



Mr. Sandeep Goswami
COO at FountainHead II CleanTech India Pvt Ltd.

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EcoConstruction India speaks to Mr. Sandeep Goswami to discuss the slow rise of OPEX models for India's Building Industry to attain a green status.

Let us know more about FountainHead II CleanTech India..

We at FH2CIPL offer solutions which fundamentally addresses the issue of green building from the perspective of design solutions, while adding product based solution as and where prudent in the Operational Expense " OPEX format.

This is made possible as we believe in importance of the National Action Plan for Climate Change (NAPCC) and trained to understand the Clean Development Methodology (CDM) within the scope of United Nation Environmental program - Sustainable building & Climate Initiative (UNEP'SBCI).

What are the current challenges faced by real estate developers to wholeheartedly accept the green building concept?

The biggest challenge faced by builders, as with most industries in India is of policy paralysis. The long standing demand of the building industry to be given Infrastructure status was yet again met with disappointment. It would have opened up the path of more responsible approach and industry standardization would have come in.

What the building industry needs, in my opinion are mandatory sustainable design guidelines which can be applied pan India and then adjusted to specific city and zonal needs. The rules must be for one and all. For example, while the city of Pune has its own eco-guidelines, there is no such thing for Mumbai. Nothing is mandatory. Unless Energy Efficient Building Design guidelines are made mandatory, we shall continue to build in the ratio of 100:1 Green building.

As the World Sustainable Building Development Council has pointed out, 50 years down the line these inefficient buildings would be a bane for all; in a resources depleted World. A building consumes 40% of the world energy and produces 60% of the total waste. Thus, in the coming future, any building which would be consuming more water or energy would slide down the ranking in terms of asset value and choice for habitat.

Green Building Rating Systems encourage use of renewable energy in the building sector. But the initial capex sometimes can be a hindrance of complete acceptance of renewable energy technologies. How is FountainHead II helping real estate developers here?

To answer this, one needs to understand the state of play. There are two aspects - the cost and area constrain. Builders and Developers who do want to apply the Green matrix fully, at times find hindrance in terms of design constrain and other is the cost constrain.

When you are not provided with logical development rules as it is in the city of Mumbai, it is but natural for the builder/ developer to maximize his saleable area and give priority to that, rather than think of creating architectural features which can maximize use of RE. (Especially solar /wind).

In the cost front - If we take the case of Mumbai, the cost of land and construction is very high. If the developer puts in a CAPEX in RE, then the sale price increases further. In a cut-throat competitive business and with mediocre sales and no mandatory requirement, the developers give RE a pass. Or at best put a very small system as a token gesture towards green.

While the Development rules are not in F2CIPL's control, those who are utilizing our consultancy for Green Building, we are encouraging them to maximize the RE component, while footing the upfront expenses ourselves in the OPEX format which is a win-win situation for all.

How is OPEX Solar model being offered by your investors and FountainHead II, a win win situation for all?

The advantage of OPEX is that there is no upfront payment to be made by the user for the system. All the user needs to pay is the monthly tariff as is norm when one uses electricity provided by the DISCOMS. In this way the investment made by us is paid off over time.

The biggest advantage I find from the point of view of user is that they get a quality product but also guaranteed operation & maintenance, a service which is hard to find on time even with valid warranty in any product. This is because the downside associated with this model is completely with the investor. They lose tariff if the system is not optimum, simply because the tariff is generation based and if it generates less than what it has been sized for, the user does not pay.

My investors are essentially RESCO's who would own & operate the asset for the length of an agreement which is predetermined. The advantage to them is that they can set up smaller off-grid system on users roof-tops and thus avoid the pitfalls and problems associated with utility scale RE projects.

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In what form of RE are you offering the OPEX model. And do you see this model gaining popularity..

Presently we are concentrating on roof-top solar, primarily because of its dependability. The Sun is one thing, which will without fail rise and set within a predetermined time in all parts of the world, everyday. This is not true for many others RE sources.

But Solar too has limitations. And that is; no power can be generated during the night. Storage and back-up are the only options. However, this would be possible when the Government would allow Net metering norm in all states. By Net metering one can send the surplus power, from unused roof-top solar to the grid and barter the same amount of units during the night from the grid. And once there is less short-fall, planned load shedding would be reduced so supply of night time power would improve.

It would encourage more players into the field and thus the shortfall in power would be addressed to a great extent. It would further drive down the cost of EPC and even the cost of batteries for back-up. Which then could become norm, displacing GHG producing diesel generators.

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Does the OPEX model also work for other solutions in a Green Building? Please share some details..

In the USA, there are many financial companies, which provide financial support to energy efficiency products.

We at FH2CIPL along with our investment partners are looking at providing OPEX solution to almost all energy efficient solutions possible for a building, which is going green.

Recently we have ventured into LED in OPEX, and are conducting pilot projects. We would like to add more and more products and solutions and are actively seeking experts who could give us the numbers and case studies, for us to go faster in that direction.

How does this entire OPEX model come into being, what made you think of doing this?.

While we have two excellent Green Building rating systems, namely GRIHA & IGBC-LEED. With norms not being mandatory, most use it for advertisement purpose and attempt to apply a green wash.

This pains any environmentalist and we at FH2CIPL are environmentalist in mind and spirit. We understand the spirit of the NAPCC. And for it to succeed, innovation and incentive is a must. There is a limit a Government can do, beyond which we must take the responsibility of preventing Climate change.

Moreover it made perfect sense as a Green Business Idea, to have a unique USP to provide not only Green consultation but also the finances to apply the solutions.

Will the Solar & LED OPEX charges be the same for all projects or will it change as per location or other criteria?

No, in the case of Solar OPEX, we are looking at providing a discounted tariff from that of the DISCOM and it would be based on the tariff as prevalent in that state. The other criterion is size of the system and the demand load.

As for LED, we are presently doing a few selected pilot projects and then decide on what would be the best course of action.