

Energy transition and resilient cities at FFEM

Efficiency

—
Conservation

—
Adaptation



Our action today



37

projects underway in 2020, 75% of which are in Africa

— representing →



€32 M

earmarked for energy transition and sustainable cities in 2020

By 2030, 95% of urban growth will be in developing countries. FFEM's approach is to address the issues of energy transition and cities together, to promote low-carbon development and to strengthen climate resilience. We target underfunded aspects of the energy transition, such as energy efficiency and nature-based solutions.

1 Promoting low-carbon energy efficiency



BRAZIL, MEXICO

€762,000

FFEM supports two initiatives: "Assessing Low Carbon Transition" by the French Agency for Ecological Transition (ADEME) and "Deep Decarbonization Pathways" by IDDRI. The goal: to help the public and private sectors of these two countries **mutually enrich their decarbonization strategies.**

FFEM supports projects aiming at **energy efficiency and demand management**, particularly in the non-localized consumption sectors of transport, buildings, refrigeration, and public lighting. In the field of construction, we promote urban renewal based on low-carbon energy through the optimization of buildings, rational energy management, and the use of environmentally responsible materials. At the household level, we target **control of energy consumption** by supporting the choice of fuels from sustainable sources. This policy is linked to our actions on the management of wood, forest, and agricultural resources. We also support enhanced use of biomass.

2 Encouraging new technologies

FFEM gives priority to innovative and environment-friendly solutions to increase **access to modern and sustainable energy services** in developing countries. Our actions incorporate new technologies for optimal management of production systems, storage, and energy consumption. We recognize that **cities and the connected-building sector provide great innovation potential** for improved energy efficiency. We also provide support for digitization and equipment interconnection, for example by developing mini-grids based on new technologies such as smart electricity grids and smart meters.



MADAGASCAR

€2.44 M

In rural areas without access to electricity, the Nanoé company is developing **nano-grids that supply 4 to 6 households**. They will be gradually **interconnected** to meet greater demand.

3 Making cities more resilient



GUATEMALA

€4.4 M

The Guatemala City metropolitan area has reduced its vulnerability to climate events by restoring and preserving its natural spaces through the **creation of urban parks**, thanks to FFEM support.

Pressure on ecosystems from rapid urbanization means that they can no longer play their regulatory role, consequently affecting **people's environment and living conditions**. To strengthen the **resilience of cities to natural hazards and the impacts of climate change**, we support the promotion and preservation of natural areas in cities. We encourage **nature-based solutions that restore ecosystem functions**: temperature regulation, reduction of coastal erosion and pollution, replenishment of groundwater, maintenance of soil absorption capacity, etc.



Typha is an invasive plant in the Senegal River basin. To limit its spread, the TyCCAO project promotes its use for insulation and fuel.

A cross-cutting approach

Human activities, especially in cities, impact biodiversity and ecosystems. To preserve them over the long term, FFEM's projects target change in use and improvement in practices. That's why our projects include the fight against climate change in a cross-cutting way. For example, the gathering of woodfuel is linked to the issue of deforestation, and the question of energy systems to that of sustainable consumption and production. In this way, we contribute to achieving the Sustainable Development Goals (SDGs).

3 ILLUSTRATIVE CROSS-CUTTING PROJECTS



ENERGY



FORESTS

— BURKINA FASO, MALI, NIGER

The FONABES project aims at improving access to energy for rural populations in the Sahel. At the same time, it promotes the conservation of forest ecosystems and dialog within the fuelwood value chain.



ENERGY



POLLUTION

— UGANDA

In Kampala, motorcycle taxis ("boda boda") are commonplace. The Zembo company has developed electric motorcycles that are solar-recharged and rents or sells them to boda boda drivers.



ENERGY



BIODIVERSITY

— MAURITANIA, SENEGAL

The TyCCAO project fosters the structuring of a cross-border value chain for typha, an invasive reed from the Senegal River. It promotes its use as a sustainable fuel and insulating building material.

25 years of solutions



100

projects on energy and sustainable cities financed since 1995



€109 M

committed to energy transition and sustainable cities over the past 25 years

FFEM has long supported the energy transition in developing countries. Our objective is to contribute to climate change mitigation and socio-economic development through sustainable and affordable access to energy. We also seek to adapt cities to climate change and improve people's living conditions.

Renewable energy, from production to consumption



MOROCCO

€500,000

The Comprehensive Rural Electrification Program (PERG), a PPP project, established a large-scale **decentralized solar electrification system** in 2004. It was still in operation in 2014.

Lack of infrastructure or of efficient distribution systems means that energy problems are even more acute in developing countries, where energy poverty is high. A more sustainable energy transition is thus all the more strategic for these countries. That's why FFEM has worked for the past 25 years to **strengthen access to energy for all; support urban and energy renovation** in industry, construction, and homes; and **promote the development of renewable energy**. We have supported **several decentralized rural electrification projects** to meet these goals.

Financial innovation to aid in transition



CHINA

€600,000

In 2007, FFEM financed technical assistance to strengthen the capacity of Chinese banks to **finance private energy-efficiency and renewable-energy projects**.

It is crucial to **strengthen energy policies** and the capacities—including financial capacities—of our partner countries to deal with climate change. The development of renewable energies and energy efficiency in countries in both the North and the South require specialized financing tools. **Since its creation, FFEM has been able to respond to the need to finance energy-efficiency policies.** Investment funds, credit lines, and the Kyoto Protocol's flexibility mechanisms have been mobilized to support the development of energy-service companies and to finance energy-efficient buildings.





Urban planning to adapt to climate change

Thanks to urban planning, it is possible to adapt cities to climate change by addressing environmental and socio-economic issues together: housing, transport, risk vulnerability, and energy consumption. For local authorities, FFEM proposes **an integrated approach to urban issues, through planning and programming by local stakeholders.** Nature-based solutions are complementary to this approach. These can be implemented on pilot sites, for instance, in nature reserves, urban parks, or green and blue belts.



COLOMBIA

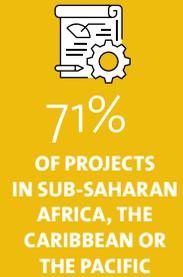
€1.15 M

Cali's "Green Corridor" pilot project promotes a **city that is socially and ecologically more sustainable**—a city that is greener, connected and low-emitting, promoting soft mobility and public transport.

Financing private sector innovation

FFEM has been using an innovative financial tool since 2013 to support people's access to low-carbon energy: **FISP-Climate**, an innovation facility for the private sector, in the field of climate change. The purpose of this specific financing mechanism is to support innovative development projects carried out by private companies (from the North and South) that use their skills to protect the environment and combat climate change.

FISP-CLIMATE IN FIGURES



An innovative and illustrative project

Desalinating seawater with solar energy

RODRIGUES

This innovative project desalinates seawater using **solar energy and without the use of batteries.** Its dual objective is to desalinate 80 m³ of seawater per day and to develop a technological approach adapted to isolated island communities.

The **French Facility for Global Environment** (FFEM) supports innovative environmental projects in developing countries. It was created by the French government in 1994, following the first Earth Summit. FFEM has already supported more than 333 projects in more than 120 countries, two-thirds of which are in Africa. FFEM works in partnership with public, private and civil-society stakeholders in both the South and the North, as well as with other donors and international organizations. The projects it finances generate local environmental, social, and economic benefits. They not only help preserve biodiversity, climate, international waters, land, and the ozone layer, but also fight pollution. What makes FFEM special is that it focuses on pilot projects in order to learn from them and to disseminate their innovations on a broader scale.

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FFEM - French Facility for
Global Environment



**FONDS FRANÇAIS POUR
L'ENVIRONNEMENT MONDIAL**

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