HUNGARIAN MARKET SUMMARY

AFEER 2019 CONFERENCE

Bucharest, 5/11/2019

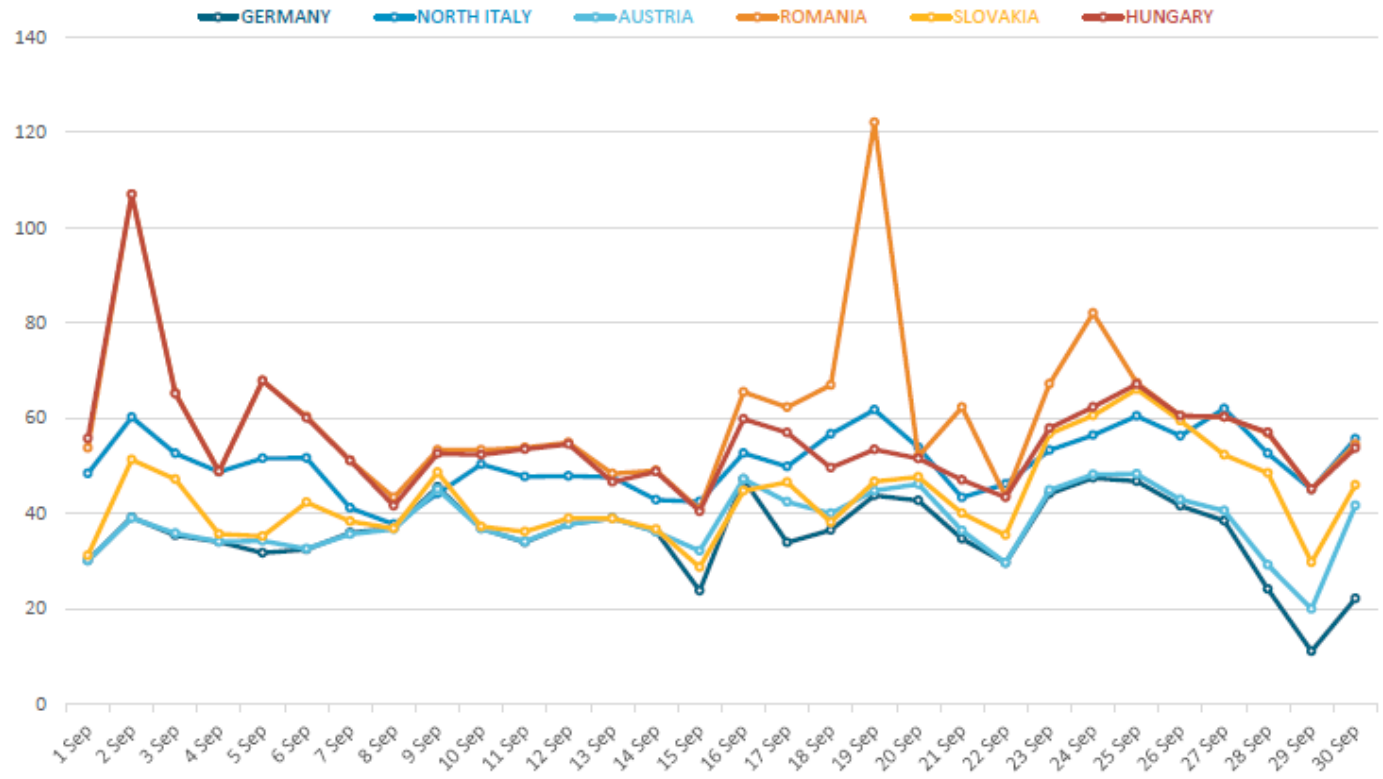
HETA
Hungarian Energy Traders' Association

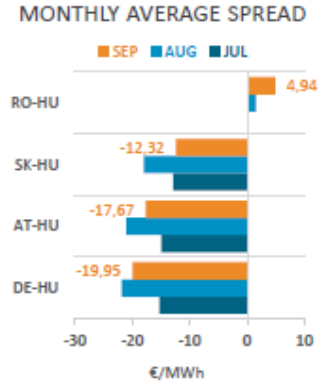
Regional prices convergence

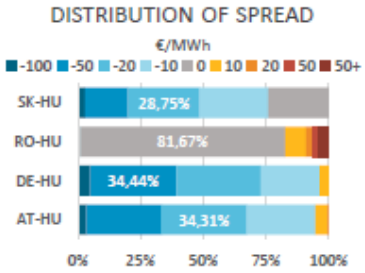
03 FIGURE

DAY-AHEAD BASELOAD PRICES IN THE REGION

The monthly average spread between the Hungarian-Romanian and Slovakian-Austrian-German prices has reached nearly 20 €/MWh. On September 2 the Hungarian baseload price was 106,94 €/MWh, the daily average spread soared to almost 70 €/MWh between the Hungarian market and these three markets, from 6am to 9pm it almost reached 100 €/MWh.







Remark: the distribution of spread is based on the difference between the Hungarian and regional hourly prices on the respective markets and the share of it during the month. The legend indicates the upper value of the given category.

Source: www.hupx.hu, www.eex.com, www.mercatoelettrico.org

Source: HEA Monthly Report, Sep. 2019

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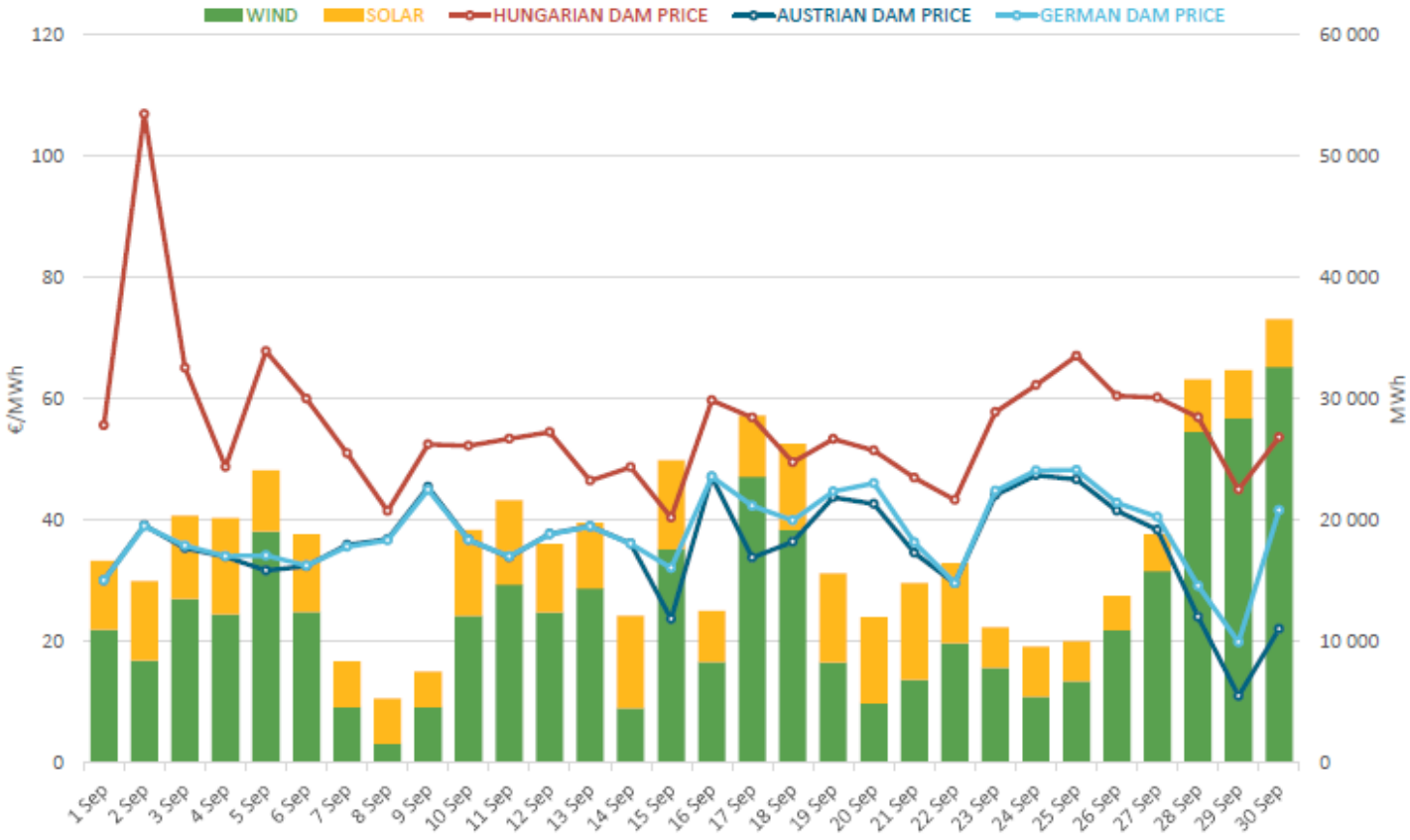
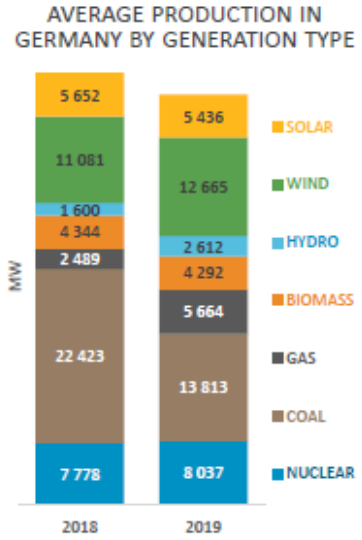
Impacts of the DE RES production on price

04 FIGURE **HUNGARIAN, GERMAN, AND AUSTRIAN DAY-AHEAD BASELOAD PRICES AND GERMAN RENEWABLE GENERATION**

The substantial spread between the Hungarian an Austrian-German prices can be connected to the German renewable generation only at the end of the month. The German production mix changed significantly compared to last year. Coal based generation was 38 % lower than last year, wind generation was 14% higher, hydro generation was 63% higher and gas based generation was 228% higher YOY.





Source: HEA Monthly Report, Sep. 2019

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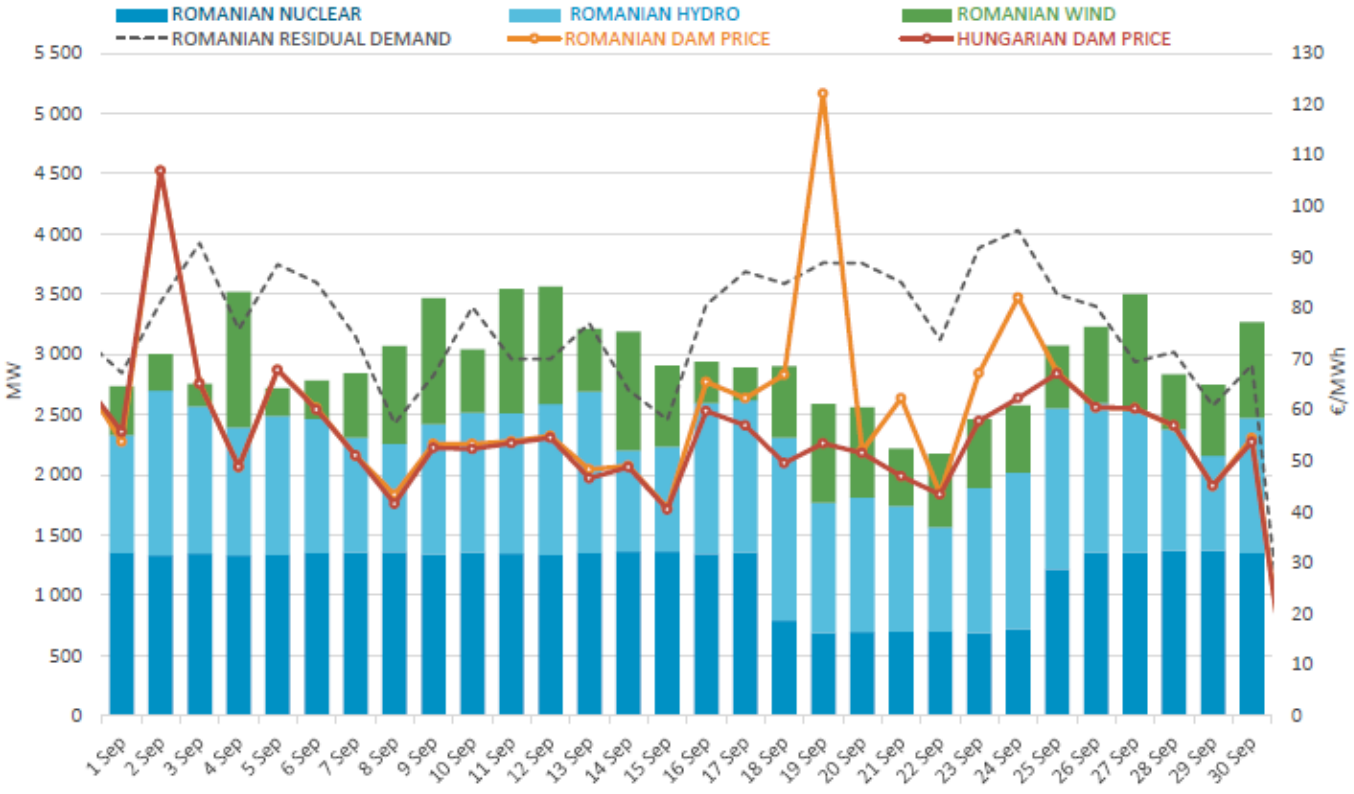
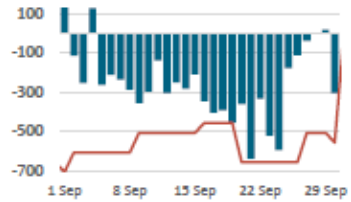
Impacts of RO production on price

05 FIGURE **HUNGARIAN AND ROMANIAN DAY AHEAD PRICES AND ROMANIAN ELECTRICITY GENERATION**

Hungary was in export position with Romania in September. In addition to the record low generation of Romanian hydro and wind power plants in 2019, there was an outage in Cernavoda (650 MW) nuclear power plant between September 18-25.

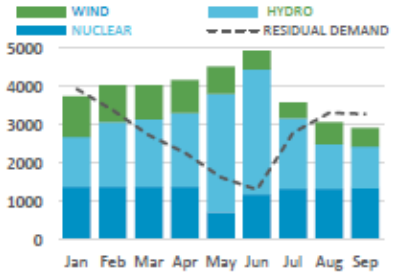


DAILY AVERAGE FLOW OF DAM (MW)



DAM exchanges	Hours	HU DAM (€/MWh)	RO DAM (€/MWh)
HU > RO	604	55,6	61,6
RO > HU	116	55,9	55,5

MONTHLY AVERAGE GENERATION (MW)



Source: transparency.entsoe.eu, www.hupx.hu

Source: HEA Monthly Report, Sep. 2019

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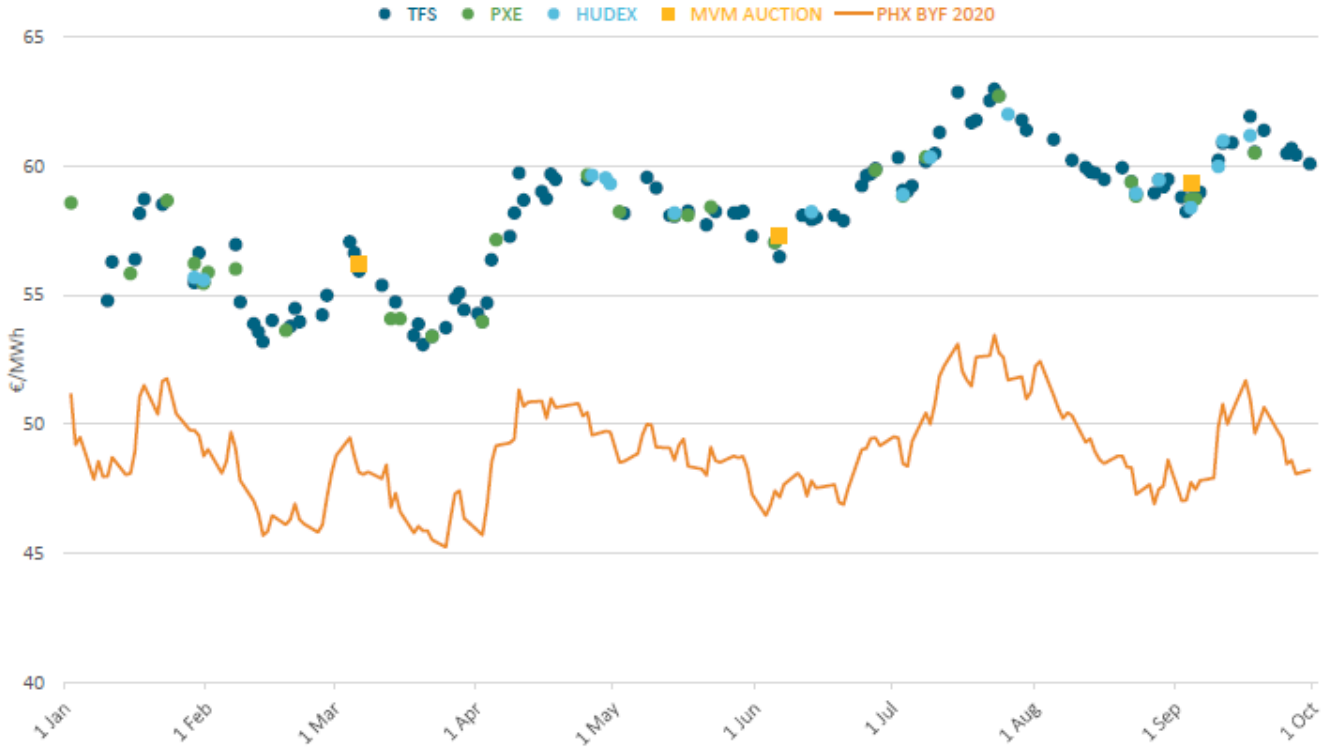
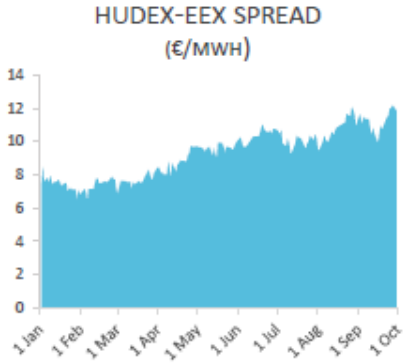
Cal2020 regional prices

30 FIGURE

PRICE OF CAL2020 PRODUCT AT DIFFERENT TRADING VENUES

In connection with the price movements in fundamentals the price of the Hungarian and German yearly products increased 4 €/MWh with a correction of 2 €/MWh in the second half of the month. The monthly average spread between the two markets rose from 10,75 €/MWh to 11,16 €/MWh, the monthly maximum exceeded 12 €/MWh.





Remark: HUDEX-EEX spread: the difference between HUDEX and EEX settlement prices. TFS platform - the largest OTC market of Hungarian power products. „TFS_2020" is the trading price of Hungarian yearly baseload product of 2019 on TFS platform. MVM auction: power trading auction which is organized by MVM Partner Zrt.

Source: www.hupx.hu, www.eex.com; TFS

Source: HEA Database

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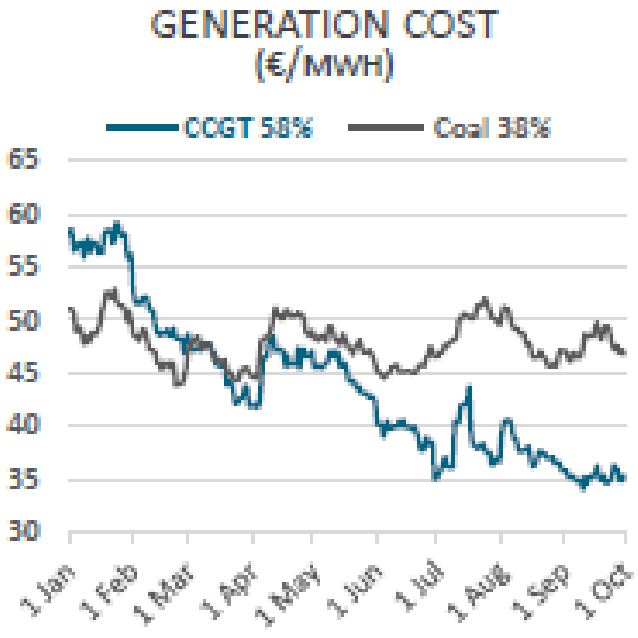
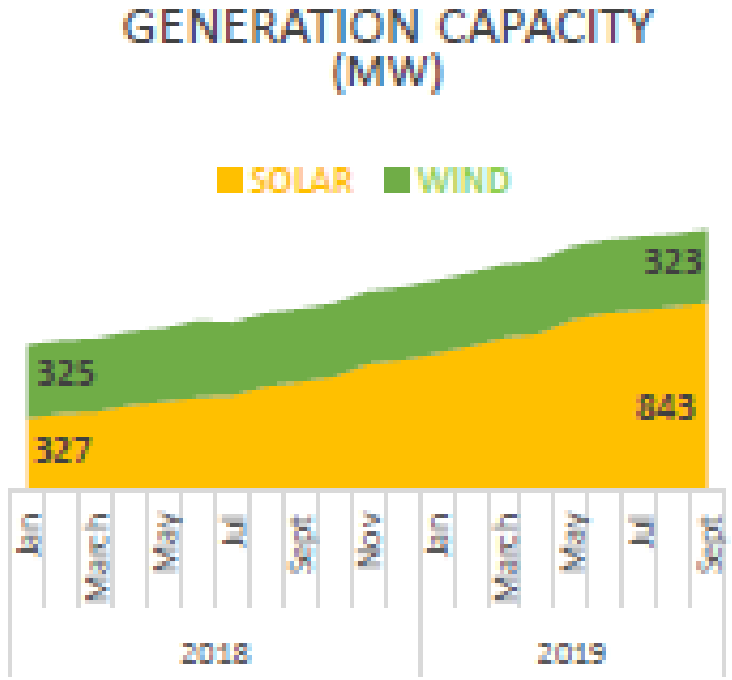
Increasing role of gas and RES in electricity production





Source: HEA Database

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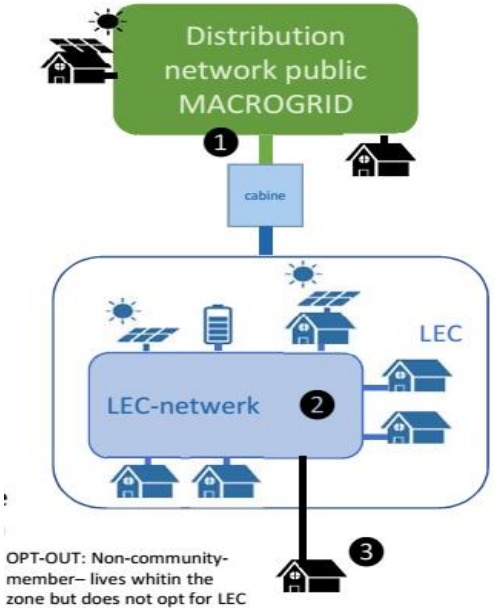
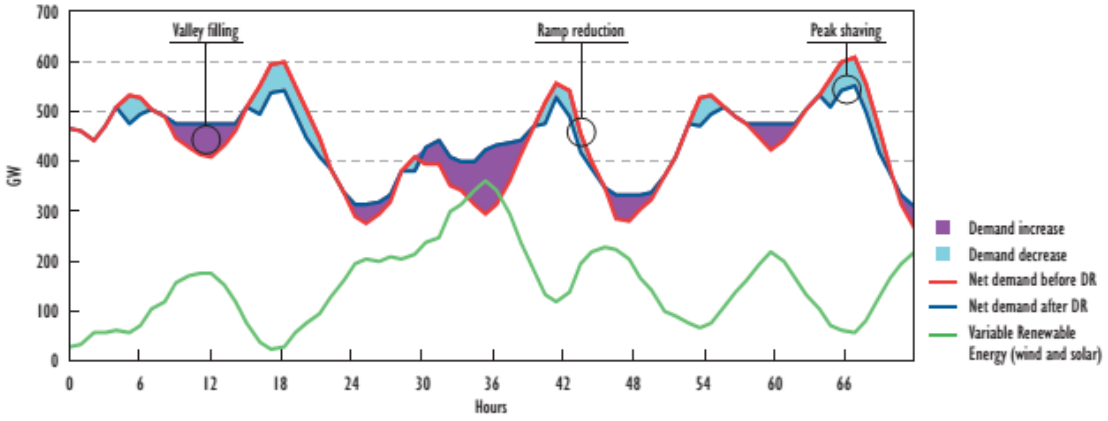
How the new challenges impact the business models of energy companies?

- Consumer-focused commercial practices
- Market segmentation
- Beyond the meter services
- Aggregator position, DSR
- Multi-utility solutions
- Energy efficiency services and consultation
- ESCO model





MAGYAR ENERGIAKERESKEDŐK SZÖVETSÉGE MEKSZ