# **GREEN MICROFINANCE**



Sustainable Energy for the Poor

The Future of the Microfinance Industry

**April 2008** 



## Vision

Green Microfinance seeks to lead the field of microfinance, ensuring that the principles of sustainable development are integrated into all lending policies and programs.

## Mission

Green Microfinance supports clean energy for the poor.

- Clean energy practices are essential to achieving two of the Millennium Development Goals: *poverty reduction* and *environmental sustainability*.
- Sustainable energy practices by microenterprises and microfinance institutions contribute to sustainable global economic development and reduce the impacts of climate change on the poor.
- GMf promotes the distribution of and use of renewable energy technologies, which help reduce global warming, providing the poor with cleaner air, and ultimately better health.



Green Microfinance works primarily through microfinance institutions (MFIs), whose primary clientele are microenterprises.

- We primarily assist MFIs to build their environmental management capacity and to develop appropriate sustainable environmental lending practices.
- We concentrate our efforts within the informal sector of the developing world, in which most micro-businesses operate.



## Background

- Initial research conducted in 2000 on the interface of microfinance and the environment
- In 2002 Green Microfinance (GMf) established as LLC
- In 2004 facilitated Microenterprise and the Environment Conference
- In 2006 hosted Green Microfinance Wharton Roundtable Microfinance and the Environment: Setting the Research and Policy Agenda
- In 2006, established Advisory Board, who bring unique knowledge and skills on poverty, global warming, energy, and microfinance
- In 2007, Green Microfinance increased core team, attracting energy engineers with microfinance experience, who join financial specialists
- During 2008, increased regional technical expertise and competence in regional expansion (India and Philippines)
- In 2008 formed Green Microfinance Center, a non-profit, for education and research for addressing climate change and the development of clean technologies (application pending)
- Created microfinance and energy investment opportunities with the assistance of Morgan, Lewis, Bockius, LLP



## Leadership Team

Elizabeth Israel
President
Founder, Program Development

Thomas Israel Vice President

Strategic Planning, Business Development

Kathleen Robbins, MBA, DMin
Director of Clean Energy

Engineer, Biofuel Initiatives, Clean Energy Initiatives

Juliane Kniebel, MBAE
Director of Microfinance Energy
Engineer, Microfinance Clean Energy Program Development

Neha Mudaliar
Director of Indian Investments
Investments for MFIs, Financial Planning

Dan Lundmark
Director of Media and Communications
Web Design, Film, Media

Joan C. Hall
Consultant
Founder, Microfinance Specialist

Abhishek Lal Consultant Founder, Program Advisor

Scott Edward Anderson Advisory Board Strategic and Investment Advisor



## **Energizing Microfinance**

### **Energizing India**

Project: Microfinance for Clean Energy

Organization: Evangelical Social Action Forum (ESAF), Kerala, INDIA

**Summary:** Evangelical Social Action Forum (ESAF) approached Green Microfinance requesting technical assistance. Green Microfinance and MicroEnergy International, along with ESAF, will introduce energy specific products to its 232,310 micro credit clients in four Indian Provinces: Kerala, Chhattisgarh, Maharashtra and Tamil Nadu.

Note: There has been strong interest in Energizing India from other Indian MFIs and NGOs.



"Energizing India Workshop: Financing Clean Energy" is tentatively planned for September 2008 in south (Kerala) and north (Uttarakhand) India. This participatory, informative workshop will be open to all microfinance institutions throughout India.

www.esafindia.org

### Energizing Latin America and the Caribbean

Project: Haiti Solar Finance Project

Organization: Fonkoze, Port-au-Prince, Haiti

**Summary:** The objectives of our GMf pilot project are to design a loan product, to identify pilot locations, and to test the loan product for a variety of applications. During 2007 a feasibility study was conducted, including a field visit, which helped to identify and to gather information on PV suppliers, on current PV use, and on demand for solar energy.

Note: The final proposal has been reviewed and is being revised for funding.

www.fonkoze.org





Project: Renewable Energy for Haiti: Biodiesel Pilot Project Organization: Jatropha Nursery, Terrier Rouge, Haiti

**Summary:** Jatropha Nursery is a project which is committed to ongoing research in the propagation, cultivation, and use of *Jatropha Curcas* for bio-fuels. Green Microfinance is working with the Jatropha Nursery staff and advisors in developing a reliable biodiesel fuel supply chain.

The vision is by 2010 that 100% of Digicel Haiti's diesel fuel requirements will be met by Haitian produced biodiesel using locally grown non-edible feedstock. No food crops will be supplanted. No diesel engine modifications will be required.



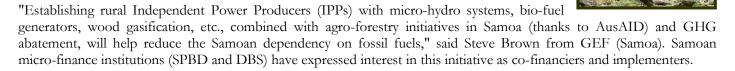
Note: Green Microfinance seeks to develop agro-reforestation programs in order to create sustainable supplies of biomass in countries that are environmentally devastated. Kathleen Robbins, Green Microfinance Director of Clean Energy, is conducting continuing research through this nursery and other jatropha initiatives globally.

### **Energizing Asia-Pacific**

Project: Clean Energy for Samoa and the Pacific: Help Augment GEF-PAS Program and Others, such as IUCN's Energy Program

Organization: MFI, GEF (Samoan Ministry of Natural Resources and Environment), EPC (Samoa), Min of Finance (Energy Section), SPREP (PIGGAREP) and Pacific Coconut Oil Samoa and the PACIFIC

**Summary:** Since November 2007 Green Microfinance has been working with GEF Services (Samoa) and other key energy partners on the development of a regional project, which would reduce GHG emissions, develop Carbon Credits, reduce rural poverty, build sustainable livelihoods and decrease dependence on petroleum imports.



**Note:** SPBD can play an important role by financing micro-technologies to create microenterprises that equate to more sustainable behaviors and livelihoods. Steve recently said, "Let's just position ourselves, no rush, consolidate with stakeholders, then merge harmonized interests regarding all our projects and their strong emphasis to poverty alleviation thru socio-economic development, surprisingly for some, with also huge biodiversity conservation benefits."

http://gef-passamoa.blogspot.com



### Energizing South-East Asia™

Project: Clean Energy for Cooking

Organization: Approtech Asia, Manila, Philippines

**Summary:** Farmers routinely burn their agricultural waste on over 100,000 hectares of open farm land. This practice violates the national Clean Air Act and local environmental legislation.

Approtech Asia is now promoting a process that converts such agricultural waste into fuel briquettes. "Our program will ultimately generate briquette enterprises in over a thousand communities," said Feri Lumampao, Execute Director of ApproTech Asia. "We have recently completed a charcoal supply and demand market analysis. The contemplated community enterprises will generate sufficient,



high quality, clean-burning briquettes to meet current household and small enterprise energy demands," Feri has enthusiastically told GMf.

Approtech Asia anticipates that they can develop a carbon credit exchange program through the Carbon Solidarity Asia network of eight South East Asian countries, providing an additional source of income for local business owners.

Note: Green Microfinance signed a MOU with Approtech Asia on April 12, 2007. Feri recently wrote to Green Microfinance, "YES! We are very much ready for the micro-finance on clean energy using improved cookstove and institutional stoves and clean biomass fuel (high quality charcoal and improved briquette), especially for cooking at the household and micro-enterprise (tobacco curing, copra drying, etc.) levels".

www.approtech.org



#### **Green Microfinance Overview**

## Green Microfinance, LLC - GMf™ (For Profit) Expanding Access to Clean Energy Technology

#### **Green Loan Fund**

Financing Clean Technologies for the Poor
Investment Needed: \$6 Million for 10 MFIs (25,000 households – 170,000 beneficiaries)

#### Certification

Training, audit, and certification of Microfinance Institutions

#### **Clean Development Mechanisms**

Assistance, application, investor identification of CDM in the developing world

#### Biofuel

**Business Development** 

Green Microfinance Center - GMfC™ (Non Profit)

Research and Education Center for Addressing Climate Change and the Development of Clean Technologies

#### Clean Technology Research and Development Fund (SEED FUND)

Donations to Support Seed Funding for Microfinance Institutions Funding: \$2.25 Million (to prepare 15 MFIs for investment in five years)

#### MFI Role in Bio-Fuel

Research and Development: \$500,000

#### Certification

Development of Certification Program - \$500,000 Funding: \$20,000 to certify 3 MFIs

#### e-Knowledge Center and Film

Funding: \$230,000

Total: \$3.5 Million