



Energy Agency
of the Republic of Macedonia



Distributed generation from RES policy and recommendations

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THE POLICIES AND THE RECOMMENDATIONS ON D-RES ARE BASED ON:

➤ **Program of activities of the Energy Agency of Republic of Macedonia for 2015**

With acceptance of the program, the Government has tasked the EA to make the analysis and give recommendations for establishing D-RES.

➤ **Energy Strategy 2015-2035**

The EA has pushed the D-RES to be included in the Strategy as a part of the total installed capacity for PVs.

➤ **Preliminary analysis on the techno-economical performance of the models for D-RES**

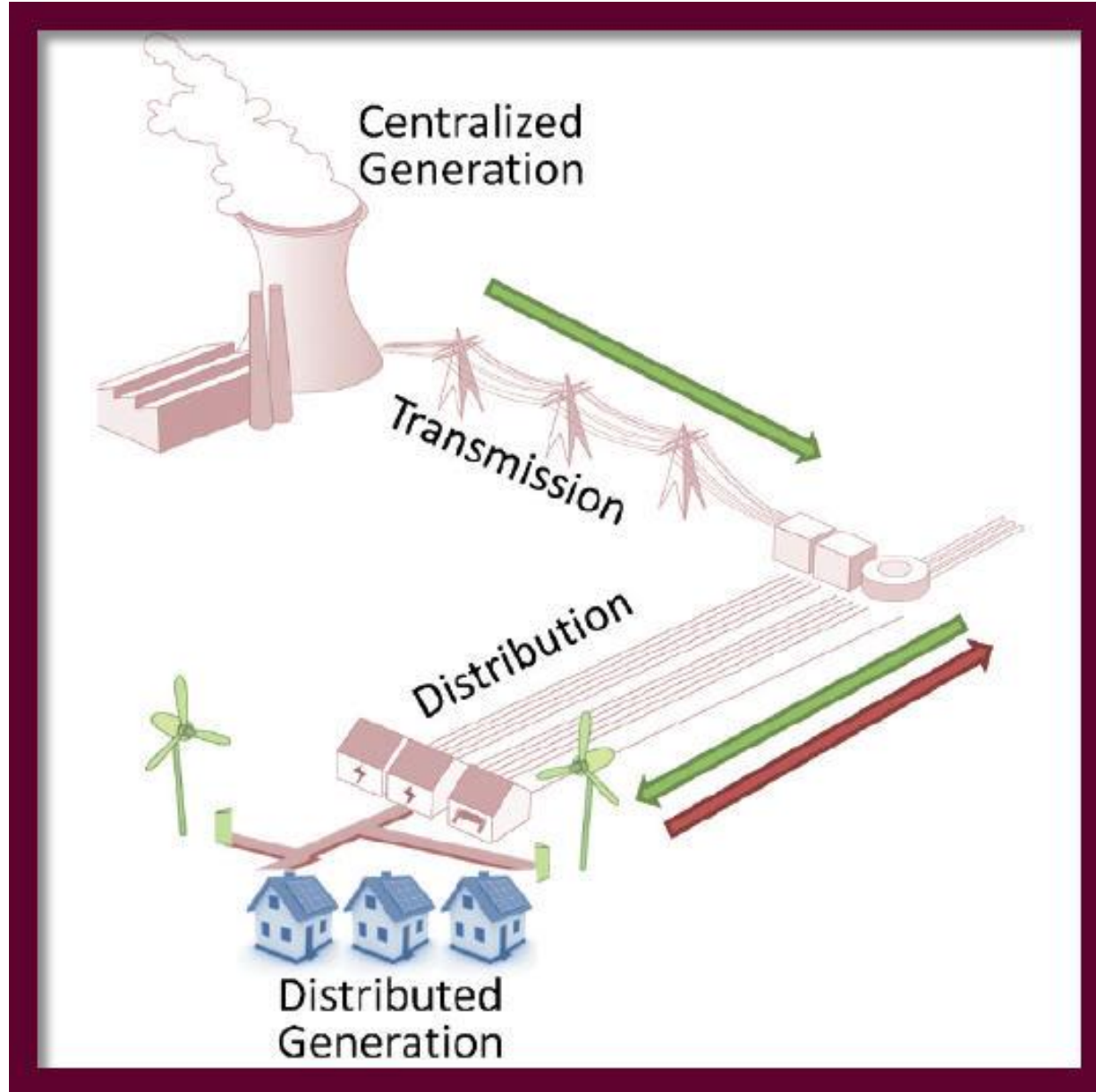
The first results showed that there is possibility of 300 MW of D-RES from rooftop PVs to be installed on the industrial objects/buildings.



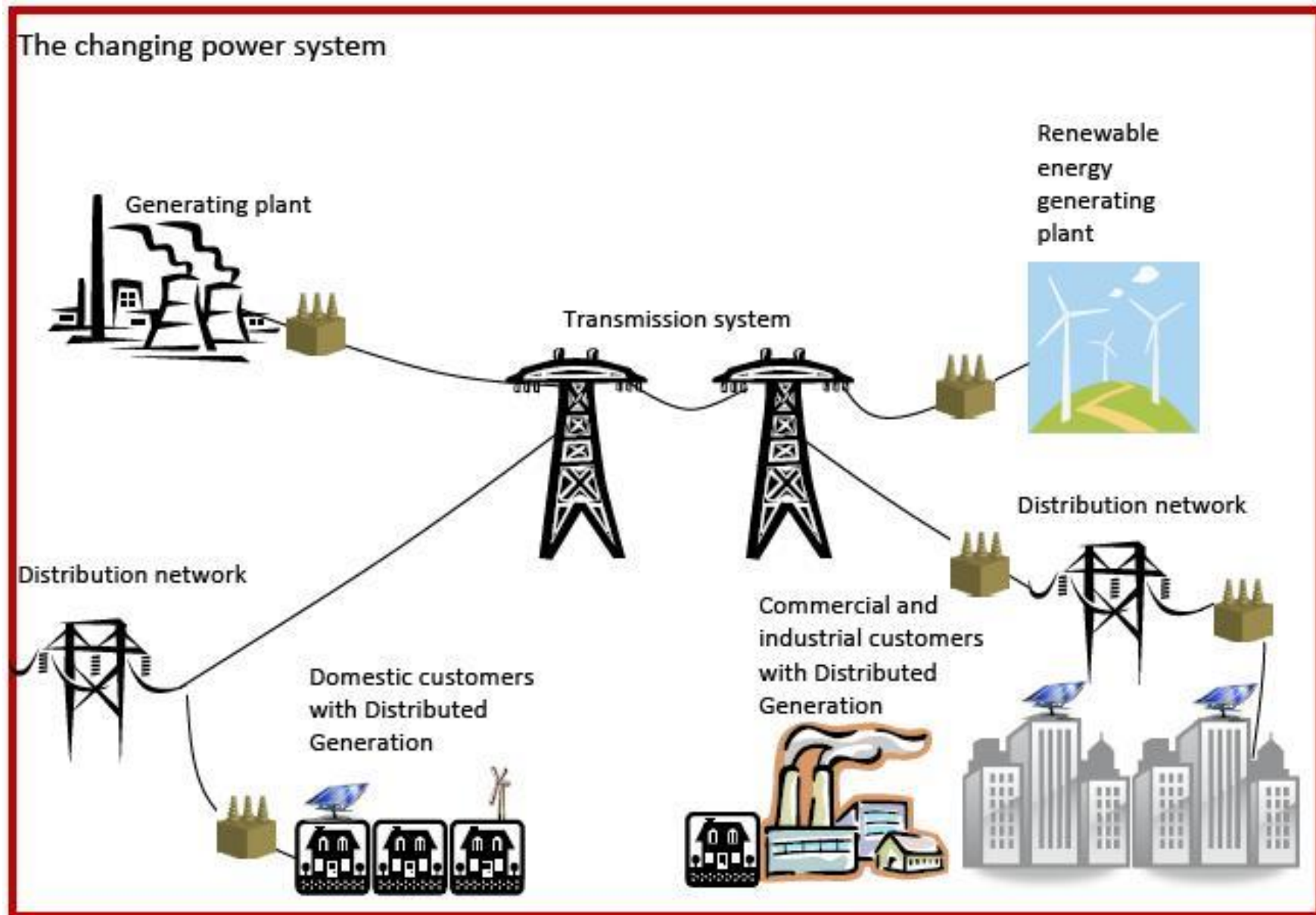
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WHAT IS DISTRIBUTED GENERATION



WHAT IS DISTRIBUTED GENERATION - EFFECTS



NEEDED SAFEGUARDS FOR IMPLEMENTING D-RES:

➤ **Limitation on the installed capacity per object/building**

The maximum installed capacity per object should be no more than what is defined in the contract for connection to the grid and the projected energy output of the d-res systems should not exceed the yearly consumption of the object/building.

➤ **Balancing of the energy output**

The responsible side for balancing should be the contracting party of the d-res system owner.

➤ **No noticeable effect to the distribution grid**

The installations should not cause negative effect to the distribution grid. The voltage and frequency should always stay on the agreed parameters. The responsible side for this should be the contracting party.



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MODELS FOR IMPLEMENTING D-RES:

➤ **Network compensation**

The SO (d-res system owner) produces energy for covering the needs and the excess is being transferred to the grid, in the night time/down time the grid operator supplies the SO according to the defined ratio.

➤ **PPA + with a power market company**

The power from the d-res system is being sold/given on disposal to the power market company and the company is obligated to cover the electrical energy requirements of the SO.

➤ **Leasing + PPA**

The leasing company is the SO, it leases the whole system to the industry and it signs PPA with the owner of the roof (industry).



THANK YOU

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