According to recent studies, Transportation alone is responsible for one-third of the world’s energy usage [2]. Rising levels of carbon dioxide, as seen in Figure 1, have led the world to more environmental-friendly technologies, like the hybrid solar car. The problem with hybrid cars is their fast discharge and slow recharge.

The mechanism of sliding the panels down and raising them up again.

Effectiveness of the additional panels, see Figure 2, on the car.

Controlling the panels from outside the car.

Picking a suitable battery with adequate energy storage.

Making sure the sliding wires are flexible.

Selecting a material that has high strength, able to withstand harsh weather conditions, and has a reasonable cost.

The additional panels will add more weight, which might affect the car movement.

The assumed two minutes for the panels sliding might be time consuming for some users.

Adding a coating to improve the corrosion resistant of steel.

The car’s appearance will be a major obstacle, so the panels should maintain a good appearance.

**Table 1: Comparison between Steel and Aluminum**

<table>
<thead>
<tr>
<th>Material</th>
<th>Strength</th>
<th>Weight</th>
<th>Cost</th>
<th>Life Durability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>✔️</td>
<td>✗</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Aluminum</td>
<td>✗</td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
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</table>

**References**

