

To Energy and water regulatory commission.

Sofia, 8-10, Al. Dondukov blvd.

## PROPOSAL

*from*

*Bulgarian Photovoltaic Association, EIK 175801326*

Regarding: Draft decision to define preferential prices for electricity produced from photovoltaic plants with a total installed capacity of up to 30 kW including, which are planned to be built on roof and facade constructions.

Ladies and gentlemen,

In connection with the published for discuss a draft decision for the determination of preferential prices of electricity produced from renewable energy sources for the price period 01.07.2018 - 30.06.2019, we would like to bring to your attention facts that contradict the thesis, reflected in the draft decision, in which is claimed a reduction in investment costs for solar plant up to 5 kW and capacity from 5 kW to 30 kW by 8%, as well as the relate reduction in operating costs for the two groups of solar plants by 11%.

The purpose of the evidences, which we will bring is that EWRC should make decision which is lying on real arguments, which from our point of view should be at least to maintain the preferential prices for these plants at the level of the present decision for determination of preferential prices of the electricity produced from renewable sources (01.07.2017 - 30.06.2018). The proves are from more detail look and analysis over the same sources, which are quoted in the draft decision. The quoted reports by Fraunhofer Institute and IRENA provide price statistics for roof installations up to 2016. The Fraunhofer Institute has a starting price - 1 300 EUR / kWp (report from February 2018), and IRENA has the lowest price of 1 500 USD / kWp (December 2017 report). In analyzing these statistics, both authoritative sources noted that, that these prices are already saturated and that the prices for Roof solar plant can hardly be expected in subsequent periods. Our additional arguments, we will point out below.

1. There is no reduction in the prices of individual components.

- 1.1. The biggest burden in the investment cost are the prices of photovoltaic panels, for which the safeguard duty on imports of panels from China, Malaysia, Thailand was not canceled and its duration was extended. Considering the size of the market in Bulgaria, the cost of delivery, transport and transport insurance, as well as the product charge, increase costs by 0.05 EUR / kWp.
- 1.2. The cost of inverters, taking into account specific technological requirements for inverters for small installations, has not only no declined, but is increasing due to the dollar price of components for their production has been observed. And because there is no index for the inverters, we apply links to the sources we worked on:  
<https://www.photovoltaik4all.de/fronius-wechselrichter?p=1&o=1&n=12&f=378%7C366>  
<https://www.photovoltaik4all.de/kostal-wechselrichter?p=1&o=1&n=12&f=402%7C380>;  
<https://www.photovoltaik4all.de/abb-wechselrichter?p=1&o=1&n=12&f=402%7C380%7C390>;  
<https://www.photovoltaik4all.de/sma-wechselrichter?p=1&o=1&n=12&f=378%7C409>
- 1.3. Most of the components for the construction of Roof solar plant are related to dollar prices

Finally, the rising dollar against the euro is reflected in higher investment costs. In any case, from these data, you will easily see that an investment cost of 2 284 BGN / kWp, including the cost of joining, is absolutely impossible.

2. The defined "net specific production" of 1 302 kWh / kWp as the average annual service life of Roof solar plants of 1 302 hours is absolutely insubstantial and does not take into consideration the specificities of the operation of these plants. It is a fact that Roof solar plants very rarely operate at maximum efficiency because the modules are not installed at an optimal angle or nor entirely south. Roof solar plants cannot be cleaned from the accumulated dust on them, the cost of removing technical problems on the modules is considerably higher than on terrestrial ones. Our experience shows that roof solar plants cannot produce more than 1,200 kWh / kW of installed power. The determination of "net specific production" by the average annual workload of the solar plants, averaged for Bulgaria in 2015, 2016 and 2017, also contradicts the Renewable Energy Act, where the definition of "net specific production" requires the average annual workload of the solar plant to deduct energy for own consumption.

It is noticeable that for the purpose of reducing the preferential price of roof power plants up to 5 kW and from 5 kW to 30 kW, investment costs and "net specific production" are arbitrarily determined to show a return on capital of 7%.



Ladies and gentlemen,

We appeal to you to make a decision, based on objective evidence of investment costs and the possible "net specific production", to keep even the small interest in the construction of roof power plants up to 30 kW.

12.06.2018 r.  
Sofia

Kind Regards,

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