



Press Release – June 8, 2022

## **Climate-friendly houses of the future**

### **ASCA cooperates with the German Solar Decathlon participant CoLLab from the Stuttgart University of Applied Sciences**

**ASCA – an ARMOR Group company, the organic photovoltaics (OPV) global leader – has supplied the Solar Decathlon team CoLLab from the Stuttgart University of Applied Sciences, Germany, with its aesthetic solar modules. The students will present their eco-friendly house, which is covered with ASCA’s lightweight solutions, at the Solar Decathlon Europe 21/22 competition. The renown architectural contest will take place from June 10 to 26 on the solar campus of the Faculty of Architecture and Civil Engineering at the University of Wuppertal.**

After three years of work, sixteen teams of students from all over the world will unveil their 1:1 prototypes of climate-friendly houses in Wuppertal as part of the Solar Decathlon Europe competition. The German team CoLLab has developed a house extension for a building on their campus in Stuttgart. To create a place for social interaction on the campus, the students have built additional floors to the existing building. ASCA has joined the project by providing solar modules that are installed around the building. “It is very interesting to work closely with promising students as they are defining the architecture of tomorrow. This innovative project is a perfect example of how our solar solution can be used in energy renovation projects because it can be flexibly adapted to existing buildings,” says Hermann Issa, ASCA’s Senior Vice President of Business Development and Project Management.

### **Solar modules provide energy and shade**

The ASCA® modules will both supply energy and provide shade. To this purpose, the student team has integrated the solar modules in different sizes in a metal mesh around the building to create an aesthetic pattern that generates sustainable energy. As the modules are lightweight, the team was able to install them easily and quickly. To find the perfect placement of the solar modules on the façades, the students have simulated the energy requirements, the interior temperature and the daily light conditions. In addition to producing energy, the transparent ASCA® modules improve indoor comfort: in winter, they let the sunshine through, while in summer, the some of the radiation is blocked to maintain a comfortable temperature.

### **Sustainable building concept**

The façade cladding is made of recycled wood. An air-to-water heat pump extracts heat from the preheated air of the solar chimney and the additional floor is passively cooled by a water feature. Thanks to its modular approach, the CoLLab team can easily transfer the extension to other existing constructions. The concept can be adapted in size to fit the shape of an existing building and its load bearing structure. “This concept is a perfect example of the possibilities that our solutions offer to move towards more energy-efficient buildings. Through renovation operations, it is possible to integrate solar solutions into the building envelope, regardless of its original design,” Hermann Issa adds.

### **About the competition**

The Solar Decathlon Europe competition is the world’s largest student-based competition that challenges collegiate teams to design, build and operate energy efficient and eco-friendly buildings powered by renewable energies. The winner of the contest is the team that can score the most points in ten categories. This June, the competition will take place in Germany for the first time and will be focusing on sustainable building and living in urban areas.

### **Online press conference**

Journalists are invited to a press conference on June 10 from 12pm to 1pm. The conference will be broadcast online. Please follow this link to participate:  
<https://www.youtube.com/channel/UCvff22WqNTM67BpszpVS4aw>



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#### **About ASCA**

**ASCA** designs and develops intelligent, tailor-made, flexible and low-carbon solar energy solutions on an industrial scale for its international partners. Its team of experts of sixty people is spread over France and Germany. ASCA is a company of ARMOR Group. ARMOR specializes in the industrial formulation of inks and the coating of thin layers onto thin films. The Group is the global market leader in the design and manufacture of thermal transfer ribbons for printing variable traceability data on labels and flexible packaging. With an international presence, ARMOR has nearly 2,450 employees in some 20 different countries. In 2020 it posted annual revenue of €372m. [www.asca.com](http://www.asca.com)

**A PDF of the press release and images can be found at the following link:**

[https://download.pr-krampitz.de/2022\\_06\\_08\\_Aasca\\_EN.zip](https://download.pr-krampitz.de/2022_06_08_Aasca_EN.zip)

#### **Caption (picture 1, 2 and 3):**

Flagship project: The students of the University of Stuttgart are applying for the prestigious Solar Decathlon architecture competition with a building they equipped with solar solutions from ASCA. This year the competition is focused on sustainable construction and urban living.

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Picture 1&2: Lukas Fischer, HFT Stuttgart

Picture 3: Jonas Stave, HFT Stuttgart