following <i>possibilities:</i></p> <ul style="list-style-type: none"> • <i>Air pollution (both outside and inside houses (decreased/increased, specify; note whether this has affected population health)</i> • <i>Noise levels decreased/increased (specify)</i> • <i>Other environmental effects on soil, air, water (specify)</i> <p>e. Was the environment included in the project design and objectives?</p> <p>f. Were effects on the environment measured during or after the intervention?</p>	
16	<p>Social / development effects of the intervention:</p> <p>a. What is percentage and number of population having access to electricity before and after the intervention?</p> <p>b. What is the percentage and number of population having access to other commercial energy sources before and after the intervention?</p> <p>c. Did the intervention change the price of electricity or fuel (specify)?</p> <p>d. Were social/development effects of the intervention taken into account in the project design/objectives?</p> <p>e. Were social/development effects measured during or after the intervention?</p>	
17	<p>Lessons learnt</p> <p>a. Has the project been evaluated?</p> <p>b. If yes, describe the results. What lessons have been learned?</p> <p>c. Is there potential for repeating this intervention elsewhere? <i>Why?</i></p>	

This questionnaire was filled in by:.....

Checked by:.....

Date.....

Signature.....

5 Finalizing the questionnaire

Make sure a final check is run on the completed questionnaire before sending it. Make sure that the questionnaire is signed.

You can send the questionnaire by email to: H.Harmsen@ecn.nl

Alternatively, you can fax the questionnaire to: Henk Harmsen, + 31 20 492 28 12.



Appendix J. Contacts

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Appendix K. Kick-off Workshop Presentations

The 110 page / 4.2 MB PDF file with all presentations as 2 per page handouts is available from the DEA website at <http://deafrica.net/workshops/kickoff/presentations.pdf>

Mission

To promote an innovative and environmentally sustainable technological development within the areas of energy, industrial technology and bioproduction through research, innovation and advisory services.

Vision

Risø's research **shall extend the boundaries** for the understanding of nature's processes and interactions right down to the molecular nanoscale.

The results obtained shall **set new trends** for the development of sustainable technologies within the fields of energy, industrial technology and biotechnology.

The efforts made **shall benefit** Danish society and lead to the development of new multi-billion industries.

Energy for Development

Energy for Development (EfD) is the focal point for Risø National Laboratory's activities related to energy in developing countries. EfD was established on 1 January 2004, and implemented jointly by the departments of Systems Analysis (SYS), Wind Energy (VEA) and Biosystems (BIO). These departments already have well-established research programmes and competences, including various aspects of energy, at the national and international level. EfD brings these competences together with a focus on energy issues in developing countries.