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Stimulating gas savings in heat supply: Ukraine

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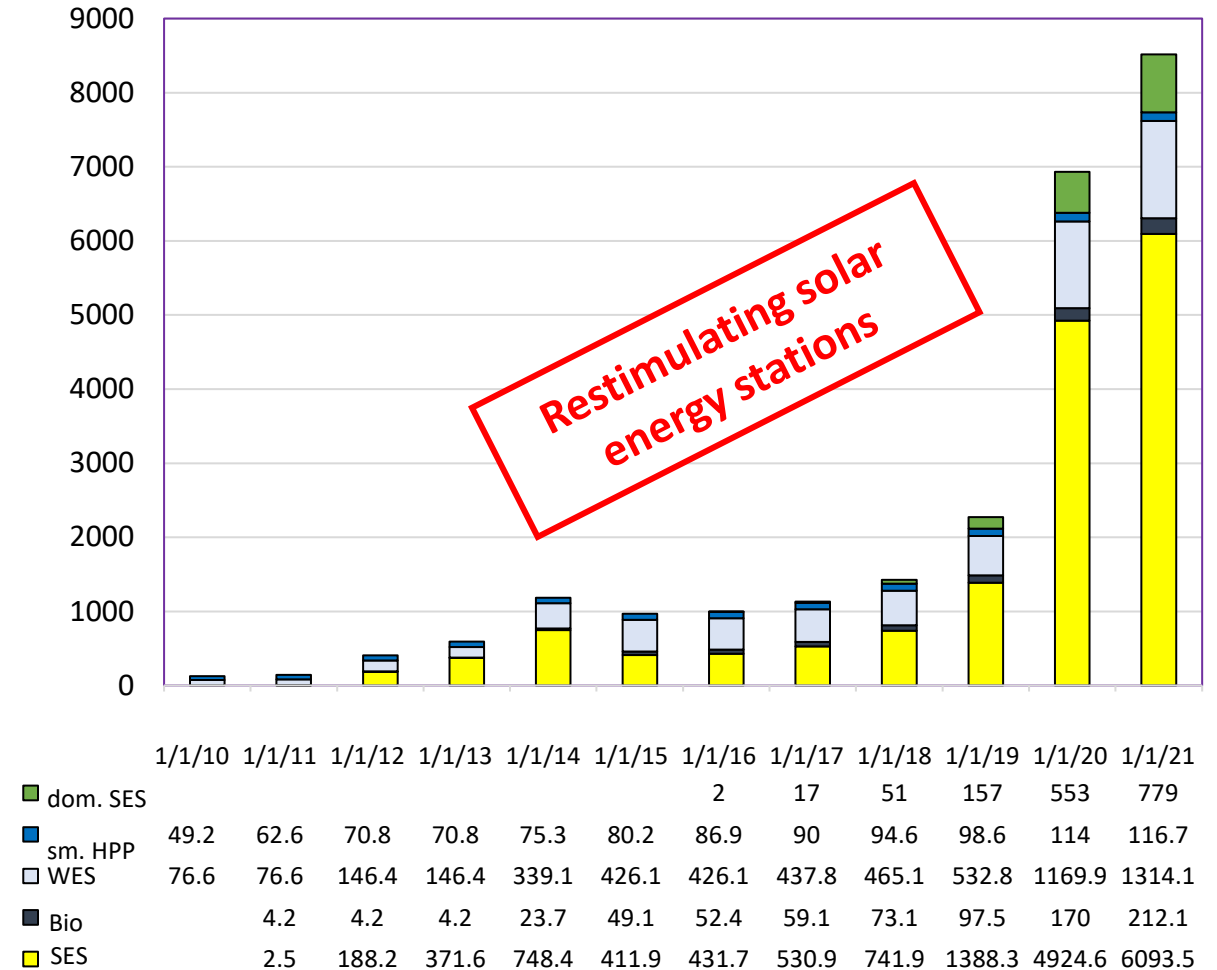
Cand. Eng. Sc, Chairman of the National Energy and Utilities Regulatory Commission (NERC) (2006-2007),
member of the NERC (2011-2014)

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Stimulating RES in the Ukrainian power generating industry

- 2009/2011 - adoption of the legislation on stimulating the development of renewable energy sources (RES) in power generating industry:
 - "green" tariffs until 2030, including the ones for households on SES/WES up to 16kW
 - local component requirement
- 2012 - decrease of the "green" tariffs level
- 2012 - decrease of the "green" tariffs level, including the ones for existing SES of > 10 MBT, replacement of the local component requirement with a surcharge for the use of Ukrainian-made equipment, increase of the maximum capacities of households on SES/WES up to 30 kW
- 2019 - decrease of the "green" tariffs level, change of the support scheme (auctions since 2020), increase of the maximum capacities of households on SES/WES energies up to 50 kW
- 2020 - decrease of the "green" tariffs level of the existing power plants, introduction of liability for imbalance

Capacities of power plants on RES, MW



The situation of heat supply in Ukraine in 2014

- Heat supply (individual, local, district) is mostly based on gas:
 - population – 15.1 billion m³
 - district heating company (DTC) for population - 7.1 billion m³
 - budget organizations - 0.7 billion rubles.m³/year
- Until 2014 - the price of gas for population and DTC was subsidized, in 2014, there was an increase for gas price, the risk for supply restrictions
- **Economic efficiency of heat production on alternative fuels** (wood processing waste, agricultural waste, etc.):
 - implemented in the private sector
 - **not applicable for DTC and budget organizations due to the lack of investments** in modernization and transition of boilers based on gas to alternative fuels as a consequence of:
 - public financing deficit
 - lack of incentives for private investors



- **The Regulator's proposal** (of the National Energy and Utilities Regulatory Commission (NERC)) is to **create incentives** for private investors by **linking the price of heat production on any energy carriers (except gas) to the price of heat production on gas**

Stimulating gas savings in heat production

By the government's decision (2014)

- The NECR proposal **was implemented in the Orders of the Cabinet of Ministers** of Ukraine from 09.07.2014 No. 293 (DTC for population) and from 10.09.2014 No. 453 (for budget organization):
 - **the tariff for heat production** on any types of energy carriers (except gas) was set at the level **of 90% of the weighted average tariff for heat production on natural gas**
 - the weighted average tariff for natural gas heat production was calculated by the Regulator
 - considering the subsidized gas price for the population, **the difference** between the heat production tariff and the heat tariff for the population **was subject to compensation from the budget**

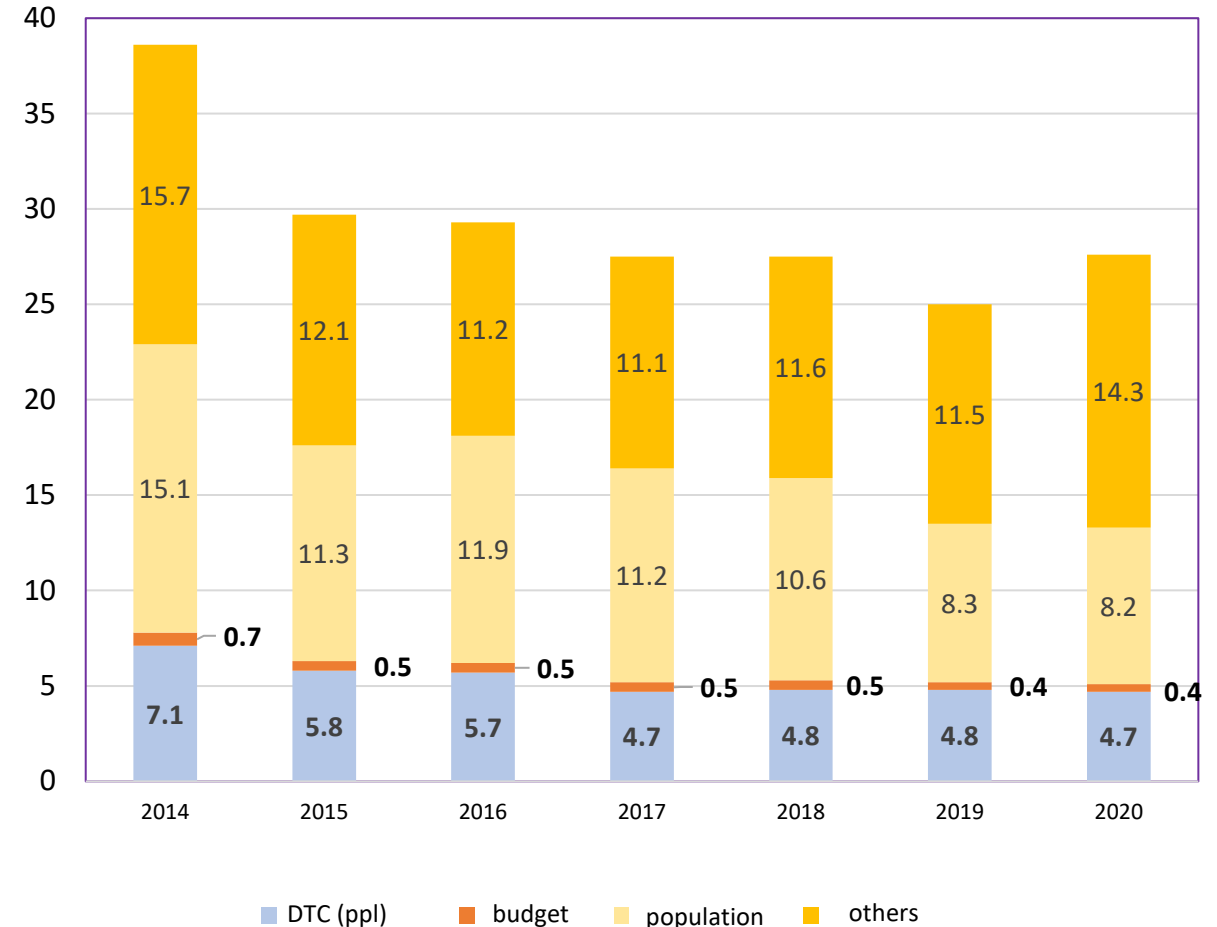
By statute (2017)

- Taking into account the effectiveness of stimulating gas savings, **the mechanism is fixed in the Article 20 of the Law of Ukraine on Heat Supply** by the Law No. 1959 of 21.03.2017:
 - **tariffs for heat**, produced on all types of energy (except gas), set **at 90% of tariffs for heat** produced based on natural gas, and in its absence at 90% of the weighted average of tariffs for heat, produced based on natural gas on the territory of an administrative unit (region)
 - the tariff for heat production on any types of energy carriers (except gas) is set **taking into account the weighted average tariffs for the transportation and supply of heat**
 - the weighted average tariffs are calculated quarterly by the State Agency on Energy Efficiency and Energy Saving in accordance with the Procedure approved by the Cabinet of Ministers

Results of stimulating gas savings in heat production

- since 2014 in Ukraine:
 - 2436 MW of new heat production capacities from alternative energy sources have been introduced (of which 1984 MW after 2014)
 - the gas replacement capacity is more than 0.9 billion m3
 - more than 520 million euros have been invested
- At the end of 2020, 7544 boiler houses were operating on alternative fuels (29% of the total number, 13.3% of the capacity of all boilers)
- The decrease in gas consumption by budget organizations and DTC (for heat production for the population) in 2017 relative to 2014 amounted to 2.6 billion m3

Consumption of natural gas, bln.m3



Thanks for your attention!

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