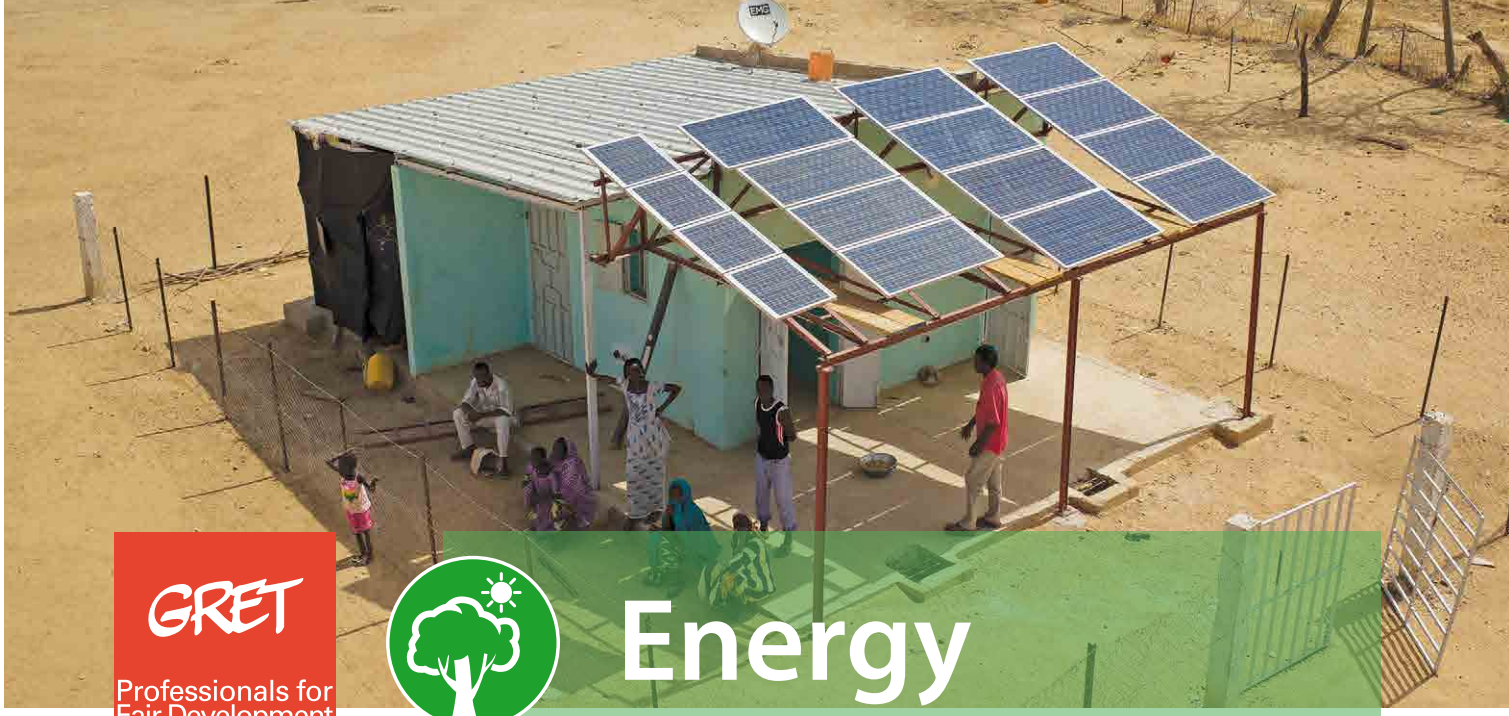
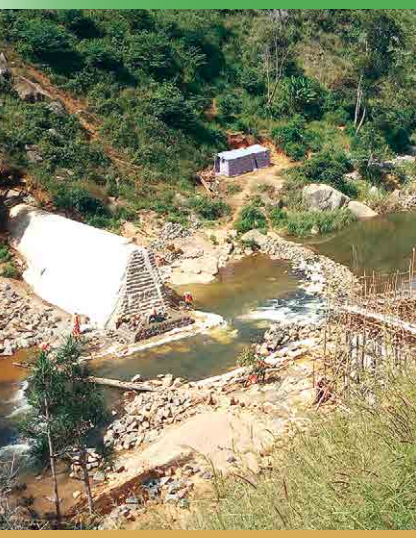


GRET
Professionals for Fair Development

Energy

Supporting innovation through design and implementation of reliable energy solutions that are accessible to all and respectful of the environment.

Factsheet



BENCHMARKS

Work on this subject area **since the beginning of the 1990s**.

8 countries of operation in 2019: Burkina Faso, Cambodia, Democratic Republic of Congo, Madagascar, Mauritania, Myanmar, Senegal, Vietnam.

An international team of **20 people**.

While energy is increasing worldwide, fossil fuel reserves are decreasing and the climate is changing, more than 1 billion people still have no access to electricity and 3 billion people still cook using firewood or charcoal with traditional stoves. Yet, access to energy is crucial for economic and social development.

For GRET, energy transition requires sustainable improvement of access to reliable, affordable, environmentally respectful energy for populations living in energy poverty. Since the 1990s, GRET has been working to improve conditions of access to energy for the most disadvantaged populations, ensuring its work is integrated into public policies in its countries of operation. It supports technical, organisational and financial innovation, via the design and implementation of sustainable energy solutions for economic and social development.

GRET promotes the implementation of balanced systems of governance taking account of everyone's rights and obligations (national institutions, local authorities, social businesses, private operators, users, etc.) – a prerequisite to ensure quality of service and sustainability of resources. It prioritises renewable energy, taking a concerted territorial approach that is as closely aligned as possible to stakeholders' constraints, needs and resources.

GRET capitalises and shares its experiences for collective learning, with a view to contributing to achievement of the sustainable development goals.

Methods of intervention

GRET supports the various stakeholders in territories to fulfil their responsibilities. It mobilises diverse skills: R&D; market research; technical-economic studies; support to implement systems for governance of resources, infrastructures and the service; project management and assistance to project owners; support for entrepreneurship; development of economic activities and value chains; etc.

GRET's approach

» *"In the same way as health, education or employment, access to energy is a real challenge for development. Among our methods of intervention, we prioritise transfer of technology for technical innovations that respond to populations' needs and generate jobs locally"*, explains **Juliette Darlu, Energy Programme manager at GRET headquarters.**

» *"In Mauritania, because of increasing scarcity of wood energy, the portion of households' budgets devoted to cooking is significant. The Farim project is implementing a comprehensive value chain providing improved stoves. Our team developed an effective stove model suited to the local context, and then provided support to a semi-industrial workshop for its production and a distribution network for its marketing. Our ambition is to ensure sustainability for this value chain, by supporting private stakeholders and training young professionals in a workshop"*, says **Samba Camara, Energy project manager in Mauritania.**

Key stakeholders' views

"We are fully benefitting from this new technology electricity and the new activities we can now carry out. Thanks to this electricity, insecurity levels have decreased and the reputation of the village has improved. Not to mention the fact that I now have a stable job!"
Fidel, operation technician at the Amboarakely turbine site in Madagascar

"At first, we couldn't believe it. We didn't think it was possible to convert grass into coal. The truth is that everything is possible in life."
A typha coal producer in Bouhajira, Mauritania

Focus on two projects

Hydroelectricity and environmental protection in Madagascar (Rhyviere I & II projects)

2008-2020 | ***Budget**: 9.3 M€* | ***Funding**: European Union, local private operators* | ***Partners**: Rural electrification and development agency (Ader), French National Research Institute for Sustainable Development (IRD), Companies technical information centre (Cite), Enea Consulting.*

Since the end of the noughties, GRET has been supporting the development of hydroelectricity in rural areas of Madagascar. This approach combines territorial energy planning, public-private partnerships for construction and management of infrastructures, and integrated watershed management in collaboration with the various users.

To stimulate economic development thanks to electricity, the project also provides specific support to small businesses (technical and financial training, assistance with purchase of electrical equipment, etc.).

During the first phase of the project, a 60 kW and an 80 kW power station were built and today make it possible to sustainably supply renewable electricity to three communal capitals and approximately 7,500 people. A 350 kW and a 500 kW power station are currently being constructed; these will enable supply of seven communes, i.e. approximately 50,000 inhabitants.

Typha biofuel in the Senegal River region (Typha project)

2011-2021 | ***Budget**: 2.5 M€* | ***Funding**: European Union, Ademe, FFEM, Cartier Philanthropy* | ***Partners**: Iset, Ademe, Biobuild concept.*

Typha is an invasive plant which proliferates along the banks of the Senegal River, with negative impacts on local biodiversity and local people's living conditions.

Since 2011, GRET and its partners have been developing energy recovery techniques to convert typha into biofuel. It is developing a production and marketing value chain for this fuel providing an alternative to wood-fuel on the local market. This activity makes it possible to attenuate the impact of typha, reduce deforestation and greenhouse gas emissions and create jobs.

http://www.typha.org

2019. Photos: © GRET.

SOME REFERENCES

- Camara S., Cerqueira J., Samassa N., *Electrification rurale par plateformes multifonctionnelles solaires*, An overview produced as part of the Erudi project in Mauritania, GRET, 2016, 32 pages.
- The www.typha.org website.
- Cerqueira J., Darlu J., Randrianarivony R., Grondin T., *Des turbines et des Hommes – Quelles coalitions d'acteurs pour l'électrification rurale à Madagascar ?* Feedback on the Rhyviere project experiences, GRET, 2018,166 pages.
- Butin V. (Burgeap) (dir.), Cladière T. (Nodalis), Scotney R. (Enea), Levet J. (GRET), *Les enjeux de l'universalisation de l'électrification – Etat des lieux & recommandations*, AFD, European Union, October 2019, 14 pages.