

The main difference in the operation of Smart Grid is as follows: in traditional networks, the current flowing through the wires comes from the generation point to the consumer in accordance with a predetermined level of voltage and resistance, but introduction of Smart Grid will allow to independently regulate power supply depending on decreased or increased mode of consumption. "Smart" counters transferring the information on consumption will be installed at the enterprises and apartment houses. This fact will allow to adjust using of electrical appliances over time and distribute electricity depending on the demand, which significantly reduces energy costs.

References:

1. Mohanty S. P., Choppali U., Kougiianos E. Everything you wanted to know about smart cities: the internet of things is the backbone IEEE Consum Electron Mag, 5 (2016), pp. 60–70.
2. Nam T., Pardo T. A. Smart city as urban innovation: Focusing on management, policy, and context Proceedings of the 5th international conference on theory and practice of electronic governance (2011), pp. 185–194.
3. International Energy Agency, - <http://www.iea.org/>.
4. European Parliament, - <http://www.europarl.europa.eu/>.
5. Institute of Electrical and Electronics Engineers USA. [//www.ieee.org/](http://www.ieee.org/).
6. European Commission: priorities in energy infrastructure until 2020 after - Concept of the integrated European power system, message COM (2010) 677 from 11/17/2010.
7. European Commission: The Europe 2020 Project Bond Initiative is a working document Commission from 28.02.2011. Joint Research Center of the European Commission.
8. «Technological map of the technological plan of the European energy strategy 2011». 2011 Technology Map of the European Strategic Energy Technology Plan (SET-Plan), - The European Commission's Joint Research Center (JRC).

WELFARE OF MARKETS IN POLTAVA

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Modernization of cities is one of the most pressing issues today. This article will consider the problem of modernizing markets on the example of the city of Poltava.

Poltava is the spiritual capital of Ukraine. But along with its historical values and sights, there are many places in it that require reconstruction, transformation and modernization, in other words – changes in urbanism. Urban studies is a science devoted to the development of various urban systems (transport, pedestrian infrastructure, ecology, health care and others), their interaction with each other and with city residents [1]. One of the places that

need a reconstruction is the territory of the "Central Market" located in the very centre of the city. Its outdated model with the placement of tents, containers, spontaneous trade from cars, tables, folding beds cannot exist in our modern world. Occupying a huge area of the centre of Poltava, it needs significant modernization.

Many researchers have dealt with the issues of urban modernization. For example, Edward Blakely in his article says that traditionally cities were created and planned based on economic prerequisites, and not on the needs and demands of people. People were only a part of the mechanism; they did not control it. The role of the urban planner was to ensure the participation of people in economic processes, to use them optimally as a productive force [3]. However, now, in our opinion, the situation has changed. People, their opinions and requests, significantly influence decisions on the development and improvement of the city. And the majority of Poltava residents believe that the city authorities should make decisions about changing the urban planning policy and ennoble this territory of the regional centre.

Information on attempts to solve this problem can be found on the website zmist.pl.ua. One of the developers of the project, Artur Aroyan, says: "The problem of the market is a certain anarchy, which is expressed in disordered shopping places and parking lots. Based on the analysis of these problems, the main directions in which it is necessary to work were identified." According to Artur Aroyan, it is necessary to reorganize the functional zones of the market, to make them clearly defined. In particular, to separate residential buildings from retail facilities and create multi-storey car parks, which allow leaving retail facilities on the first tier. Also, along the streets, where there is an opportunity, they want to create green stripes [2].

We believe that it would be appropriate to build a modern multi-storey building of the market, on the first and second floors of which meat, fish, dairy and vegetable pavilions could be located, and on the floors above - food products. Arrange landscaping around the building with a public garden, a fountain, benches, and a recreation area. It is possible to arrange a cafe. The rest of the territory could be given for residential development. Thanks to the above measures, roadways will be freed from spontaneous parking lots and traffic jams during market hours, and will be cleaner and more beautiful.

Taking into account the above, we believe that Poltava, as the regional centre of Ukraine, deserves to be a beautiful modern city, therefore it is necessary to attract specialists from the field of urbanism to modernize different parts of the city.

References:

1. Vi`ki`pedi`ya. Urbani`stika. [Elektronnij resurs] – Rezhim dostupu do resursu: <https://ru.wikipedia.org/wiki/Урбанистика>.
2. Czentral`nij rinok u Poltavi` mozhe nabuti novogo viglyadu [Elektronnij resurs] – Rezhim dostupu do resursu: <https://zmist.pl.ua/news/centralnii-rinok-u-poltavi-mozhe-nabuti->

novogo-viglyadu-foto.

3. Ble`jkli E`dvard. Modernizacziya goroda [Elektronnij resurs] – Rezhim dostupu do resursu: https://www.vedomosti.ru/opinion/articles/2012/02/17/modernizaciya_goroda.

PREREQUISITES FOR RECONSTRUCTION OF BUILDINGS OF CHILDREN'S PRESCHOOL INSTITUTIONS

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An important stage in the history of the formation and development of domestic preschool institutions was their construction according to the standard projects. In these circumstances, three most important periods of construction of preschool institutions can be singled out: the first (1946-1961) – adaptation of the existing buildings for a rapid restoration in the postwar years; the second (1961–1970) – development of kindergarten projects taking into account the age of the children and the time of their stay in the institution; the third (1971–1980) – application of prefabricated construction technologies consisting of typical reinforced concrete elements of serial production, taking into account a high growth rates of cities and their number.

After conducting a study of the most common three-dimensional schemes of the typical projects of the 1960-1980's, the basic principles of construction of preschool institutions were revealed. They are gallery and centralized buildings. The communicative basis in all types of these constructions is the corridor. Group unit is the basis of the functional-planning element, which combines all the rooms needed for one group. The structure of the designed functional zones is also revealed. However, nowadays the projects of this type require rethinking at three levels: architectural and urban planning, spatial and functional-planning.

In the period of 1990-2000, the birth rate of the population of Ukraine decreased, due to the current demographic situation, a large number of buildings of preschool institutions were closed or repurposed. New functions were assigned to these constructions ranging from administrative to production ones. The buildings of preschool institutions used for their intended purpose currently operate in the conditions of old regulations, which do not correspond to the modern principles of the society, culture and education development.

Currently, consumer demand for the services provided by kindergartens has been transformed. Updated demand conditions have affected the types of kindergartens. Depending on the services provided by preschool institutions, the set of premises in their functional blocks is also updated.