BIM IS PRODUCING ITS OWN ENERGY WITH SOLAR ENERGY POWER PLANT PROJECT

BIM's Executive Committee Member and CFO Haluk Dortluoğlu, "Total power of Solar Energy Power Plants in Batman, İstanbul and Iğdır warehouses reached 2.23 MW. We plan to build the system on top of 14 warehouses in total."

Factories that produce their own energy.

3 December 2021, Friday 09.00 Derya Kumtepe

BIM has lately made a name for itself with its rooftop solar power plant projects. We discussed the details and outcomes of the project with the Executive Committee Member and CFO Haluk Dortluoğlu. Dortluoğlu noted that they plan to build the power plants on top of 14 warehouses in total and stated that they aim to decrease greenhouse gas emissions.

Could you briefly mention the foundation of your company and your activities within the sector?

BİM Birleşik Mağazalar A.Ş. started its activities in 1995 with 21 stores, with the aim of delivering basic food and consumables to consumers at the best possible price and with the highest quality. BİM is the first representative of hard discount model in Turkey and it keeps its portfolio limited to 800 products while offering many private label products to its customers.

BİM is the leader of the retail sector in Turkey and is still carrying out its activities with 9.303 stores all around Turkey by September 2021. BİM also increased the number of FİLE stores to 153 which offers to consumers a new concept. Our company sustains its development without giving up quality understanding and customer satisfaction and with its effective cost management policy.

BİM acts with the vision to be an international company and carries out its activities in Morocco and Egypt. The company has 574 stores in Morocco and 300 stores in Egypt as of September 2021.

Could you evaluate the sector you operate in terms of energy consumption? In which sections are the most intense energy consumed in storage areas?

We have high consumptions in lighting, heating, cooling, refrigerators, cold storages and work machines in our warehouses and stores. To preserve the freshness of the products and the health of our customers, our refrigerators and cold storages have the highest share in terms of consumption, since they operate 24/7.

What kind of strategy do you follow in terms of energy efficiency? Could you evaluate and answer many areas from lighting to the cooling system?

We aim to reduce the environmental impact in our operations in order to contribute to fight against the climate change which is one of the most important global environmental problems. Within this scope, we carry out projects and applications, which will increase energy efficiency. We make investments for producing electricity with renewable energy. At the same time, we also carry out studies to increase the source efficiency in logistical activities and to reduce greenhouse gas emissions.

Most of BİM's energy consumption comes from electricity consumption in our stores. Increasing energy efficiency in our stores both decreases the company's environmental impact and ensures financial savings. Within this direction, we started the renewal of our store formats beginning from 2020 and we started making important improvements on energy-saving and thermal insulation. In BİM's new store model, we used stone wool and glass with high insulation to provide interior thermal insulation, and switched to energy-efficient LED lighting models to reduce energy consumption. As a result of these practices, an average of 25% heat and 10% electricity savings were achieved per store. In addition, an automatic panel switch application has been started for lighting and energy-consuming appliances that will not be used at the end of the shift. Along with the newly opened stores, we are also renovating the existing stores.

We take measures to ensure energy efficiency not only in stores but also in warehouses. In the first stage, thermal insulation is provided by strengthening the exterior insulation of the buildings and applying a curtain wall/glass system. In addition, we installed an energy scale tracking system to measure electricity consumption in 14 warehouses. In this way, we take steps to increase energy efficiency and carry out optimization studies by regularly monitoring consumption. In BİM Turkey operations, the energy density per square meter decreased by 4% in 2020 compared to 2018 and was measured as 200.8 kWh/m^2.

BİM has initiated the project of establishing solar power plants (GES) on the roofs of regional warehouses to generate electricity from renewable sources, and an investment of 6.5 million TL has been made in the project so far.

Could you tell us about the rooftop solar power plant projects that you have implemented recently? In which regions did you set up power plants? Will there be different projects that you plan to establish in the new period?

We invest in renewable energy to contribute to the fight against one of the most important global environmental problems, climate change. We installed solar energy systems in our warehouses in Batman in 2020 and İstanbul Arnavutköy and Iğdır in 2021. In all three of our warehouses, we provide 100% of our energy consumption from SPPs. The total power of the SPP in our Batman, İstanbul, and Iğdır warehouses was 2.23 MW. With the solar energy system, which produces equivalent to the annual energy consumption of a thousand households, we have achieved a total annual reduction of 1,426 tons in carbon emissions, while we have saved 30 thousand trees. It is planned to install on the roofs of 14 warehouses in total. In this way, we aim to reduce greenhouse gas emissions.

Could you inform us about your yearly energy consumption? How much of your yearly energy consumption is produced by solar energy power plants?

Our total electricity consumption in 2020 was 445.310.000 kWh. Our first Project, Batman Rooftop SPP which completed its first year produced 429.000 kWh energy. We aim to reach 10.320.000 kWh energy by the year-end with the projects that we are planning to put into action. This equals 2% of our total consumption for now.

Could you briefly talk about the technical equipment you used in the projects and their features? How many panels did you use? What was your criteria in choosing products?

275 W polycrystalline panels were used in our first project, Batman warehouse Rooftop SPP, and 400 W monocrystalline panels were used in our next two projects, Arnavutköy and Iğdır. A total of 5,910 panels were used in our three projects. In product selection, we consider products with up-to-date technologies, panel efficiencies, and high installed power, which are used extensively in SPP's. One of our most important criteria in PV panels was that they have reached an installed capacity of at least 10 MW. By participating in the production processes of the panels, we are involved in all stages of the process. We prefer internationally accepted, high-tech products in inverter and construction, which are the other two important materials of SPP projects.

What is the investment cost of the project? How long do you expect the project to pay for itself?

We anticipate that the investment costs of the 3 projects that we have put into operation will be amortized within 4-5 years. We think that these periods will come back a little more with the increasing energy prices.

What method do you follow regarding Energy Monitoring? Can you talk about your work?

In our SPPs, we perform full-time monitoring over inverters. We can quickly intervene in possible problems that occur in the power plant. We are working on systems that can be operated from a single center with the number of power plants that will increase in the future.

What are your goals for sustainability? Could you tell us about your new term goals and projects?

Being the first representative of the hard discount model in Turkey, BIM is committed to always making progress and creating common value for its stakeholders with its sustainability understanding. This philosophy of BIM, which undertakes an important social mission with its "everyday low price " policy, the principle of reflecting the savings obtained from costs to product prices, and its lean business model, also reflects the basis of its sustainability approach.

Just as we prioritize the interests of our customers over short-term high profits in our daily operations, we also consider the interests of humanity and future generations in line with the understanding of sustainability. BIM has kept its societal responsibilities at the top level since its foundation and it defends a sustainability approach that is focused on value and results and does not see sustainability as marketing or an advertisement strategy. We conduct our communication activities on this issue to contribute to social awareness. As we are embracing our sustainability strategy, we produce and use strategies that are concrete in terms of field of activity, focused on impact and that enable us to use our operational skills most efficiently. Considering our field of activity, business model, and corporate culture, we aim to contribute to the United Nations Sustainable Development Goals (SDGs).

BİM, within the scope of its business model; makes high-quality products accessible, contributes to the purchasing power of households with its low price policy every day, which it successfully implements thanks to effective cost management, encourages responsible purchasing and production, and serves its customers at the closest points to be accessible.

BİM's Sustainability Approach describes the company's vision and sustainability issues in line with its business model. I can state them as follows;

We set out to make high-quality access to the community. With strict cost control management; We carry quality products and services to all segments of the society with our low price policy, purchasing, and operation power every day. We are working to increase the happiness of our customers with our innovative products.

1. **BIM responsibly manages its value chain.**

We manage our operations efficiently and responsibly across the entire value chain. While encouraging the development of our suppliers by adopting high standards, we aim to increase their competencies by investing in our employees, who are the most important link in the chain.

2. **BIM works with the aim of a habitable environment**

We care for the responsible use of natural resources for a habitable environment. We focus on energy efficiency in order to fight against climate change and we make renewable energy investments. Within the scope of waste management, we aim to reduce packaging and food wastes. So far, we have prevented the use of 40 tons of plastics and 49 tons of paper as a result of sustainable packaging studies.

3. **BIM ensures sustainable growth with strong corporate governance.**

Within the scope of corporate management, we look after the interests of all our stakeholders, including our investors, and aim to create value for them. Thanks to our strong corporate management, we make our financial performance sustainable; we adopt a transparent and ethical business approach with effective risk management.