



Beverly Hills Project MIF

Emirates Real Estate & Estedama Dev (EREED)

Amre Gapre – Founder CEO

Estedama

Background

- EREED is established to improve the quality of life at the residential properties along with inspiring all means to minimize our carbon footprint adopting green energy building technology.
- We leverage our legacy and experience to offer economic model (ROI) along with affordability (capital budget and running cost) under the market labor shortage and material availability circumstances.
- We adopt and implement all necessary measures striving to provide Comfort, Quality and Sustainability considering Affordability and within local resources Availability.

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Manifolds and Approaches

- Passive approach – Envelope Isolation
 - Building envelope insulation – roof, walls, windows and shades
- Active approach – Clean and Renewable energy sources
 - Solar heaters (3000L) and solar PV (10KW) in the day light
 - Wind turbines for limited space, in shadow and all the day source
 - Cairo average wind speed is 4m/s (0.5KW)
- Proactive approach – Smart homes

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Programs Development (UN-EREED)

- Current status
 - Wall insulation and external finish complete (mineral wall and stone tiles)
 - Electricity infrastructure complete
 - Installation of windows and roof insulation is planned this summer, followed by installation of the monitoring equipment and solar renewable energy
- High cost is incurred so far considering NRE and labor skills shortage, however, we are eager to lead by exemplary knowing the importance and sensitivity of sustainability for human future.
- In this collaboration program, we worked on the proof of concept in Mediterranean environment along with model correlation.
- This building is furnished rental-based, we are responsible for operation, considered as best fit.



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Programs Development (EREED)

- All our projects are residential. Currently we plan for four other projects in East Cairo, and they all for trade purposes. We currently investigating weatherizing the walls as well as the building.
- We have analyzed the test data obtained at lab concerning different walls with different material, construction approach and thickness. Considering the test representativeness and limitation, conclusion is walls with air gaps asymptote beyond 20cm width. One building is currently under development with this approach.



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Incentives and Financial Facilities

- Financing clean energy projects is an urgent need considering introducing new conception for cultures to adopt, the financial terms and conditions should focus on implementation monitoring using consultancy services, meanwhile applying symbolic interest rates and much incentives from local authorities. In Western countries, financing options already available and implemented such as energy-saving mortgages, home equity, Property Assessed Clean Energy Loans for homeowners, SME and large scale developers. Incentives including Tax credit and certifications are in place.
- Cost is increased for materials and labor charges by ~50-100% on average. These challenges and obstacles need to be considered.
- Even though financing is a great tool to motivate the concept, we need to pursue the persistence of the concept. This is attained mainly by offering a fully proved economic End-to-End solution/approach based on the available local material followed by working on developing enhanced new material.

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Next

- Model Correlation: Monitoring equipment reading, Implementation error, Uncertainty
- Financial model update: Capital cost, OPS cost, Electricity Saving, ROI, all cost in USD
- Verification of other models
- Development of new materials and techniques
- Pursuing financial facilities and incentives
- AOB

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