EXTREME WEATHER EVENTS AND SiDG d.o.o.

Ljubljana, 25.4.2018

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STATE FORESTS IN NUMBERS

- Forest area: 234.986 ha or 20 % of all forests in Slovenia
- Protective forests: 21.637 ha
- Forest reserves: 5.996 ha
- NATURA 2000: 97.000 ha
- FM FSC and PEFC: 234.986 ha
- Average growing stock: 321 m³
- Average increment: 7,4 m³/ha
- Tree species:
  - Spruce 31,9 %
  - Fir 11,3 %
  - Pine 3,2
  - Beech 35,9 %
  - Oak 3,9 %
- Ratio of tree species: 52 % deciduous, 48 % conifers
- Annual cut above: 68 % of increment
STATE FORESTS IN NUMBERS

- Cut in the year 2015: 1,107,000 m³ conifers; 558,000 m³ deciduous
- 2016: 903,896 m³ conifers; 455,026 m³ deciduous
- 2017: 692,955 m³ conifers; 406,177 m³ deciduous
STATE FORESTS IN NUMBERS

- Long term contracts: 152 for 3 years
- Short-term contracts: 60 up to 1 year
AN OVERVIEW OF DAMAGED FORESTS IN THE PAST 50 YEARS (storm ≥ 350,000 m³)

<table>
<thead>
<tr>
<th>TYPE OF DAMAGE</th>
<th>YEAR</th>
<th>DAMAGED WOOD IN M³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind storm</td>
<td>1965</td>
<td>350,000</td>
</tr>
<tr>
<td>Ice storm</td>
<td>1975</td>
<td>380,000</td>
</tr>
<tr>
<td>Ice storm</td>
<td>1980</td>
<td>670,000</td>
</tr>
<tr>
<td>Ice storm</td>
<td>1985</td>
<td>500,000</td>
</tr>
<tr>
<td>Snow/Ice storm</td>
<td>1995/1996</td>
<td>680,000</td>
</tr>
<tr>
<td>Snow/Ice storm</td>
<td>1996/1997</td>
<td>870,000</td>
</tr>
<tr>
<td>Wind storm</td>
<td>2008</td>
<td>500,000</td>
</tr>
<tr>
<td>Snow storm</td>
<td>2012</td>
<td>355,000</td>
</tr>
<tr>
<td>Ice storm</td>
<td>2014</td>
<td>9,000,000</td>
</tr>
<tr>
<td>Wind storm</td>
<td>2017</td>
<td>2,200,000</td>
</tr>
</tbody>
</table>
PROPOSALS TO MITIGATE WIND DAMAGE

- Increase the stability (increase the increment, not the standing volume) and decrease the size of the stock at risk.
- Shorter rotations (stands are harvested before they are exposed to wind risk).
- Carefully designed thinning regimes (fewer thinnings in old forests)
- Carefully planned fellings in order to minimize the length of exposed edges.
- Tree species choice: When suitable more broadleaves as main species
- Insect damage: Quick removal of timber to save value and to minimise insect damage
PROPOSALS TO MITIGATE WIND DAMAGE

- The construction of new forest infrastructure will be designed and built stronger, with better materials and larger safety factors.

- The renovation of the existing infrastructure will follow the criteria for new construction and priorities set by SiDG managing board.
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- Impact on all of the company – very stressful situation
- Increased costs for storm harvest
- Market prices down
- Possibility for optimization of the company