

# Q CELLS to construct the world-largest dam floating PV power plant in South Korea

The 41 MW floating solar plant will be installed at the Hapcheon Dam in the south of the country in what will become the largest such PV construction located at a dam anywhere in the world.

[Seoul, South Korea, November 13, 2020] Q CELLS will construct a 41 MW floating PV power plant, which once complete will become the world's largest floating PV constructed on a dam, as well as the largest floating PV plant permitted in Korea. Q CELLS won the rights to develop this floating PV project in August from K-water (the Korea Water Resources Institute), and received final permission to begin construction on November 4. Q CELLS will begin construction by the end of this year.

The floating PV plant is a combination of onshore solar technology and floating structure technology. This style of PV plant is growing in popularity in mountainous and densely populated regions because it covers only the water's surface, which is an idle space, and has the advantage of up to 10% higher power generation compared to onshore PV power plant thanks to less shadowing influence and the cooling effect of the water.

The Hapcheon Dam floating PV power plant will produce enough solar electricity to meet the annual power needs of 60,000 people, which is more than the actual 44,434 population of the Hapcheon-gun in which the plant will be sited. Q CELLS will construct this floating PV power plant with a design inspired by the plum blossom, the symbolic flower of Hapcheongun.

# Clean power, ecologically delivered

The environmental stability of the Hapcheon Dam floating solar power plant has also been verified. According to a result of monitoring tests conducted on four separate occasions at the Hapcheon Lake Solar Power Empirical Study Complex by the Korea Environment Institute ("KEI"), there was scientific consensus that the PV power plant will have no negative environmental impact. The KEI conducted research on water quality and aquatic ecology, revealing that there was no significant difference between the water area covered by the power plant and the uncovered water area.

Q CELLS is planning to install its Q.PEAK DUO Poseidon Edition solar panels at the dam. These modules have been specially designed for floating PV installations. Using eco-friendly materials, the Q.PEAK DUO Poseidon Edition can endure high temperatures and high humidity environments, verified by an internal test with a higher standard than the typical KS certification test. Testing conditions for these modules include exposure of more than 3,000 hours in an environment of 85 degrees Celsius and 85% relative humidity.

Hee Cheul (Charles) Kim, CEO of Q CELLS, said: "This floating PV will produce eco-friendly electricity by utilizing the idle water surface at the dam. This is the best solution for utilizing the limited land area in the region. Q CELLS will construct the Hapcheon Dam floating PV



power plant to the high-quality standards for which the company is recognized around the world."

### **About Q CELLS**

Q CELLS is a renowned total energy solutions provider in solar cell and module, energy storage, downstream project business and energy retail. It is headquartered in Seoul, South Korea (Global Executive HQ) and Thalheim, Germany (Technology & Innovation HQ) with its diverse international manufacturing facilities in the U.S., Malaysia, China, and South Korea. Through its growing global business network spanning Europe, North America, Asia, South America, Africa and the Middle East, Q CELLS provides excellent services and long-term partnerships to its customers in the utility, commercial, governmental and residential markets. For more information, visit: <a href="http://www.q-cells.com">http://www.q-cells.com</a>.

### **Safe-Harbor Statement**

This press release contains forward-looking statements. These forward-looking statements can be identified by terminology such as "will," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates" and similar statements. Among other things, the quotations from management in this press release and Q CELLS' operations and business outlook, contain forward-looking statements. Such statements involve certain risks and uncertainties that could cause actual results to differ materially from those expressed in or suggested by the forward-looking statements. Except as required by law, Q CELLS does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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