INTRODUCTION
Improper disposal of pineapple waste can cause negative impact to the environment. To reduce the waste, we decide to recycle it. Recently, we discover that the present of chlorophyll in the pineapple plantation waste in the leaves can be used to fabricate the Dye Sensitized Solar Cell (DSSC) which is can be categorised as a renewable energy as well as environmental-friendly. The experimental and analysis was done to obtain the best condition of chlorophyll yield from the waste. The best condition from the mechanical extraction can be achieved by uncut the processed leaves at 3 cycle for extraction cycle by using the sugarcane machine. The highest value of chlorophyll a is 52.57 mg/ml and chlorophyll b is 113.05 mg/ml.

NOVELTY
The novelty of this research is application of extraction process for extract the chlorophyll from the pineapple plantation waste.

METHODOLOGY
The pineapple plantation waste was used to extract the chlorophyll by using the mechanical extraction. Figure 1 shows the process of extraction chlorophyll.

RESULT
The colour of the chlorophyll is green
Chlorophyll content:
a = 52.57 mg/ml
b = 113.05 mg/ml

MARKETABILITY OF EXTRACTION PROCESS
The table show the comparison between mechanical and chemical extraction for extract chlorophyll from pineapple plantation waste. (Kumara et al., 2006; Zainol et al., 2018 )

<table>
<thead>
<tr>
<th></th>
<th>Mechanical Extraction</th>
<th>Chemical Extraction</th>
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<tbody>
<tr>
<td>Used machine such as</td>
<td>sugarcane machine</td>
<td>Involved chemical substance such as ethanol, methanol and acetone</td>
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<td>Cheaper and easy to handle</td>
<td></td>
<td>Expensive and difficult to handle</td>
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<tr>
<td>Short time and produced high yield</td>
<td></td>
<td>Short time but produced low yield</td>
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<tr>
<td>100 g of pineapple leaves produced 50 mL of juice</td>
<td></td>
<td>100 g of pineapple leaves produces 20 mL of juice</td>
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<td>MYR 283.00 for 10kg of sample</td>
<td></td>
<td>MYR 552.00 for 10kg of sample</td>
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</table>

***Mechanical extraction is preferable to extract the chlorophyll from the pineapple plantation waste.

THEMECHAINICAL EXTRACTION

The mechanical extraction by using sugar cane machine is easier than chemical extraction.

USEFULLNESS OF DSSC
Solar portable charges
Solar building
Solar car