

REDUCING OPERATIONAL COSTS THROUGH CHANGE IN FIREWOOD PURCHASING PATTERN

**Company: Panificadora Super Pão
Campina Grande - Paraíba - Brazil**

ABSTRACT

The bakery, Panificadora Super Pão, was founded in 1995, in the City of Campina Grande, in the State of Paraíba, Brazil. Nowadays, it employs 14 workers, distributed as follows: 07 in customer service; 03 in production, and 04 in confectionery. Its main products are: bread, biscuits, cakes, and wheat-based products. The company owns a shop, also sells its products in school canteen and offer buffet and coffee break services. They bake their products in an old and rustic oven whose energetic fuel is firewood, which is stocked in great quantities near the oven, what facilitates the proliferation of insects and blocks employees' passageway to the oven. After the GHK Workshop, the entrepreneur started reducing the amount of stored firewood, reducing the environmental impacts and obtaining economic savings in the fractionated purchase of firewood.

THE CHALLENGE

The majority of the bakeries in the State of Paraíba bakes their products in old and rustic ovens, normally firing a type of firewood called algaroba (*prosopis juliflora Sw*). At Panificadora Super Pão, the purchase and stock control of this firewood is visually done, and the load bought lasts about four months. The firewood is stocked in the backyard, near the oven, in open air, what blocks the passageway of employees in charge of the baking process, and attracts pests to the interior of the bakery.

APPLYING THE GOOD HOUSE KEEPING GUIDE

The entrepreneur found out about Good House Keeping Guide and PREMA Methodology participating in a series of workshops ran by CEPIS (Centro de Produção Industrial Sustentável). A special attention was paid to the Materials Checklist which suggests monitoring the material consumption, regularly raising and assessing the losses. Good house keeping principles were used to identify simple and quickly implementable non-cost measures, which could be easily carried out by the company.

TAKEN ACTIONS

- * Fractionated firewood purchase;
- * Standardization of the size of firewood pieces introduced in the oven;
- * Reduction in the use of pesticides used to prevent insects from coming in into the bakery.

BEFORE



AFTER



ECONOMICAL BENEFITS

Previews cost of firewood consumption per month	§ R\$ 1.300.00/ truckload § The firewood consumption in the bakery was around a truckload for each 3 months. § R\$ 5.200.00/year of firewood.
Investment	No investment.
Annual cost avoidance	§ R\$ 1.300.00 § Through the fractionated purchase of firewood, it was possible to control the consumption of this energetic matrix in the baking process. Before the implementation of the GHK guide, a truckload was used in each three months and, nowadays, the same amount of firewood lasts for four months, in other words, per year, the bakery avoids buying a load of firewood. This action was quantified and followed up for a year, what gave us precise figures of savings.
Investment	Immediate

ENVIRONMENTAL BENEFITS

Through the fractionated purchase and the chopping of the firewood, it was possible to reduce environmental impacts, once the consumption of this energetic matrix in the baking process was reduced in 25%. Another environmental benefit was the reduction in the use of pesticides which were used to avoid pests in the stock area. However, the savings in pesticides were not quantified.

ORGANAZATIONAL IMPROVEMENTS

The fractionated purchase of firewood allowed the company to reduce the stock, what facilitated the access of employees to the oven area and also reduced possible pests focus, turning the working environment into a more agreeable place.

FURTHER INFORMATION:

PREMANet

Profitable Environmental Management
(ex-GTZ - Programa Piloto para a Promoção da Gestão Ambiental no Setor Privado dos Países em Vias de Desenvolvimento - P3U, da GTZ).

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