Proposal for a building with low CO₂ emissions

We proposed a plan for new construction and for facility maintenance and energy efficiency retrofits to reduce emissions of CO₂.

National policies
- The 3rd session of the Conference of the Parties to the United Nations Framework Convention on Climate Change
- Energy conservation policy

Client Needs
- Reduced utility costs
- Equipment renovation
- Corporate Social Responsibility

Social Needs
- Deregulation
- Global Environment Contribution

Before
CO₂ Emissions: 9,000 t-CO₂/yr
Crude oil consumption: 4ML / yr
Primary energy: 160,000 GJ/yr.
Utility cost: 300 million yen/yr

Example of health care building
(42,000m², 660 beds)

After
CO₂ Emissions: 7,000 t-CO₂/yr
Crude oil consumption: 3.2 ML / yr
Primary energy: 130,000 GJ/yr.
Utility cost: 240 million yen/yr

Prototype environmentally-friendly Office Building

Fujita provides our customers with the best balance of environmental performance and economic efficiency.

CASBEE Comprehensive Assessment System for Built Environment Efficiency

Built Environment Efficiency(BEE) = \( \frac{Q}{L} \) (Built Environment Quality / Built Environment Load)

<table>
<thead>
<tr>
<th>Ranks</th>
<th>Assessment</th>
<th>BEE Values</th>
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</thead>
<tbody>
<tr>
<td>S</td>
<td>Excellent</td>
<td>BEE ≥3.0, Q ≥50</td>
</tr>
<tr>
<td>A</td>
<td>Very Good</td>
<td>3.0 &gt; BEE ≥ 1.5</td>
</tr>
<tr>
<td>B⁺</td>
<td>Good</td>
<td>1.5 &gt; BEE ≥ 1.0</td>
</tr>
<tr>
<td>B⁻</td>
<td>Slightly Poor</td>
<td>1.0 &gt; BEE ≥ 0.5</td>
</tr>
<tr>
<td>C</td>
<td>Poor</td>
<td>0.5 &gt; BEE</td>
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