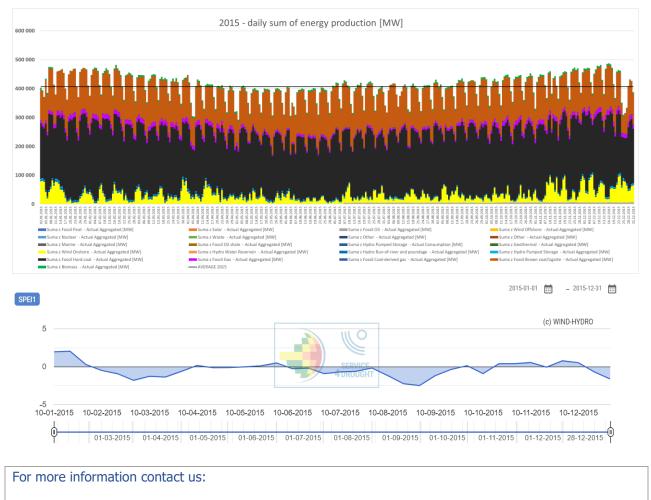
## **BMP's for ENERGY SECTOR**

## BMP's for energy sector - comparative analysys of energy production and drought intensity

The assumption was to develop drought monitoring model, which will support energy production, including system cooling in case of drought risk or appearance. Target potential users were both renewable and conventional energy production sectors. During task realization the analysis of selected enterprises dealing with renewable and conventional energy production led to conclusions that BMP's will be the appropriate solution instead of the model. The conventional energy and renewable water energy requirement is information on water quantity (standard water balance data) instead of pure drought information. In that case the most suitable was to develop general information on drought occurrence and intensity.

Exemplary sector data which were analysed and considered to use in the model are: quantity of produced energy and risk of income losses after drought occurrence. Droughts 2015 and 2018 was significant to energy sector. There was a threat of stooping main electric power station "Bełchatów" and also "Kozienice". Below there is a set of data 2015 & 2018 on energy production (daily data from: the ENTSO-E Transparency Platform) and intensity of drought by different indexes from our Service 4 Drought monitoring service.

The risk of black-out due to drought is visible on the drought maps (e.g. SPEI-1, SPEI-3 ... 12) and diagrams. BMP's for drought risk management in the energy sector is to observe the energy production (as a respond to current energy demand which is rising in summer drought occurrences) and compare with the level of drought indexes in order to estimate the tendency of energy demand level and regional demand for energy.



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