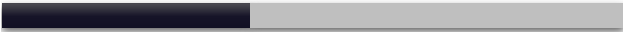

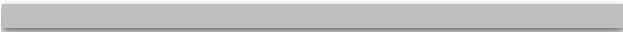



# Electromagnetic welding



<p><b>Description</b></p> <p>Substitution of current full copper parts by hybrid parts. Such components will be joined by electromagnetic pulse welding (EMW).</p>	<p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>To evaluate environmental impacts of the tools for manufacturing new joining technologies compared to the conventional ones to proof the superiority of the newly developed demonstrators in term of energy, materials and wastes flows,</li> <li>To identify and evaluate solutions to completely disassemble the hybrid components of the joints produced to recycle the individual base materials so that only the small joint area has to be discarded.</li> </ul>
<p><b>Activities</b></p> <ul style="list-style-type: none"> <li>Sustainability assessment:             <ul style="list-style-type: none"> <li>– Life-Cycle Assessment LCA.</li> </ul> </li> </ul>	<p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>Input data complex to collect </li> <li>Technical knowledge required </li> <li>Legal &amp; legislation barriers </li> <li>Technology readiness level </li> </ul>
<p><b>Expected outcomes</b></p> <ul style="list-style-type: none"> <li>Decrease high-costs and critical materials consumption,</li> <li>+ 30% product performance (with unchanged final price),</li> <li>Reduction of fumes and waste in welding techniques.</li> </ul>	

