MRI ACHIEVEMENTS 2016

COCIR 6° ANNUAL FORUM
ON THE SELF-REGULATORY INITIATIVE FOR MEDICAL IMAGING DEVICES
- 15 March 2017 -
MRI DISTRIBUTION

MRI MODEL DISTRIBUTION PER YEAR

kWh/day

3 YEARS OF CONTINUED COMMITMENT

• In 2014 a SRI Member achieved a substantial decrease in market average by improving the software architecture and improving the crio-cooling system.

• In 2015 a different Member obtained a significance reduction by implementing a technical improvement that was not identified during the study on improvements potential.

• In 2016 another Members achieved a drastic reduction in energy consumption by improving existing models and reducing the power usage in Off mode by 50%.

Lessons learned:

• The 3rd consecutive year of drastic improvement shows that new saving solutions are discovered as the eco-design process continues

• This confirms once again that an eco-design process and measurement tools (such as the COCIR methodology) are essential to continuously improve energy efficiency and to discover new solutionS that can also be adapted to new versions of existing models.
CALCULATING SAVED ENERGY

• In the current SRI Report we estimated the energy savings achieved by the SRI by comparing the BAU scenario and the Beyond BAU. Those scenarios were calculated in 2010 on the basis of many assumptions.
  ✓ *The reduction compared with the BAU baseline implies that the SRI will save in 2017 around 7459 kWh per unit sold according to the Beyond BAU scenario, equivalent to more than 2,6 tons of CO₂ per year per unit.*
    ✓ Assuming 5 days per week, 52 weeks per year

• Now, after 6 years we can use real data to calculate the energy savings compared to 2010.
## CALCULATING SAVED ENERGY

### TOTAL YEARLY ENERGY SAVINGS

<table>
<thead>
<tr>
<th>UNITS</th>
<th>Year</th>
<th>BAU kWh/d</th>
<th>kWh/u</th>
<th>SRI kWh/d</th>
<th>kWh/u</th>
<th>kWh/y tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>462,0</td>
<td>2010</td>
<td>104.296</td>
<td>225,75</td>
<td>104.296</td>
<td>225,75</td>
<td></td>
</tr>
<tr>
<td>394,0</td>
<td>2011</td>
<td>89.010</td>
<td>225,75</td>
<td>89.010</td>
<td>225,91</td>
<td>0</td>
</tr>
<tr>
<td>446,0</td>
<td>2012</td>
<td>100.684</td>
<td>225,75</td>
<td>100.036</td>
<td>224,30</td>
<td>842.869</td>
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<tr>
<td>454,0</td>
<td>2013</td>
<td>102.490</td>
<td>225,75</td>
<td>95.147</td>
<td>209,57</td>
<td>7.637.706</td>
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<tr>
<td>513,0</td>
<td>2014</td>
<td>115.810</td>
<td>225,75</td>
<td>95.126</td>
<td>185,43</td>
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<tr>
<td>604,0</td>
<td>2015</td>
<td>136.353</td>
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<td>106.855</td>
<td>176,91</td>
<td>15.338.888</td>
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<tr>
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<td>153.510</td>
<td>225,75</td>
<td>117.808</td>
<td>173,25</td>
<td>9.282.581</td>
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<tr>
<td>680,0</td>
<td>2017</td>
<td>225,75</td>
<td></td>
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</tbody>
</table>

The SRI allowed between 2010 and 2016 the saving of **49 GWh**, equivalent to **17232 tons of CO2** (*a small town of 12.000 households*)