

Using energy efficiently in hospitals

Ukrainian hospitals are reducing their energy consumption, thus saving millions in their budgets

The challenge: Hospitals under pressure

Energy intensity – the ratio between energy consumption and economic output – is at least three times higher in Ukraine than in countries in the European Union. The country’s outdated infrastructure and supply systems and its reliance on energy imports from abroad have led to a dramatic increase in energy prices since 2015.

Ukraine now aims to change this situation, making an affordable, reliable energy supply a political priority. The public sector in particular is to receive government support in saving energy. Among the most energy-intensive public institutions are the more than 1,000 hospitals in Ukraine with a total of around 430,000 beds. Some hospitals spend up to 20 per cent of their budget on energy. The high energy prices are putting the institutions responsible for running the hospitals under considerable financial pressure and greatly reducing their scope for action. This is also affecting the quality of the services they offer: essential medical supplies and equipment are unable to be procured in adequate quantity. Hospitals need to save energy in order to cut costs – but they need to do so in the right places.



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Despite the huge energy consumption, some hospitals might not even achieve respective comfort standards, for example, room temperatures may be too low in winter. The staff do not have the resources or knowledge required to improve the situation and to harness potential. At national level there are not enough advisory services on energy efficiency or financing options for renovation work.

Our approach: Sustainable reduction of energy consumption

On behalf of the German Government, GIZ is working to reduce energy consumption in Ukraine effectively, with a special focus on energy efficiency improvements in Ukrainian hospitals. GIZ is showing the hospitals involved in the project how to use energy more efficiently, for example by optimising technical processes and changing behaviour in workflows. Even turning off heaters on technical floors or flushing the heating systems leads to significant energy and cost savings. In view of the tight government budget, energy-efficient renovation concepts that can be implemented with limited funds are primarily adopted. Thus lighting systems and technical equipment in laundries and kitchens are being modernised, windows and doors are being replaced, and thermal insulation installed.



Energy audit in Chernihiv hospital

The greatest possible cost-benefit effects are being achieved for all investments. Meeting basic requirements such as energy audits not only present hospitals with potential savings, but it makes it easier for them to access financing options.

GIZ is promoting the exchange of knowledge and experience between staff at Ukrainian hospitals. Information campaigns and events are showing staff at hospitals that is not yet involved in the project how to save energy in their institutions too. This leverage effect is helping to improve the energy situation in many hospitals across the country on a lasting basis. The hospitals are saving millions in costs – money that can be used to improve medical services for patients across the country.



Experts discuss with each other and learn about energy management during the Dialog Platform

Our results: 17 hospitals will become Energy Efficient

The project is piloting measures in 17 municipal hospitals in the partner cities of Sumy and Chernihiv, which provide in-patient treatment for 26,000 patients every year. With support from GIZ, energy audits have been carried out in all of the hospitals on the basis of the European standard EN 16247-1. A total of 87 audit reports have been conducted, recommending strategic and prioritised measures to make more efficient use of energy and thus reduce costs. With investment costs of almost 14 million euros, implementing these measures could save around a million euros a year. Parts of the renovation roadmap laid down in the audits will begin to be implemented from late 2018. In addition, more than 60 managers and energy managers have been trained from 17 hospitals and have learned more about energy management in their hospitals.



Energy manager of a hospital checks the radiators



Alexander Lysenko: “The energy efficiency of hospitals is the priority”

Alexander Lysenko is Mayor of Sumy and explains:

“The municipal administration is improving the situation itself, but we need professional assistance from German experts. The energy efficiency of hospitals is the priority, because it will quickly enable us to improve comfort at medical facilities.”

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Vladislav Atroshenko: “Gather the best experience in energy management”

Vladislav Atroshenko is Mayor of Chernihiv and reports:

“For me, this is one of the most promising projects we have, and we want to carry it out effectively. Germany is a high-tech country, and we hope we’ll be able to gather the best experience in energy management in the scope of the partnership.”

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