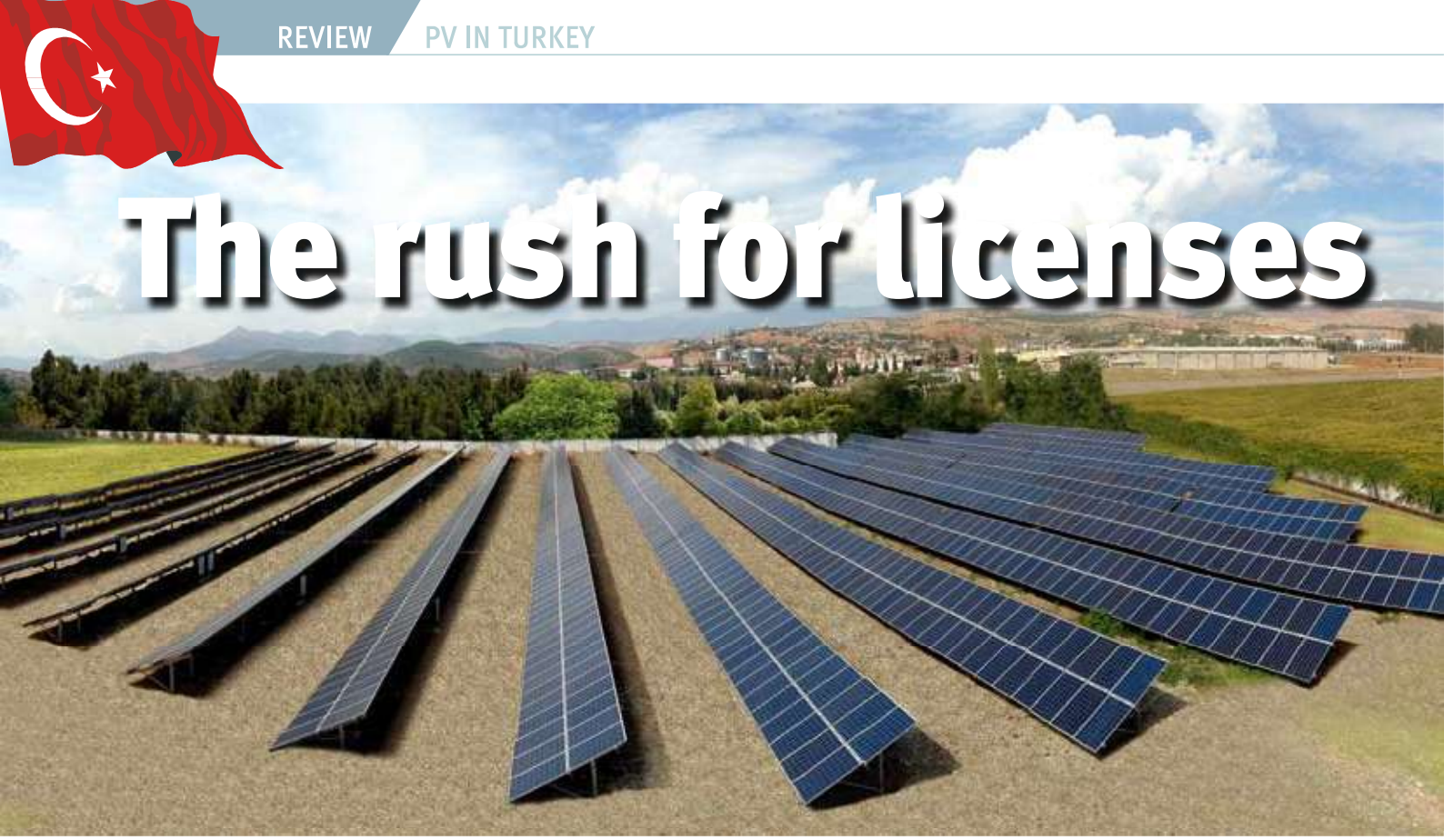

The rush for licenses

Solar plants do already exist in Turkey, each all the while as unlicensed installation.

Photos (3): Solarbaba/Turkish Solar Energy Platform

Turkey has awarded the next batch of licenses for the construction of large-scale PV systems. The growth of the Turkish PV market, however, is mainly being driven by unlicensed systems.

The utility company Gün Günes Enerjisi Elektrik Üretimi as well as 21 other Turkish companies had every reason to be happy on 29 and 30 January. On those two days, they received word in Ankara that they had been granted licenses to build large-scale PV plants. The Energy Market Regulatory Authority (EMRA) awarded licenses for plants with a total capacity of 225.66 MW. Most of them will be built in the provinces of Konya and Ankara.

The licensing round was eagerly anticipated. Any PV plant with a capacity of more than 1 MW in Turkey that is not intended for own consumption needs to obtain a license from EMRA. Only two other licenses have been awarded so far, and Turkey is still in the process of gathering its first experiences with the tendering procedure.

The two companies that received the first licenses were Halk Enerji and Akfen Holding. Halk Enerji is building a large-scale plant with a capacity of 4.9 MW in Erzurum, and Akfen Holding is setting up an 8 MW plant in Elazığ. Both provinces are in eastern Turkey. “What they have actually received are pre-licenses,” says Ateş Uğurel, the owner of the Turkish solar energy platform Solarbaba. As soon as the winners receive these preliminary licenses, they can begin working on the land where they plan to build the plant, investigating the effects on the environment and fulfilling other bureaucratic requirements. “They only receive the actual licenses after that,” said Uğurel. Experience has already shown that the Turkish procurement procedure is not without its pitfalls. But first, let us examine the formal process.

A multi-stage process

The first thing the government did was to define the basic parameters of the tender. It set an upper limit of 600 MW installed PV power, and it also specified the transformer stations and the capacities that could be connected to them. In addition, it designated regions where building PV systems would make sense due to the high level of solar radiation.

After this key data has been published, investors choose a place where they would like to build a PV system. They have to measure the solar radiation at the location for at least six months, and they are also required to obtain official meteorological data for the location for at least six more months. This is a prerequisite to submit an application for the license. If these first requirements are fulfilled, investors can submit their documents to EMRA up until a date that has been set in advance. The authorities review the applications and publish another date for the tender. All companies eligible to receive a

license are invited to participate in the tender. On this occasion, the so-called contribution fees are announced. How much do the companies bid to obtain a license? “Bids are submitted per MW. Whoever can offer the best price per MW is announced as the winner,” says Uğurel.

Lengthy procedure

Interest in the licenses turned out to be far greater than expected. Applications for large systems with a total capacity of 8.9 GW were submitted, which is almost 15 times the tendered amount of 600 MW PV power. For this reason, Uğurel expects the granting of licenses in Turkey to take years. The process of awarding licenses for the 600 MW PV power began four years ago, and only two licenses for a total capacity of approximately 13 MW had been awarded up until 28 January. “It was hard to choose companies eligible for the tender,” Uğurel reports. In addition, changes to the requirements caused further delays. Investors who were already in the middle of the application process, for example, were forbidden from building in a forest area. This forced them to find a new location.

The contribution fees that companies pay to apply for the licenses differ widely. The fees for the first two large-scale systems were between 68,000 Turkish Lira (TRY)/MW (approximately 28,000 US$/MW) and 827,000 TRY/MW (approximately 340,600 US$/MW). “We don’t understand how these variations in the license fees are possible,” says Hannes Beushausen, Project Manager at Apricum. The company offers strategic consulting for clean technology companies that are looking to enter foreign markets.

The fact that many companies are bidding at “ambitious levels” is a big problem, according to Beushausen. The feed-in tariff for PV electricity in Turkey is only 13.3 US$-ct/kWh. In addition to this, there is a bonus for local content, if domestic components are used. The level of solar radiation in Turkey is very high, so the business is lucrative nonetheless. “The plants can be made to seem economically viable,” Beushausen says and points to the ‘purge of the value chain’ and the sharp fall in prices. “However, things cannot continue like this,” he adds. For this reason, one of Apricum’s most important tasks is to convince Turkish investors to aim for “realistic prices”.

Unlicensed systems are on the rise

A license for a megawatt-sized system is only necessary if the operator wants to benefit from the feed-in tariff. Beyond that, anyone who wants to build a power plant can do so, provided the system is used for own consumption. According to Uğurel, the largest unlicensed facility in Turkey has a power output of 5.3 MW. It is located at a university, and 100 % of the electricity it produces is used for own consumption, according to Solarbaba.

Currently, Turkey can display an installed capacity of approximately 50 MW PV power, in accordance to official data. Unofficial estimates, however, put the actual capacity closer to 80 MW.

Beushausen has also noticed that the market for unlicensed systems seems to be quite healthy. The regulations that apply to these systems state that most of the energy produced by them must be used for own consumption. The rest can be fed into the public grid and is remunerated. The reality is often different, Beushausen says. Many plants may fulfil the formal criteria, but still feed a large part of their solar power into the grid. He expects this to change soon. Up till now, there were provisions for a feed-in capacity of 2 GW. "This has now been exhausted by current applications," Beushausen says.

For this reason, discussions are under way on allocating additional transformer capacity, which in turn would be subject to further conditions. "One condition could be genuine own consumption," the consultant adds. "Unlicensed systems are the real driving force behind the development of the Turkish PV market," Ateş Uğurel says. He is expecting unlicensed systems with a total capacity of about 50 MW to be built this year: "If one takes the legal applications into account, the lowest forecast for next year is 300 MW. Some are expecting 500 MW." According to official estimates, there is currently an installed capacity of approximately 50 MW PV power. Unofficial estimates put the actual capacity closer to 80 MW. The next round of the licensing process may also contribute to market growth. The Energy Market Regulatory Authority has announced the dates for the second round. It will be held in early April. *Ina Röpcke*

The second round of the licensing process for large-scale photovoltaic systems has been announced for the beginning of April.