Radiant Cooling/Heating for Energy Efficient Buildings

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Conserving Now, Preserving Future
Problem

- Air Conditioning consumes 40-65% of electricity in buildings
- 80% of 100 billion square feet built space by 2030, is yet to be built in India
- Multifold growth expected in cooling requirement - current penetration ~ 6%

Solution – What We Do

Replacing inefficient conventional cooling system with innovative cooling distribution system to improve the effectiveness & reduce energy usage
Radiant Cooling/Heating Panels that provide:

- Operational cost reduction of 30-50% over conventional systems.
- Capital cost reduction upto 20%
- No noise
- Healthy indoors
- Uniform comfort, no hot or cold spots in the space
Technology

- Proprietary panel design
- Cost and efficiency optimised
- Can be used for cooling or heating
- Patents applied for different applications.
Markets & Customers

Customer Profile:
• Having high cost of electricity
• Having more than 1 million square feet of air conditioned space
• Operating air conditioning in all seasons, possibly 24 hours a day

Market Segments: Information Technology Firms, Hospitals, Educational Institutions, Warehouses, Commercial Office Buildings.
SUSTAINABILITY:

Radiant Cooling provides electricity savings of ~0.3 KW/Ton/Hr.

= 0.3 kg of CO2/ton/hr

Current Size of Air Conditioning Systems in India:
>40 Million Tons

1% penetration in existing market, would lead to:

• savings of 216 M units/year
• 0.2 Million Tonnes of CO2

IMPACT:

• Direct employment generation of 25 people and indirect employment generation of 50 people.
• Technology being used in remote Himalayan regions for heating.
Milestones & Achievements

MILESTONES:

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<thead>
<tr>
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<th>2016-17</th>
<th>2017-18 (projected)</th>
<th>2018-19 (projected)</th>
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<tbody>
<tr>
<td>Revenue (million USD)</td>
<td>0.5</td>
<td>2</td>
<td>10</td>
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- Pioneer & Leader in the market for radiant cooling & heating systems
- Pan-India presence with 25 projects executed in 12 states

AWARDS:

- WWF Climate Solver India 2015
- GCIP Semifinalist in 2016 & 2017
- Skoch Award for Radiant Cooling in 2015
## Next Steps

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<tr>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
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<tr>
<td>Revenue Target of USD 10 Million</td>
<td>Revenue Target of USD 18 Million</td>
<td>Revenue Target of USD 30 Million</td>
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<td>Consolidation of position with large Infrastructure firms.</td>
<td>Market Entry in Middle East</td>
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<td>Raising Equity of USD 5 Million</td>
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THANK YOU!

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