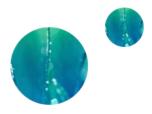


The impact of the circular economy measures on qualifications & skills, forms & organisation of work as well as health & safety.

Katarzyna Mojzykiewicz

Bakery Craftsmen Association of the Republic of Poland



Bakery-confectionery

- Bakery and confectionery is a family business and has existed since 1946.
- It is a part of the SME sector.
- In 2018 there were 2.15 million enterprises in Poland, 99.8% of which were the small and medium-sized enterprises (PARP Report on the state of the SME sector in Poland, 2020)
- We are a member of the Bakery Craftsmen Association of the Republic of Poland and the Confectioners and Bakers Guild in Poznań.
- Our bakery-confectionery business combines tradition of old Polish recipes with the contemporary taste and modern technological solutions.
- The company undertakes pro-ecological actions, observing sustainable development principles with the objective of adopting the rules of the circular economy.















Bakery-confectionery firms



They employ:

- masters,
- apprentices,
- school pupils

They employ:

- saleswomen,
- drivers,
- office workers



They usually work in two-shift systems

They always operate at night

They sell products in their own company stores and also deliver bread to other shops



Actions in the field of circular economy



Using sustainable products and materials

- raw materials for production are provided by companies observing sustainable development principles,
- using the fully biodegradable packaging materials.

Preserving resources

- electricity, water, natural gas (using renewable energy sources),
- optimizing packaging size (adjusting the packaging size to the size of the offered products),
- investing in solutions which reduce resources consumption and are available in the market.

Eliminating waste and educating employees

- eliminating bad habits,
- monitoring resource consumption in the company,
- direct involvement of employees in the elimination of losses at all production stages (continuous improvement concept).
- waste segregation.



Ways of saving electricity

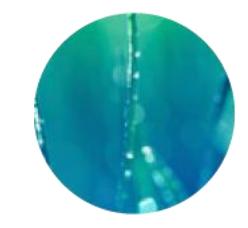
the use of motion sensors



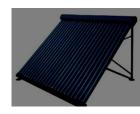


the use of LED fluorescent lamps





• the use of solar collectors



• the use of steam condensers in baking ovens



• the use of chimney exchangers





Ways to save water



the use of faucet aerators



 the use of modern spouts with reduced water flow





• the use of photocells - contactless taps



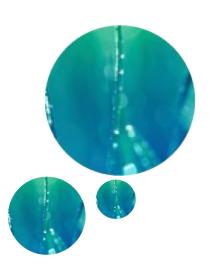
• the use of dishwashers



the use of water dispensers







The use of different taps

Traditional tap









tap reducing the flow of water equipped with an aerator



Medium flow 4.8-8 I/min

touchless tap



Medium flow 6 I/min

Industrial dishwasher



- Reduces operating costs due to its high efficiency
- Lowers consumption of electricity,
 water, detergents and rinsing additives
 with the same washing result
- Shortens working time of an employee delegated for this task



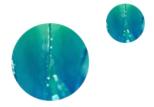
Water dispenser

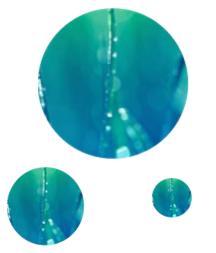


www.guztech.com.pl

Allows to measure the right amount of water precisely, improving the production process

Saves water consumption up to 30%





The elimination of bad habits - examples

Taps

- Making certain that taps are always turned off.
- In case of failure, turn them off immediately.

Refrigeration equipment

- Always keep away from heat sources.
- Make the most of their available space.

Lighting

• Turn off the light in rooms that are not used .





Other actions taken in bakeries and confectioneries

- Creating new cakes with the use of raw materials obtained from cutting cakes out from baking trays.
- Reusable bags for sale.
- Assigning places for collecting plastic caps and other waste.
- Commencing cooperation with packaging recovery organizations (educational campaigns).



The impact of actions with employees' participation

- Employees' skills are improved and their environmental awareness is raised
 - The company becomes a role model and inspires to observe sustainable life habits at home.
- Improvement of health and safety
 - Products with clean label products which use only natural ingredients.
 - Reducing CO2 emission improves health directly.
- Encouraging employees to lifelong education and continuous training; not only does it increase employees' competences, but it has a positive impact on their self-esteem as well.

Sustainable development in SMEs

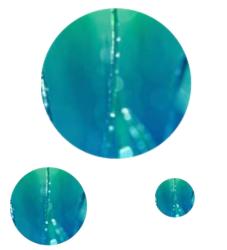


 Introducing minor changes allows to raise funds for larger investments.

Once implemented, solutions bring long-term effects.

 Increasing the awareness of the management and employees is the basis of success.





Ways of saving resources in bakery and confectionery business

ELIMINATION

- of inappropriate behavior,
- of waste,

EDUCATION

- self education
- employees education,

EVALUATION

- of improvement,
- of development,
- of better understanding,

Ways enabling the implementation of pro-ecological solutions available for staff



- We offer our staff on-the-job trainings.
- We offer external company /consultant trainings.

• **3xenvironment project** dedicated to craft firms was held in Poland between 2013- 2016 to improve the environmental consciousness among SMEs. It's aim was to present pro-ecological solutions awailable on the market, which can be applied in their firms.



Thank you for your attention!



There is nothing more valuable
than a training master who can
convey secrets of the profession to their apprentices
in such a way,
that not only can they become
specialists,
but also people acting in the respect of the
natural environment.

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Thank you for your attention!





Photo sources:

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