euei
EUROPEAN UNION ENERGY INITIATIVE
for poverty eradication and sustainable development

http://www.euei.net

AFRETEP Project
Newsletter of the 8th August 2012

Q-METHODOLOGY SURVEY

Two weeks ago AFRETEP launched a survey among its members to better understand their perspective on energy access in Africa. The survey was designed together by the Joint Research Centre (JRC) and Dr. Magi N Matinga from Malawi. By collecting the different viewpoints of its stakeholders, it will be possible to explore the issues of rural electrification on the continent.

The survey can be found at the following address: www.euei.net/african-renewable-energy-technology-platform-afretep/forum/forums/general-discussion/understanding-stakeholders-perspective-ener

People have asked about the format of the survey and we hereby wish to clarify the method used. The survey uses the Q-methodology to better visualise people's viewpoints on a topic, in this case energy access. It asks respondents to rank a number of statements according to their personal level of agreement or disagreement with these. It is then possible to have a clear picture of what people think of as priorities in energy access, or what obstacles there are.
More information at the following address: http://en.wikipedia.org/wiki/Q_methodology

Another conclusion from the survey will be a better insight in the energy expert dialogue in Africa. For example, whether members understand the core problem differently or if they prefer different solutions. Finally we hope to identify possible barriers in the policy dialogue, so as to better address them in the future.

The completed forms should be sent back to the JRC by 31 August to the following email address: jonathan.vervaeke@ec.europa.eu. We have so far collected 1/3rd of our expected target from African stakeholders and wish to urge all members to complete the survey in order to make the analysis more complete. The results, all strictly anonymous, will be published in September on the AFRETEP website and available for everyone to examine and use.

CLIMATE CHANGE EFFECT SURVEY

The Joint Research Centre of the European Commission has started a survey on scientific knowledge how climate change affects renewable energies resources availability and exploitability, with a special focus on the African region.

If you are aware of studies, reports and general scientific material related to this topic researchers would appreciate if you could send them some information (Dr. F. Monforti-Ferrario, fabio.monforti-ferrario@ec.europa.eu).

All relevant contributions will be published in a new report which will follow the previous that summarizes current knowledge at the Joint Research Centre regarding Renewable Energy in Africa: www.euei.net/african-renewable-energy-technology-platform-afretep/document/renewable-energy/renewable-energies-africa.

AFRETEP WORKSHOPS

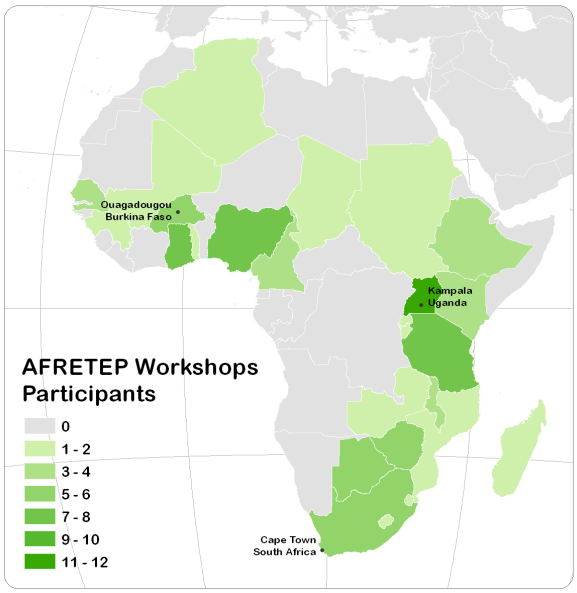
In November 2010 AFRETEP started to plan several workshops, each one focused on different topics and open to participants from any African country. We are pleased to announce all three workshops to date achieved excellent results in terms of participation, representation of African countries and quality of topics, trainers and trainees.

1. Uganda, October 2011: socio-economic aspects, mini-hydro projects and photovoltaic technology and mapping
2. Burkina Faso, November 2011: biomass and photovoltaic technology and mapping
3. South Africa, February 2012: financial schemes, photovoltaic technology/mapping and poverty reduction through rural electrification

The following figure and table show the African countries which were represented and the number of participants who attended the workshops.
For those who have missed a workshop or wish to see it again, all speeches and presentations delivered during the workshops have been video-recorded. Now, the Ugandan workshop video-recording is at your disposal both in http://www.euei.net/african-renewable-energy-

JRC
EUROPEAN COMMISSION

Institute for Energy and Transport



technology-platform-afretep/document/afretep/1st-afretep-regional-workshop-kampala-uganda-3rd-7th-octob, and http://webcast.ec.europa.eu/eutv/portal/archive.html?viewConference=16725.
Meanwhile, the PowerPoint presentations of the others two workshops are on tap in: http://www.euei.net/african-renewable-energy-technology-platform-afretep/document/afretep/afretep-regional-workshops.

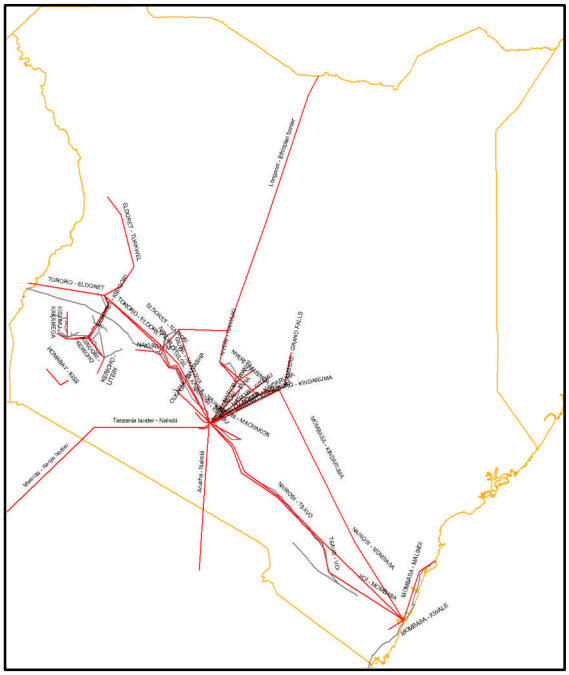
Algeria	1		Mali	2
Botswana	5		Mauritius	1
Burkina Faso	6		Mozambique	1
Burundi	1		Nigeria	7
Cameroon	4		Rwanda	1
Cape Verde	2		São Tomée P.	1
Chad	1		Senegal	3
Ethiopia	4		South Africa	5
Ghana	8		Sudan	1
Guinea B.	1		Swaziland	1
Guinea C.	1		Tanzania	8
Kenya	4		Togo	2
Lesotho	1		Uganda	12
Madagascar	2		Zambia	2
Malawi	3		Zimbabwe	5

AFRICAN PILOT CASES

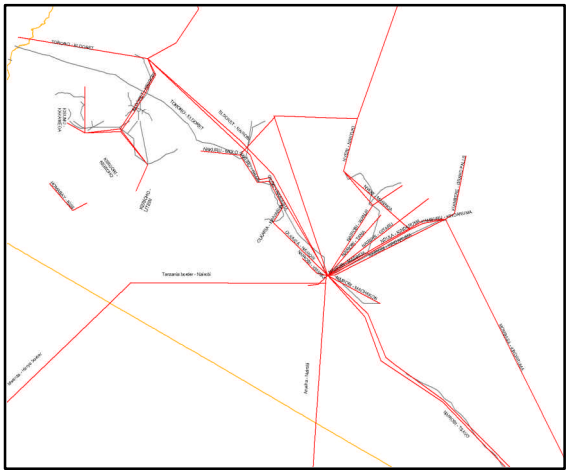
The AFRETEP team is updating the calculation for the maps included in the article http://iopscience.iop.org/1748-9326/6/3/0340029 with using the latest data on diesel prices, on mini hydro and we update the PV cost calculations as well.

In order to validate further the calculations we would like to include all available information on new and proposed gridlines (also on old ones on which we did not have information).

In agreement with our client directorate we start this validation with the case studies for Kenya, Burkina Faso and Mozambique.
We attach the GIS based grid maps on which we had information previously.
The AFRETEP team would be grateful if you could send us any additional GIS information where there are transmission lines (proposed, new or missing ones).



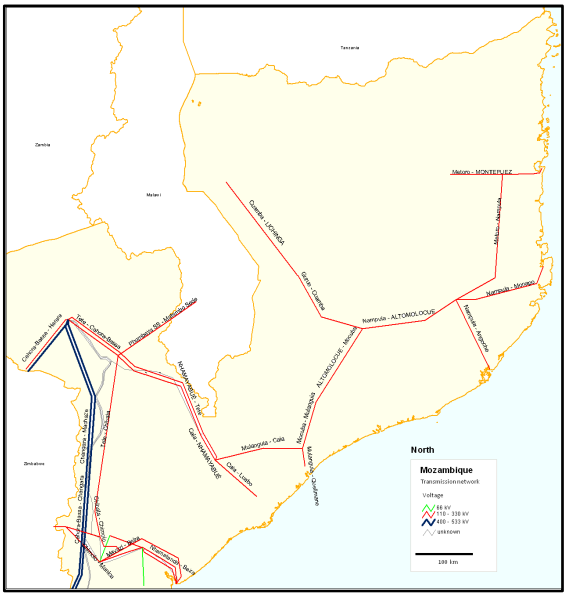
Transnet Kenya I



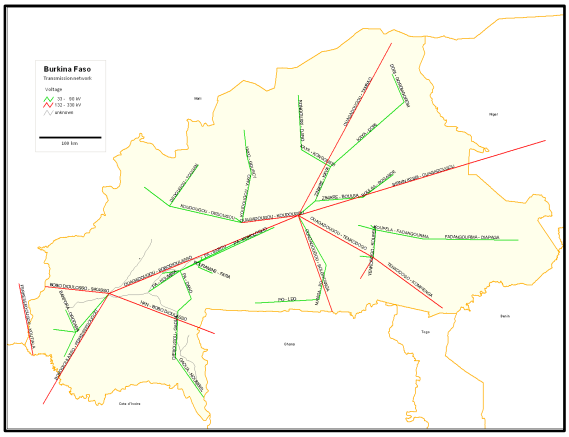
Transnet Kenya II

euei
EUROPEAN UNION ENERGY INITIATIVE
for poverty eradication and sustainable development

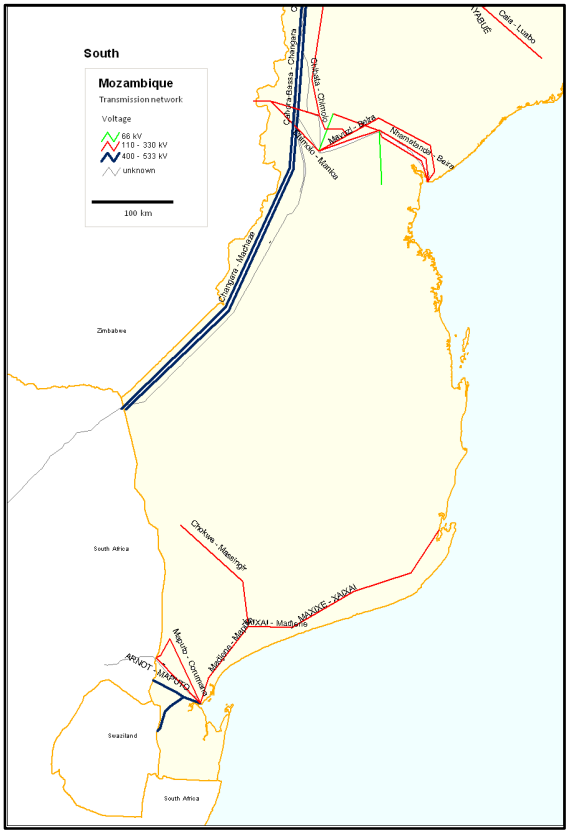
http://www.euei.net



Transnet Mozambique North



Transnet Burkina Faso

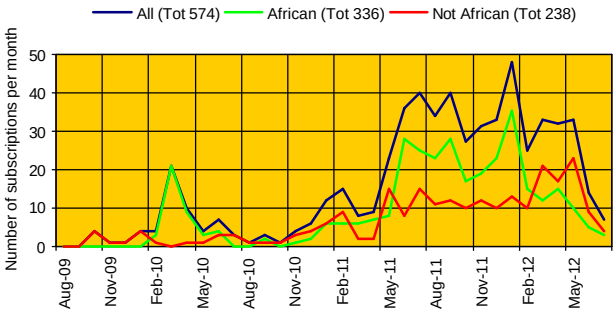


Transnet Mozambique South

We also attach the list of new proposed lines in Kenya with the names of the endpoints. We got these 2 lists from the Rural Electrification Plan and the Least Cost Development Plan of electricity from Kenya. The AFRETEP team would be very grateful if any of you having information of the GIS coordinates of these endpoints could send it to us, (Sandor.SZABO@ec.europa.eu) as we have difficulties in identifying them. We coloured the extensions that probably refer to the same plan.

AFRETEP WORKIN GROUP WEBSITE

The number of members of the AFRETEP platform has been increased to more than 570. By July 2012, the number of subscribers was 574: 336 African, 238 Non African. The figure below provides details on the evolution of the subscriptions from the beginning of the project.



AFRETEP Working Group subscriptions

Following graphs and maps show the subscriber's category, the website visits evolution (until April 2012) and the geographical distribution of African and European subscriptions as of July 2012.

JRC
EUROPEAN COMMISSION

Institute for Energy and Transport

Transmission line / project	Length (km)	Commissioning date
Kilimambogo-Thika-Githambo 132 kVsingle circuit Transmission Line	67	2011
Mumias – Rangala 132 kV single circuitTransmission Line	34	2011
Reactive compensation Phase 1 – Nairobi Transmission system		2011
Thika – Nyaga 132 kV single circuit Transmission Line	40	2011
Mombasa – Nairobi 220/400 kV double circuit	475	2012
Rabai-Malindi-Garsen-Lamu 220kV single circuit Transmission Line	320	2012
Eldoret-Kitale 132kV Single Circuit Transmission Line	60	2013
Kindaruma-Mwingi-Garissa 132kV Single Circuit Transmission Line	250	2013
Kisii-Awendo 132kV Single Circuit Transmission Line	44	2013
Loiyangalani-Suswa 400kV Double Circuit Transmission Line	430	2013
Nairobi Ring: Suswa-Isinya 400kV double Circuit Transmission Line	100	2013
Nairobi Ring: Suswa-Ngong 220kV double Circuit Transmission Line	46	2013
Bomet-Sotik 132kV Single Circuit Transmission Line	33	2015
Ishiara-Kieni-Embu 132kV Single Circuit Transmission Line	33	2015
Lessos-Kabarnet 132kV Single Circuit Transmission Line	65	2015
Mwingi-Kitui-Sultan Hamud-Wote 132kV Single Circuit Transmission Line	153	2015
Nanyuki-Nyahururu 132kV Single Circuit Transmission Line	79	2015
Olkaria-Lessos-Kisumu 220kV, Double Circuit Transmission	300	2015
Olkaria-Narok 132kV Single Circuit Transmission Line	68	2015

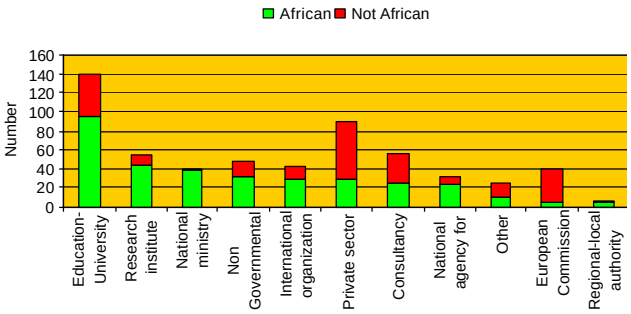
source: LCPDP 2011

Node 1	Node 2	Voltage	Length (km)
Nanyuki	Meru	132	80
Olkaria	Lessos	220	213
Lessos	Kisumu	132	103
Lanet	Nanyuki	132	200
Rabai	Diani	132	40
Konza	Kajiado	132	55
Juja	Rai	66	9
Kisumu	Siaya	132	52
Juja	Thika	132	
Kindaruma	Thika	132	
Musaga	Mumias	132	40
Olkaria	Nairobi	220	120
Mombasa	Nairobi	330	500

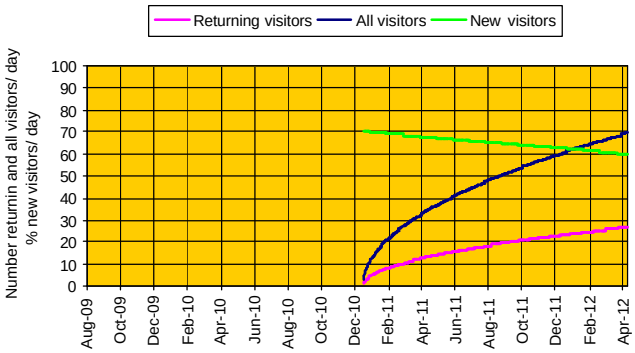
source: REM 2009

euei
EUROPEAN UNION ENERGY INITIATIVE
for poverty eradication and sustainable development

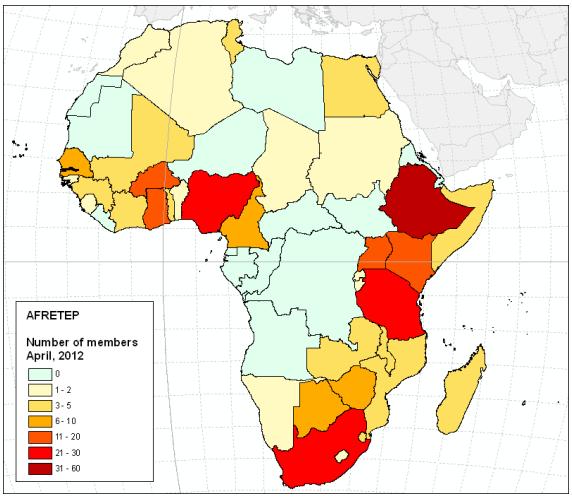
http://www.euei.net



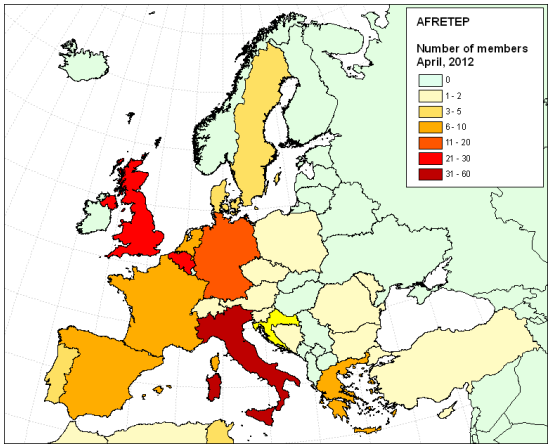
AFRETEP Working Group subscription categories



EUEI website visitors trend comparison



AFRETEP Working Group African subscriptions



AFRETEP Working Group European subscriptions

JRC
EUROPEAN COMMISSION

Institute for Energy and Transport