



KITE

CEEEZ



www.AREED.org

AFRICAN RURAL ENERGY ENTERPRISE DEVELOPMENT (AREED)
A UNEP INITIATIVE SUPPORTED BY THE UN FOUNDATION

engaging the private sector to deliver affordable energy services based on clean and renewable energy technologies

using solar, wind, water or biomass fuels, or environmentally sound uses of fossil fuels

replicating innovative service approaches, transitioning successful technologies and best practice into successful, on-the-ground operations

reducing environmental and health effects from existing energy use, and expanding the potential for new local economic activity

helping local development and finance organisations build long-term rural energy enterprise expertise

The United Nations Environment Programme initiated the African Rural Energy Enterprise Development (AREED) initiative in April 2000. AREED seeks to develop new sustainable energy enterprises that use clean, efficient, and renewable energy technologies to meet energy needs of under-served populations, thereby reducing the environmental and health consequences of existing energy use patterns.

The AREED approach offers rural energy entrepreneurs a combination of enterprise development services and start-up financing. This integrated financial and technical support allows entrepreneurs to plan and structure their companies in a manner that prepares them for growth and makes eventual investments by mainstream financial partners less risky.

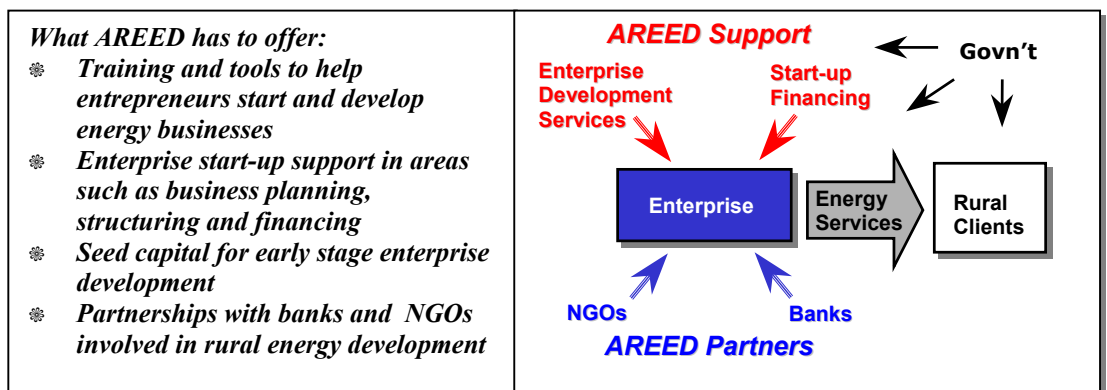
AREED is implemented as a partnership of UNEP, UCCEE, E+Co and the five country organizations ENDA in Senegal, KITE in Ghana, CEEEZ in Zambia, TaTEDO in Tanzania and the Mali-Folkecenter in Mali. Please visit www.ared.org for more information.

AREED provides early-stage funding and enterprise development services to **entrepreneurs**, helping build successful businesses that supply clean energy technologies and services to rural and peri-urban African customers. Services include training, hands-on business development assistance and, for promising enterprises, early-stage investment and assistance in securing financing.

The AREED initiative also works to broaden the skills of organizations involved in the energy and investment sectors to nurture energy entrepreneurs.

AREED works with African **NGOs** and development organizations on clean energy enterprise development. This helps prepare them to identify potential energy projects and to provide follow-up business support services to entrepreneurs. Resource tools are also developed and disseminated that focus on business planning, management structuring, and financial planning for the rural energy sector.

AREED works with **financial institutions** to assess the rural energy business sector and integrate it into their portfolios. This is accomplished through workshops and specific hands-on tools, centered on rural energy markets and enterprises, appropriate project finance models, financial analysis and risk management issues. Opportunities for co-financing are also explored.



AREED Enterprise Development Approach

AREED applies a particular hands-on form of enterprise development used by E+Co that is similar to venture capital on a smaller scale and with social/environmental ends. The approach is best explained by example. The first AREED support to an energy entrepreneur might be a modest loan (e.g., \$5,000) to support preparation of a business plan. If this looks promising, a second financing could be arranged to assist in the company's start-up – this time possibly the purchase of an equity share in the company.

E+Co is a non-profit energy investment company created by the Rockefeller Foundation. With more than 77 enterprise investments in 34 countries, E+Co has demonstrated that sustainable and profitable enterprises are an effective vehicle for expanding the provision of clean energy services to rural populations.

Once the business is operating, a working capital loan might be provided on a cost-sharing basis with the owner(s). In this initial period, significant in-kind support is provided including an AREED representative working closely with the company's management. The support increases the probability that a more "bankable" project can eventually be presented to financial investors and partners. Total AREED support to a company typically ranges from \$50,000 to \$120,000, although it can reach \$250,000. Once other partners are committed to a new company, AREED's role diminishes. The intervention is considered successful once AREED experience is no longer needed and the enterprise has reached sustainability, or is capable of attracting outside investment.

AREED NEWS

October 2002

Ghanaian LPG company Anasset and Malian biofuel company Bagani approved for investment.

September 2002

Zambian waste to charcoal company KPBS, and cookstove company Ubwato approved for investment.

May 2002

Body Shop approves co-financing for AREED investment facility.

March 2002

AREED wins Energy Globe Award for innovation in sustainable energy. Senegalese wind energy company VEV and Malian solar crop and meat drying company USISS approved for investment.

October 2001

ABM, a Ghanaian energy efficiency company approved for investment.

August 2001

Institutional strengthening workshops carried out in Zambia and Mali.

June 2001

Rasma, a Zambian cook stove manufacturer; and AME, a Senegalese solar thermal company, approved for investment.

Example I: Sawmill Waste Charcoal Briquetting in Zambia

With AREED enterprise development and seed financing support, the Zambian enterprise KPBS is expanding operations to produce charcoal briquettes from sawmill waste. The scale-up plan involves the addition of fifteen Argentine Half Orange Brick Kilns and the development of a marketing and distribution network. Underlying this expansion are long-term fuel supply and land lease agreements with the mills that will allow KPBS to increase production to 2700 tons of charcoal annually. By making use of a waste product and applying a conversion process 2.5 times more efficient than traditional methods, KPBS is a clean energy enterprise that solves both economic and environmental problems, and makes good business sense.

Example II: Solar Crop Drying in Mali

Since 1990 USISS has been processing and selling dried meat, mango and onion using a solar drying technology developed through a former GTZ project. The need for food preservation is substantial in Mali where a considerable portion of the harvest is lost to food spoilage. AREED funds will help USISS grow its business through the purchase of additional dryers and implementation of a marketing strategy in Bamako and surrounding areas. Helping expand development projects into fully commercial operations is a common AREED enterprise development strategy.

Example III: Repair and Service of Wind Powered Water Pumps in Senegal

VEV is an existing company that offers repair and maintenance services for wind powered water pumps. VEV has been servicing 110 pumps for the last 8 years on a cash basis and has proven to be a small yet profitable clean energy business. However a lack of working capital has limited the inventory that VEV can carry, leading to substantial servicing delays. With assistance from AREED, VEV will maintain an inventory of spare parts to shorten downtime and will begin offering short-term credit to clients that have demonstrated credit-worthiness.

AREED Contact Information

Mali – Mr. Ibrahim Togola, Mali-Folkecenter
Email mfc@malifolkecenter.org
Tel: 223 20 06 17 Fax: 223 20 06 18

Senegal – Mr. Secou Sarr, ENDA-TM
Email energy2@enda.sn
Tel: 221 822 24 96 Fax: 221 821 75 95

Ghana – Mrs. Harriette Amisshah-Arthur, KITE
Email: kite@idngh.com or kite@ghana.com
Tel: +233-21-256800/1 Fax: +233-21-256800

Zambia – Prof. Francis Yamba, CEEEZ
Email F.D.Yamba@ENG.UNZA.ZM
Tel: 260 1 240267 Fax: 260 1 262482

Tanzania – Mr. Oscar Lema, TaTEDO
Email oscartz90@hotmail.com or tatedo@raha.com
Tel: 225 0222700438 Fax: 225 0222774400

E+Co Africa Manager – Mr. Jurie Willemse
Email jurie@energyhouse.com
Tel: 27 12 998 8280 Fax: 27 12 998 8401

UNEP DTIE (institutional relations)
39-43 quai André Citroën, 75739 Paris, France
Tel: +33.1.44.37.14.29; Fax: +33.1.44.37.14.74
<http://www.uneptie.org/energy>

E+Co (enterprise relations)
383 Franklin St., Bloomfield, NJ 07003 USA
Tel: +1.973.680.9100; Fax: +1.973.680.8066
<http://www.energyhouse.com>