SVK Green Renovations: Home Improvement Services

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Executive Summary

• **Lack of technical guidance and confidence** in green renovations has dissuaded many potential investors.

• **Personalized** renovation service utilizing unique home modeling & simulation software to provide **detailed energy expenditure and financial analysis**.

• SVK Green Renovations is **highly motivated and professionally qualified** to deliver valuable services to home owners across America.
Significance

• Lack of technical advising for lifestyle and financial impacts of green renovation

• Accurate simulations are needed to instill confidence for home owners

• Increasing number of energy efficient homes will decrease overall energy consumption
Potential Impact and Market

• Targeted Market:
  o New home construction
  o Remodeling of old homes
  o Homes valued $200,000 and up

• SVK Green Renovation’s service will increase amount of green investors
Market Analysis

• The demand for energy efficient homes are increasing due to:
  o Rising and more volatile energy prices
  o Incentives by government

• Within 5 years capture 0.4 to 0.8 percent of new home market
  o In 2010 : 323,000 homes
  o In 2009 : 375,000 homes
COMPETITION

Eco Brooklyn
Services
• Insulation
• Water recycling
• Solar heating
• Solar electricity

Green Energy Improvements
Services
• Energy Tests
• Remodeling
• Renovations
• Efficiency Upgrades
Proposed Plan

- Brainstorm: developing ideas of software, service, and company
- Prepare: gathering of required resources
- Design & Construction: development of actual software, services, and companies
- Experiment: testing of 3D Imaging technology and service process
- Redesign: troubleshooting and remodeling of designs
- Prototype: presentation of completed prototype to advisory board for approval
Phase-1 Project Goals

• Develop 3D modeling & simulation software
• Construct model homes
• Research energy values and material properties
• Complete prototype software in one year
THE MISSION OF
SVK GREEN RENOVATIONS IS TO PROVIDE
CUSTOMIZED HOME IMPROVEMENT SYSTEMS
TO OPTIMIZE THE ENERGY EFFICIENCY OF
AMERICAN HOMES.

Integrity
Excellence
Integrity
Business Management Plan

• Upper management team
  ▪ Kamran Asif software developer
  ▪ Saif Haobsh home modeler
  ▪ Kevin Zhang heat and air map specialist
  ▪ Victor Razuk material researcher

• Business Prospects
  o Network with construction companies to obtain contracts
  o Channel between contractors and home owners
Project Management

• CEO
  – manages the upper and lower level managers
  – ensures company follows mission statement

• CFO
  – Provides and updates financial records

• CTO
  – Ensures a high level of customer service
  – Oversees the research and development department

• Chief Manager
  – Implements the company’s standards and productivity

Resources include professors, computers, heat mapping device and building materials
Project Management

Risk
• lack of software programming knowledge
• the inaccuracy of our software
• the lack of contractors

Risk Management
• Outsourcing of software programming
• Run software through stages of refining, testing, and experimenting until favorable accuracy is achieved.
• Company will gain trust, integrity, and legitimacy
Milestones, Deliverables and Gantt Chart

- Phase 1: Complete software prototype design and research
- Phase 2: Complete testing of software with model scale home
- Phase 3: Partner with contractor and begin utilizing developed software

- 3D home modeling software
- Constructed model testing home
Gantt Chart

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Predecessors</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 Research</td>
<td>15 days</td>
<td>Mon 8/29/11</td>
<td>Fri 9/16/11</td>
<td></td>
<td>$500</td>
</tr>
<tr>
<td>Development of Prototype</td>
<td>20 days</td>
<td>Mon 9/19/11</td>
<td>Fri 10/14/11</td>
<td>1</td>
<td>$1000</td>
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<tr>
<td>Construction of model homes</td>
<td>5 days</td>
<td>Mon 10/17/11</td>
<td>Fri 10/21/11</td>
<td>2</td>
<td>$1500</td>
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<tr>
<td>Software Testing</td>
<td>10 days</td>
<td>Mon 10/24/11</td>
<td>Fri 11/4/11</td>
<td>3</td>
<td>$100</td>
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<tr>
<td>Complete software product</td>
<td>10 days</td>
<td>Mon 11/7/11</td>
<td>Fri 11/18/11</td>
<td>4</td>
<td>$200</td>
</tr>
<tr>
<td>Accreditation of software</td>
<td>10 days</td>
<td>Mon 11/21/11</td>
<td>Fri 12/2/11</td>
<td>5</td>
<td>$250</td>
</tr>
<tr>
<td>Network with home contractors</td>
<td>5 days</td>
<td>Mon 12/5/11</td>
<td>Fri 12/9/11</td>
<td>6</td>
<td></td>
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<tr>
<td>Implement Software with customers</td>
<td>10 days</td>
<td>Mon 12/12/11</td>
<td>Fri 12/23/11</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Update software and debugging</td>
<td>6 days</td>
<td>Mon 12/26/11</td>
<td>Mon 1/2/12</td>
<td>8</td>
<td>$100</td>
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</table>
Phase-1 IDS Budget

• Budget requires $5,000 for equipment and experimentation

• Equipment needed
  o 3D modeling software
  o Model house materials
  o Material samples
  o Heat tomography device
## Breakeven Analysis
### SVK Green Renovations

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Fixed Costs ($)</th>
<th>Variable Costs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>$20,000</td>
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<tr>
<td>Inventory</td>
<td>$-</td>
<td>0.0%</td>
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<tr>
<td>Raw Materials</td>
<td>$-</td>
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<tr>
<td>Direct Labor (Includes Payroll Taxes)</td>
<td>$-</td>
<td>0.0%</td>
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<tr>
<td><strong>Fixed Costs</strong></td>
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<td></td>
</tr>
<tr>
<td>Salaries (includes payroll taxes)</td>
<td>$250,000</td>
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<tr>
<td>Supplies</td>
<td>$200,000</td>
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<tr>
<td>Repairs &amp; maintenance</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>$-</td>
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<tr>
<td>Car, delivery and travel</td>
<td>$5,000</td>
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<tr>
<td>Accounting and legal</td>
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<tr>
<td>Rent</td>
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<tr>
<td>Telephone</td>
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<tr>
<td>Utilities</td>
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<tr>
<td>Insurance</td>
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<tr>
<td>Taxes (Real estate, etc.)</td>
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<tr>
<td>Interest</td>
<td>$-</td>
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<tr>
<td>Depreciation</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td>$-</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td>$-</td>
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</tr>
<tr>
<td>Miscellaneous expenses</td>
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<td></td>
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<tr>
<td>Principal portion of debt payment</td>
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<tr>
<td>Owner’s draw</td>
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<tr>
<td><strong>Total Fixed Costs</strong></td>
<td>$588,000</td>
<td></td>
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<tr>
<td><strong>Total Variable Costs</strong></td>
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<td>10%</td>
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<tr>
<td><strong>Breakeven Sales level</strong></td>
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<td>$653,333</td>
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<tr>
<td>Year</td>
<td>Sales</td>
<td>%</td>
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<td>---------</td>
<td>-------------</td>
<td>----</td>
</tr>
<tr>
<td>2012</td>
<td>$ -</td>
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<tr>
<td></td>
<td>$ 1,000,000</td>
<td>100.00%</td>
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<tr>
<td></td>
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<td></td>
<td>$ 2,100,000</td>
<td>100.00%</td>
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</table>
References and Acknowledgements


Thank you to Professor Dhawan, Professor Sava, and members of the Executive Board

Questions or Comments?