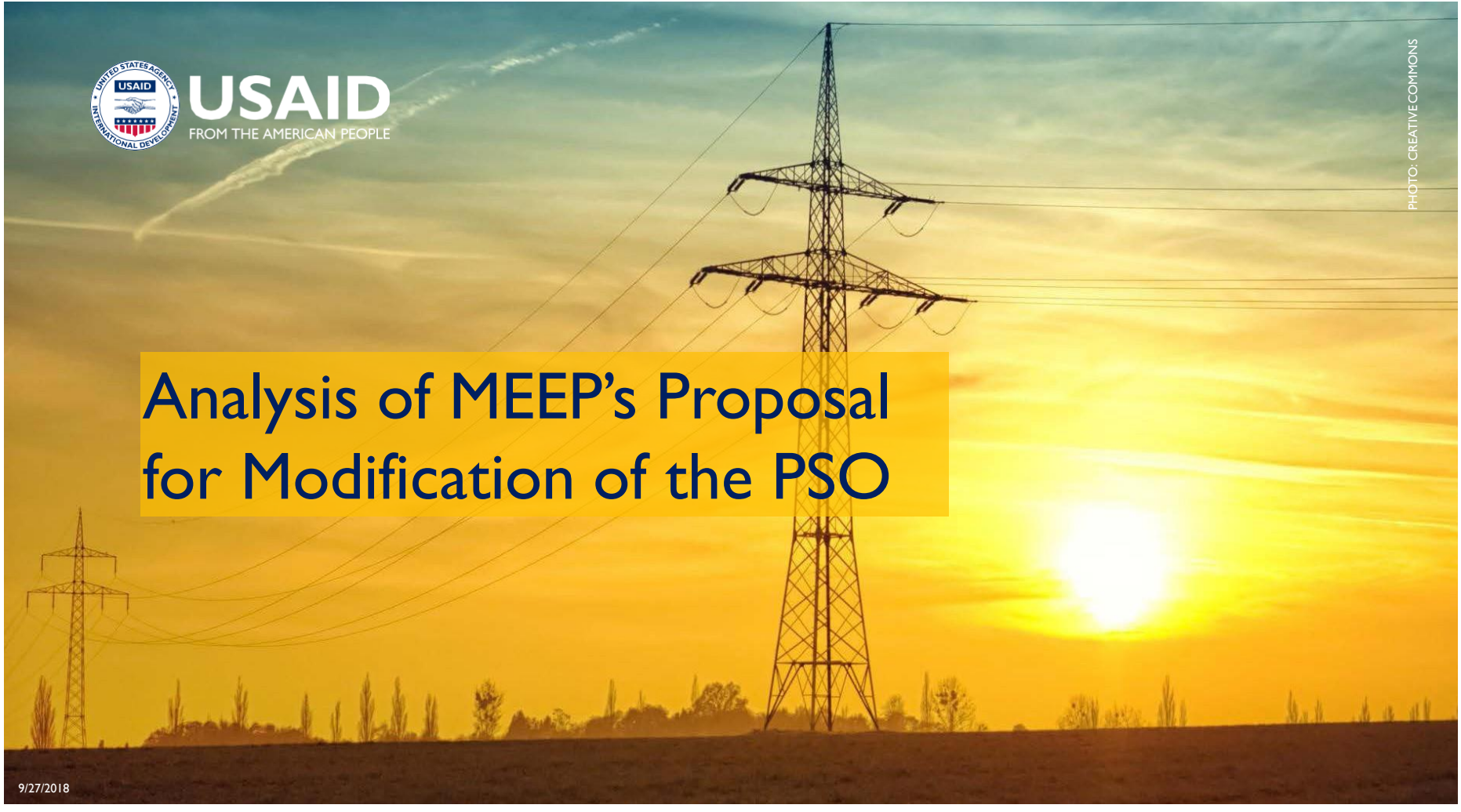
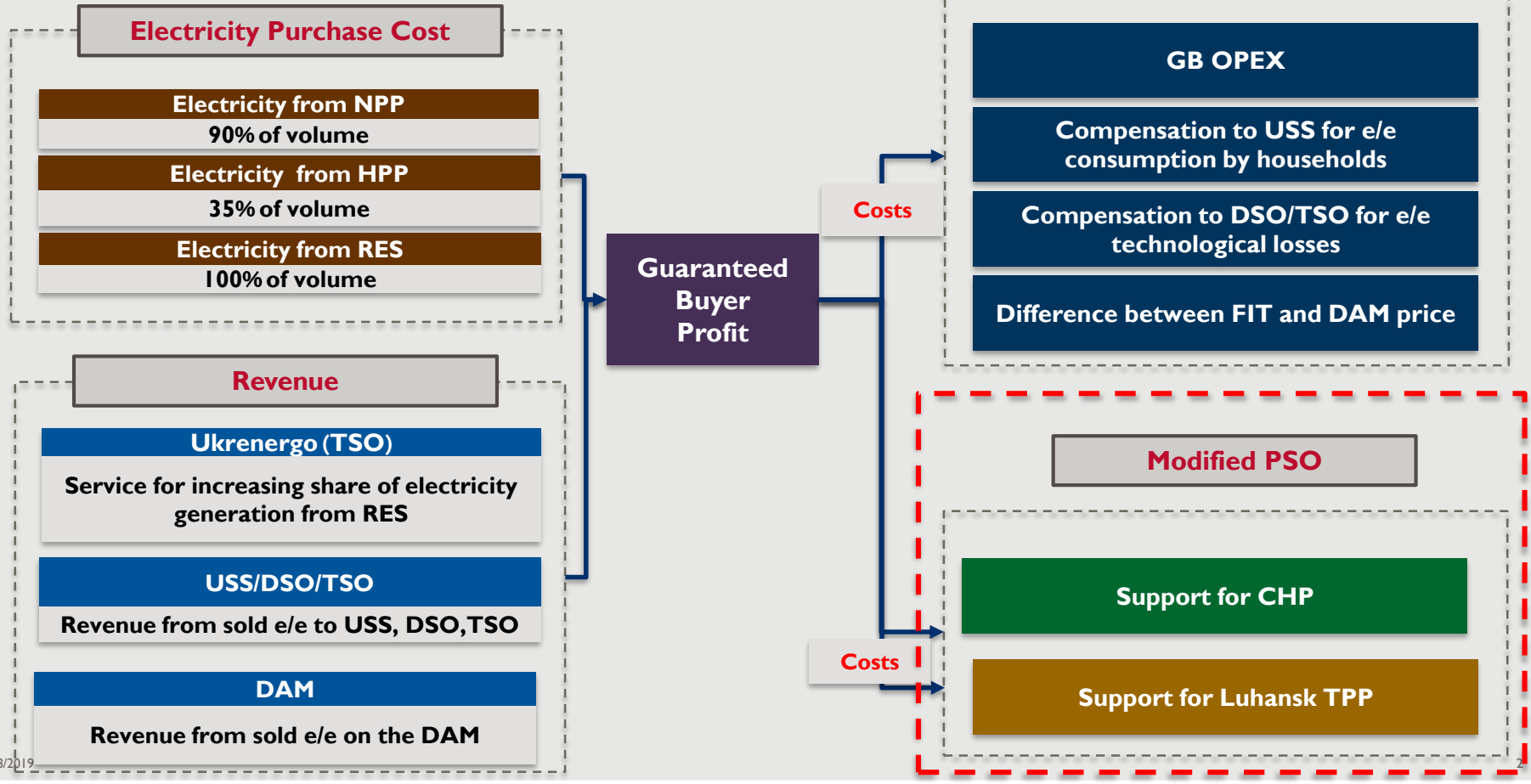


Analysis of MEEP's Proposal for Modification of the PSO

9/27/2018

PSO Scenarios

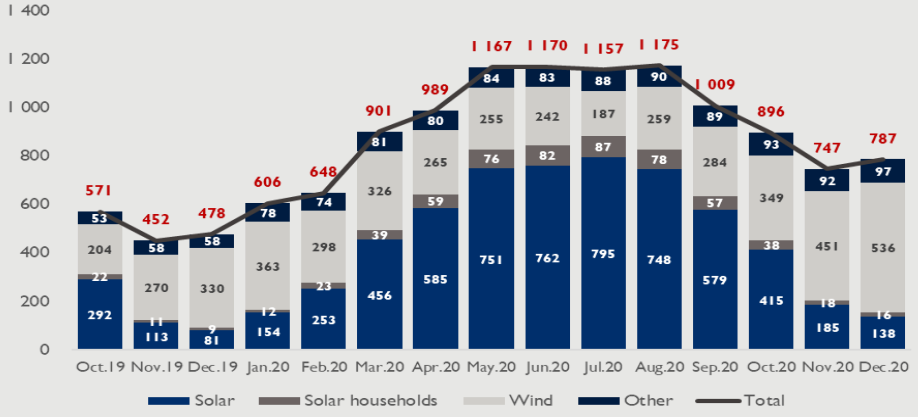


Assumptions in the financial model are based on MEEP forecasts

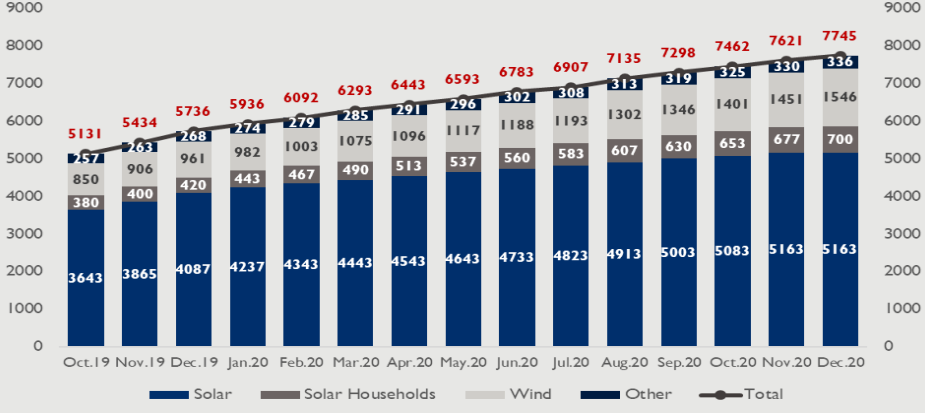
1. RES generation forecast;
2. RES capacity forecast;
3. RES prices for each type of generation;
4. TSO tariff assumption, including RES compensation;
5. Exclude Luhansk TPP financing;
6. DM prices of UA-IPS, incl. UA-BEI*;
7. 15-month energy balance forecast.

*Burshtyn Energy Island

RES Generation forecast, '000 MWh

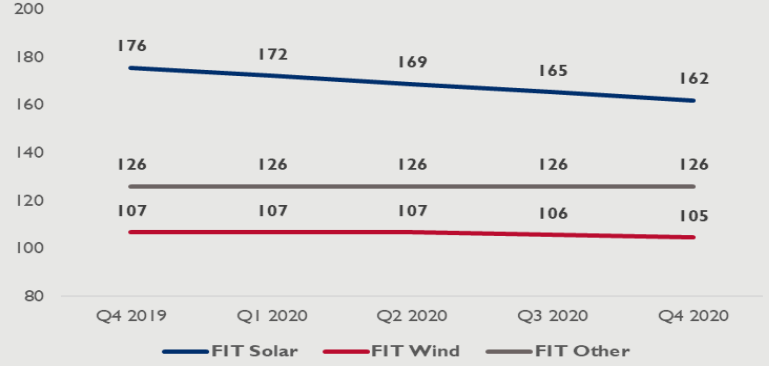


RES capacity forecast, MWh

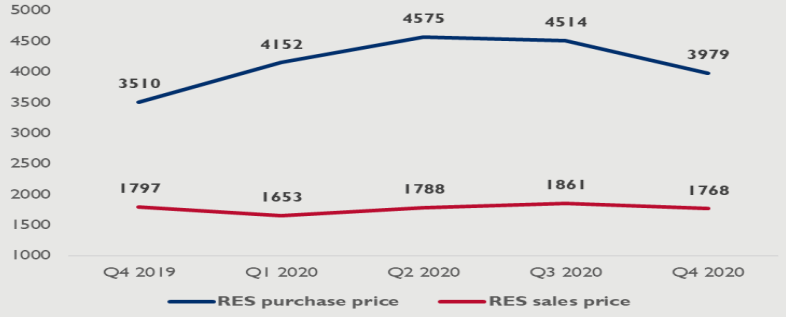


Assumptions in the financial model are based on MEEP forecasts

Feed-in-tariff by type of generation, EUR/MWh

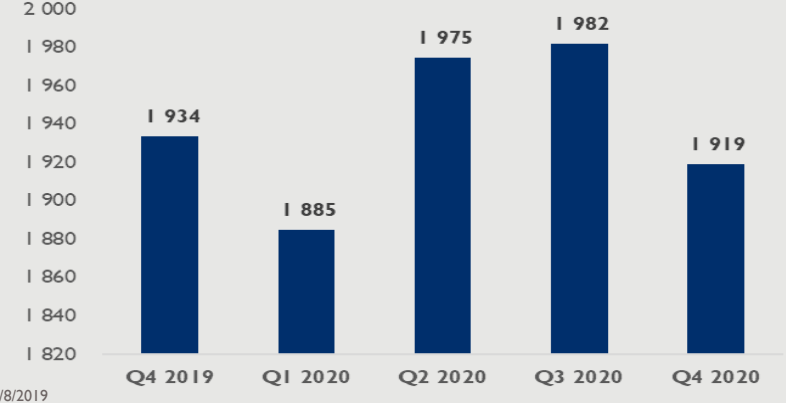


RES purchase price vs. RES sales price, UAH/MWh

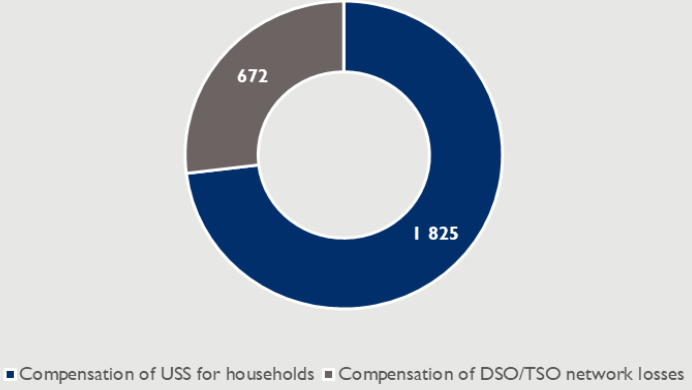


Average annual feed-in-tariff in 2020 **is 4350 UAH/MWh**

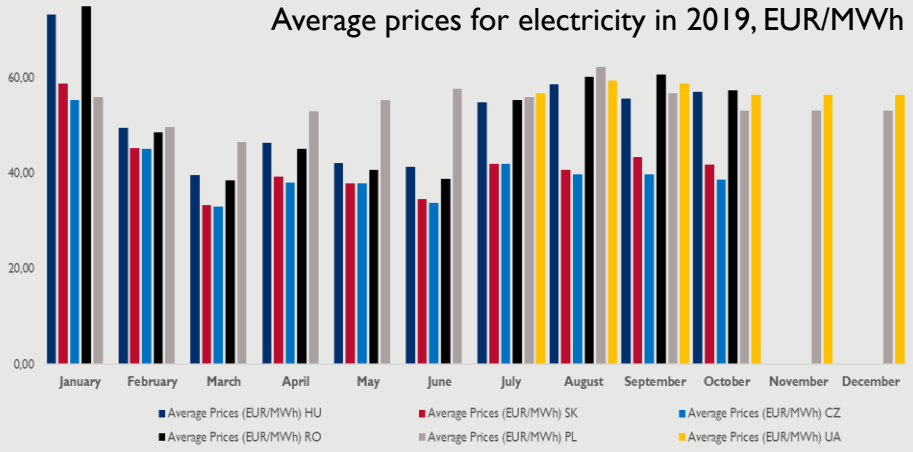
Burshtyn Energy Island DAM-ID prices, UAH/MWh

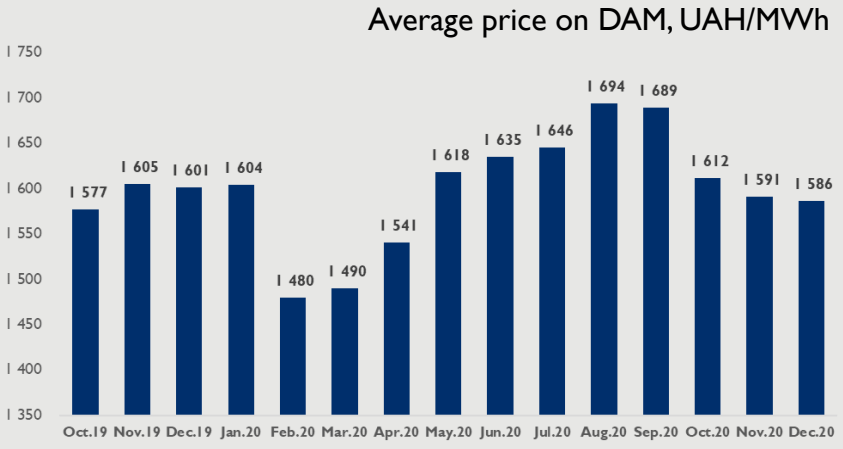


BEI: GB purchases for PSO, '000 MWh

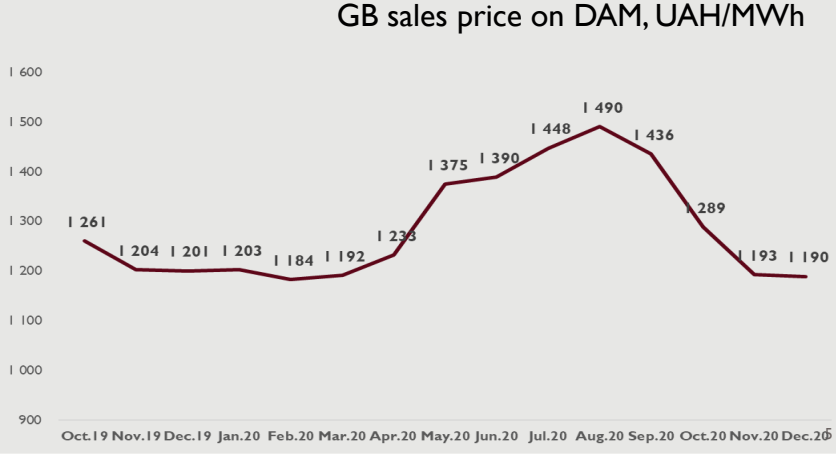


Assumptions in the financial model are based on MEEP forecasts



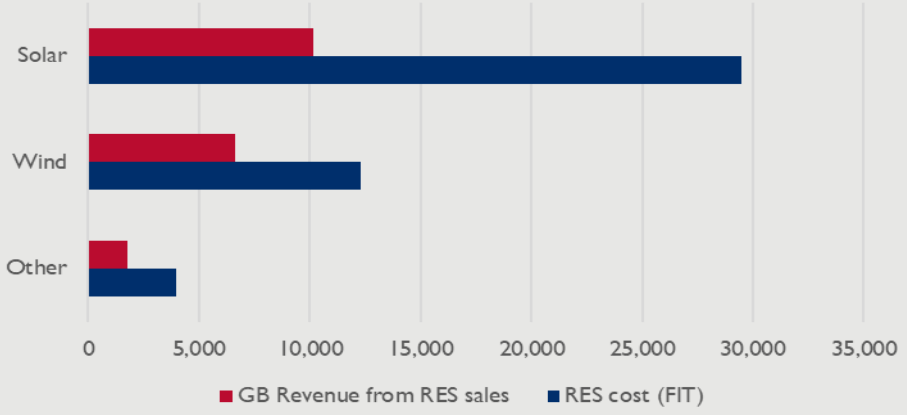


- Average DAM prices are forecasted based on analysis of European energy market;
- GB sales prices are lower than DAM prices due to specifics of the sold energy profile.

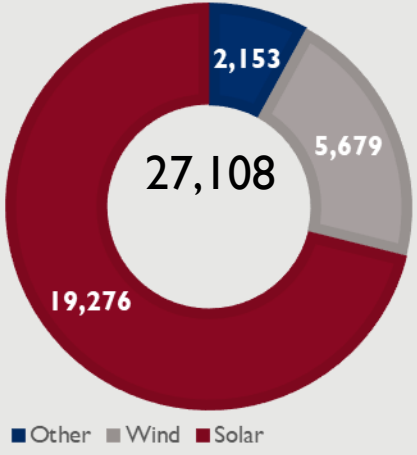


GB financial results Y 2020. Calculation of RES support

RES purchases and sales on DAM, Mill. UAH



RES subsidy calculation, Mill. UAH

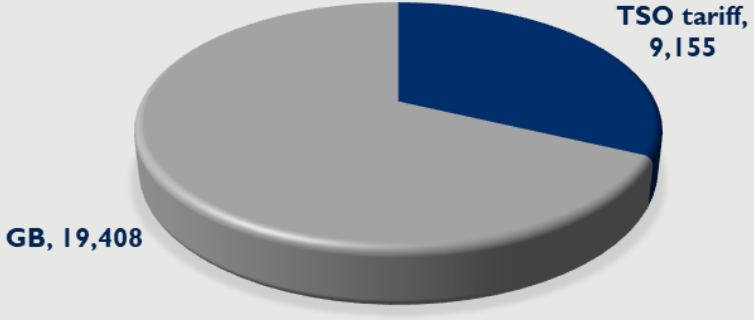


RES support, Mill. UAH

RES subsidy*	27,108
Responsibility for imbalance	1,069
GB OPEX	385
Total:	**28,563**

* Households' RES is not included.

Allocation of RES support, Mill. UAH



TSO tariff structure

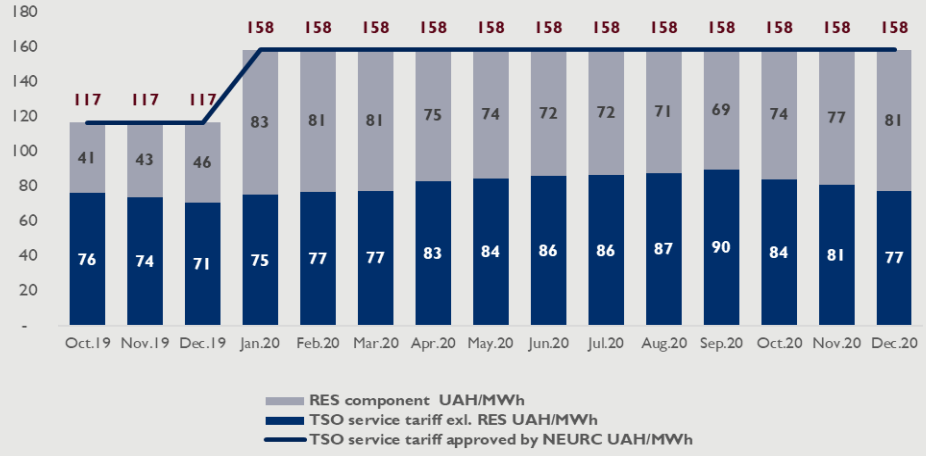
RES support, Mill. UAH	28,563
RES support in fixed TSO tariff	9,155
Available RES support from GB profit	5,956
GB deficit	**13,452**

RES component in TSO tariff = GB RES support + RES households' support

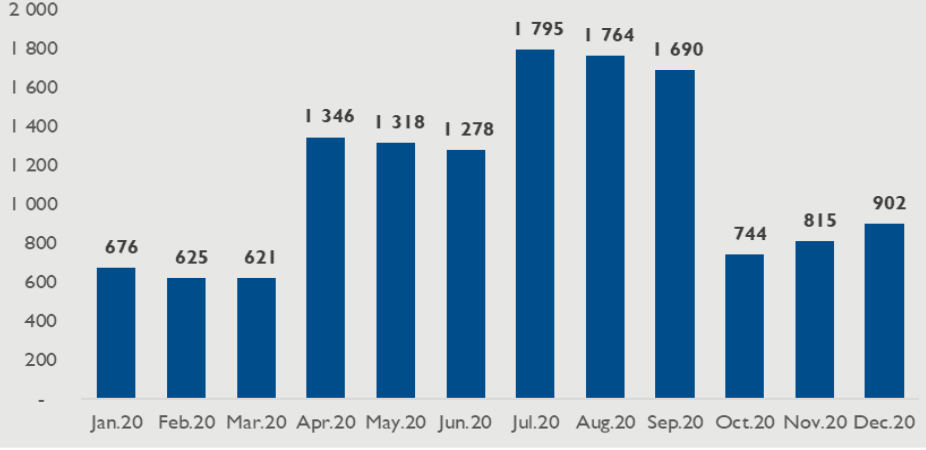
GB deficit in 2020 – **13,452 bn. UAH**

RES households' support – **1,4 bn. UAH** is included in TSO tariff.

TSO tariff forecast, UAH/MWh

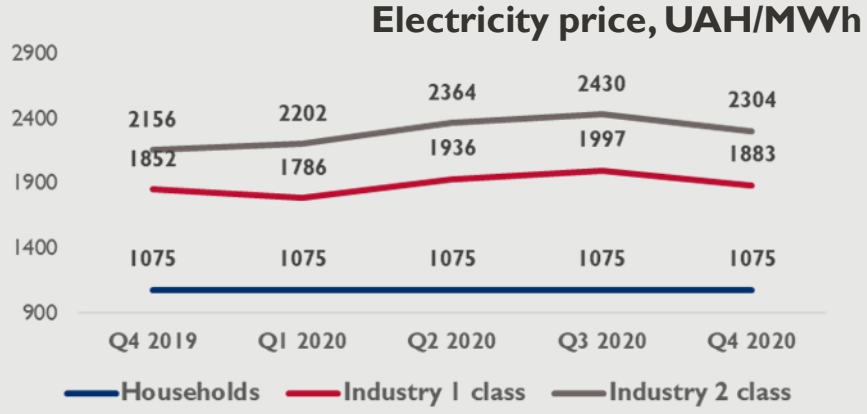


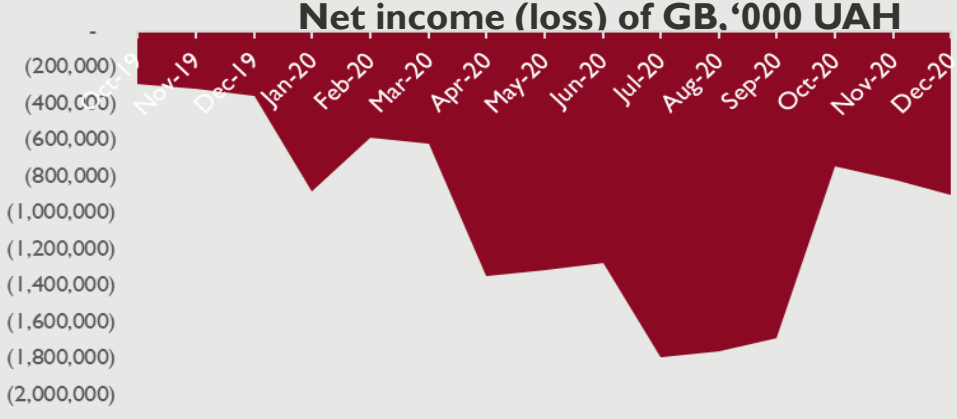
GB deficit, Mill. UAH



Scenario I – "AS-IS" - 2020: MEEP renewables forecast

Scenario	Selection
Household Tariff Scenario	**Scenario I (1075 UAH/MWh for the first 100 kWh)**
CHP financing	**Yes**
Luhansk TPP financing	**No**
Financing of technical losses at PSO price	**80%**
Responsibility for imbalance	**Yes**
Optimization of BEI	**No**



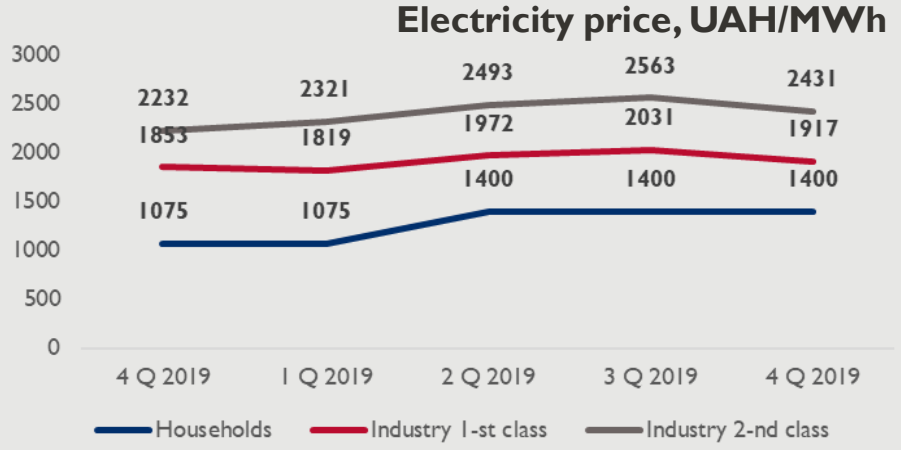


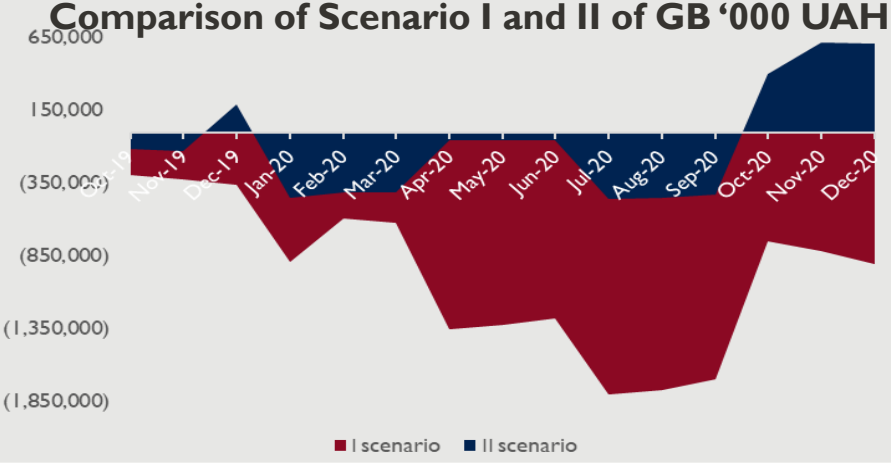
Net loss of GB in 2020 – (13.452) bn. UAH + (289.823) bn. UAH = (13.741) bn. UAH

Scenario II– ESP proposal - 2020: MEEP renewables forecast

Scenario	Selection
Household Tariff Scenario	**Scenario 2 (w/o reduced tariff for the first 100 kWh 1400 UAH/MWh)**
CHP financing	**Yes**
Luhansk TPP financing	**No**
Financing of technical losses at PSO price	**0%**
Responsibility for imbalance	**No**
Optimization of BEI	**Yes**

Net loss of GB in 2020 – (1.21) bn. UAH





Scenario II– ESP proposal - 2020: MECI renewables forecast

Scenario	Selection	bn. UAH
Financial result of GB	**Scenario I**	**(13.74)**
Household Tariff Scenario	**Scenario 2** (w/o reduced tariff for the first 100 kWh 1400 UAH/MWh)	**8.38**
Financing of technical losses at PSO price	**0%**	**2.60**
Responsibility for imbalance Voluntary imbalance reduction	**No**	**1.02**
Optimization of BEI	**Yes**	**0.53**
Financial result of GB	**Scenario II**	**(1.21)**
TSO tariff increase	**On 10 UAH - 169.78 UAH/MWh (7.3%)**	**1.21**
Financial result final		**0**

Recommendations

- Eliminate the reduced tariff block (first 100 kWh) and introduce program for full compensation of the tariff increase for the vulnerable customers;
- Exclude TSO and DSO technical losses from PSO;
- Propose a program for reduction of RES imbalances;
- Optimize trading in Burshtyn Energy Island to reduce DAM prices (adopt changes to balancing market pricing);
- Increase TSO tariff by 7.3 %.
- Develop and adopt a strategy for the gradual reduction and elimination of the PSO;