

Cool Roof France

COOL ROOF, freshness in the city: Demonstration and promotion of Coolroofing in Senegal

The project proposes to introduce "coolroofing" in Senegal, which consists in painting the roofs with a white specialized reflective, durable and maintenance-free coating.

The high electricity tariff (0.20 €/kWh) and the lack of insulation of the buildings, make freshness a luxury, a sign of wealth, but accessible only to those who are wealthy households, or to activities that can absorb the cost.

Cool Roof France is committed of providing access to the largest number to a liveable interior comfort.

Subvention

- FASEP : 481 k €

French partners

- Staterre
- Emitei

Sustainable development goals

- SDG #7: affordable and clean energy
- SDG #8 : decent work and economic growth
- SDG #9 : industry, innovation and infrastructure
- SDG#11: sustainable cities and communities



Sénégal - Grand Dakar



Durée d'intervention
18 mois



Coût total
570 k €



Effectif mobilisé
27 personnes

Thématiques



Prestations réalisées

Services
Etudes

Chiffres clés



Traiter d'au moins
5 typologies de bâtiments
publics



Surface totale comprise
entre 15 à 20,000 m²
de toitures

Project goals

This project aims to coat at least 5 typologies of public buildings for a total surface area between 15 – 20 000 sqm of roofs.

These different types of buildings, fully instrumented, will allow to measure the technical-economic opportunity of coolroofing, as well as the social and environmental co-benefits.

Different steps

Preparatory phase

Coolroofing popularization missions, selection of target buildings, programming

Phase 1 - Studies

Research studies before installation : technical tests of paints on different surfaces
development of monitoring tools, quantitative studies, etc.

Phase 2 - Instrumentation et user interface

Specifications, instrument design, user nterface design, installations

Phase 3 - Deployment

Production & transport, tooling, training of applicators, sites and sites, quality assurance and technical follow-up.

Phase 4 - Analyses

Surveys, data analysis

Phase 5 - Communication / Outreach

Kick-off workshop, scientific seminar, publications, national workshop, press activities, SenCon 2020, Africa France summit

Local clients and beneficiaries

Local Beneficiary: The State Agency for the Management of the State's Built Heritage

AGPBE's mission is to manage the State's built heritage in optimal conditions. In particular, it oversees its development and preservation.

As such, the Agency participates in the design and implementation of the Government's policy on the construction and management of office and housing buildings.

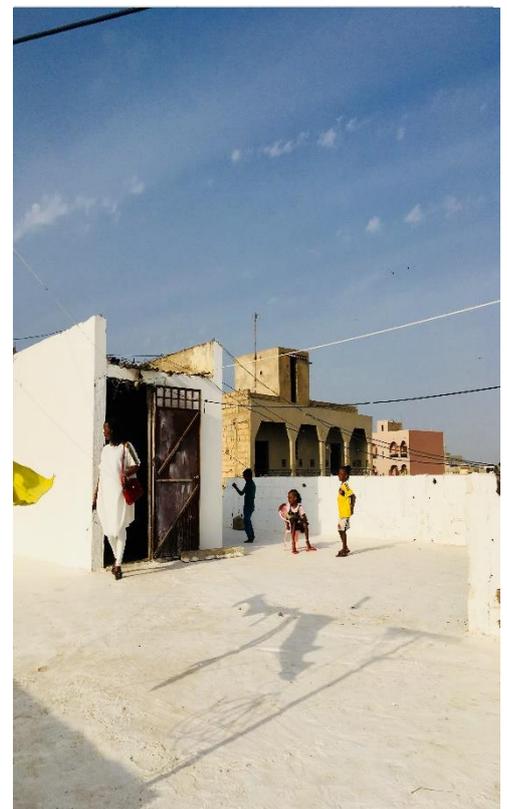
AGPBE will bring its institutional weight to bear to perpetuate the solution in its regulatory aspects (facilitating relations with the building materials approval body, the order of architects, universities, design offices, etc.).

Finally, AGPBE proposes to invite to the Monitoring Committee the organizations of access to the Climate Funds, to make them aware of the impacts of Coolroofing and to consider a deployment on a significant scale.

Post projet results

The economic impacts of this intervention in passive solar will be evaluated ex-post. The creation - or the revival of activity will depend on the precise sites that will be selected in the launching workshop. In the case of offices, the improvement of thermal comfort increases the productivity of civil servants and possibly the reception conditions of the public.

In addition, the project will create a new qualification: house painter, speciality coolroofing.



Environmental impact

- Improvement of the passive thermal comfort of buildings, quality of life and quality of work
- Reduction of the electricity bill (and therefore GHG emissions)
- Reduction of the urban heat island (subject to sufficient concentration of treated sites)
- Creation of new economic opportunities in eco-construction: applicators, tolerators, instrumentation technicians.

Fort de plus de 130 membres, le Club ADEME International accompagne les PME de son réseau dans le développement de projets innovants et de partenariats à l'international. L'objectif poursuivi est de participer au rayonnement du savoir-français, en associant le secteur privé et public dans le secteur de la transition écologique et énergétique pour répondre aux défis environnementaux et climatiques mondiaux.
Pour en savoir plus : www.clubinternational.ademe.fr

