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## **Press Release**

EnBW and the University of Stuttgart are developing new photovoltaic generation

Research project on new process is to improve efficiency, eco-friendliness and quality

Karlsruhe/Stuttgart – the energy provider EnBW and the <u>University of Stuttgart</u> are jointly researching a new process to manufacture photovoltaic modules. By using laser technology in the production modules are supposed to achieve a higher degree of effectiveness in future than today and be longer lasting. The new process not only foregoes environmentally damaging materials and heavy metals such as lead or cadmium but also promises to be more favourably priced. The further development and utilisation of the new technology is to take place in EnPV GmbH, which was founded in December, of which EnBW holds the majority.

"With the new process we now wish to jointly develop to the end, solar cells could extract more solar power over the same area and this with potentially fewer module costs than today and completely without poisonous components", is how Professor Dr. Wolfram Münch, Head of Research and Development at EnBW, explained the objective of the research project.

At present efficiency rates of over 23 percent in small cells and over 22.5 percent in large cells are achieved at the Institute for Photovoltaic at the University of Stuttgart. In this respect the head of the institute Professor Dr. Jürgen Werner ascertained: "Efficiency rates in this area are otherwise only achieved by using very elaborate technologies such as lithography. Therefore up to now high performance modules can only be manufactured at relatively high costs, worldwide they only have a very low market share. By using our laser technology it will be possible in future to manufacture high performance modules at significantly lower costs.

The research project is being funded by the Federal Ministry of Economic Affairs and Energy and co-financed by EnBW. At the end of the joint research work modules from 60 cells will be generated with a performance of significantly more than 320 watts and their longevity put to the test in climate chambers tests.

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