



Erasmus+

Changing lives. Opening minds.
Erasmus+

This project is funded by the European Union



Erasmus+

Report containing research and analysis of the collection of examples of pro-ecological behavior in the workplace in the following industries: catering, construction and electricity.

USING WITHIN THE ERASMUS + PROJECT

„Eco-friendly worker 1.0”

Elements of the report:

1. Pro-ecological behavior in the workplace – introduction, basic definitions on an example Poland, Lithuania and Latvia.
2. Pro-ecological behavior in vocational school curricula on an example school from Poland, Lithuania and Latvia.
3. Pro-ecological behavior in menu of catering, construction and electrical industrial on an example companies from Poland, Lithuania and Latvia.
4. Latest trends of catering, construction and electrical industrial and people expectations. Pro-ecological behavior in the workplace Trends 2022.

Report annexes:

1. Work documentation.
 2. Photo documentation.
-



This project is funded by the European Union

Elements of Diagnosis

1. Pro-ecological behavior in the workplace – introduction, basic definitions on an example Poland, Lithuania and Latvia.

<i>Chapter subject:</i>	<i>Who is preparing:</i>
<ul style="list-style-type: none"> ▪ <i>why pro-ecological behavior in the workplace? - health reason, social impact, financial and environmental impact.</i> 	<p>Ecological behaviour are currently treated not only as a temporary fashion and a way to meet customer expectations, but as a step towards solving global problems related to, for example, air and water pollution or climate change. Ecology in gastronomic establishments is not only about following the trends. The Polish consumer is becoming more and more aware, expecting a wide choice, more and more willingly reaching for meatless dishes, looking for healthy ingredients.</p> <p>It also pays attention to environmentally friendly technological solutions. Today, consumer behavior largely depends on the influence of the consumption culture. It allows you to embed a man in the world of the so-called consumer values. Customers more and more often pay attention to what disposable food accessories are made of and to which dishes their meal is served. However, it is not only the appearance of these items that counts, but their possible impact on the natural environment.</p> <p>Social awareness about the food ingredients is systematically increasing. More and more people are interested in healthy, unprocessed and organic products. These people want eat a healthy diet not only in the place where they live, but also outside of it. Organic food is gaining more and more interest among both households and restaurants.</p>
<ul style="list-style-type: none"> ▪ <i>definitions of ecological behavior in the workplace.</i> 	<p>Ecological behavior means “<i>actions which contribute towards environmental preservation and/or conservation</i>”.</p> <p>Employee green behaviour involves two aspects:</p> <ul style="list-style-type: none"> -task-related green behaviour implemented within employee responsibilities and - proactive green behaviour implemented beyond employee responsibilities as stated by the autonomous



This project is funded by the European Union

	<p>standards of behaviour (organisational requirements and individual requirements self-determination). Task-related green behaviour denotes the green behaviour performed by employees when completing the core tasks demanded by organisations (e.g., environmental protection responsibilities stipulated in performing duties, compliance to environmental standards, and others). Discretionary and environmentally-friendly behaviour not clearly acknowledged by the formal reward system is known as proactive green behaviour. Organisations encourage EEB to ensure the environmental management system is successfully implemented, and environmental performance achievement increases.</p> <p>Pro-ecological behaviour are seen as a combination of self-interest and concern for others people, next generations, other living beings or the whole ecosystem. Pro-environmental behaviour is a individual effort to reduce the negative impact due to the destruction of nature by improving and preserving the environment. Pro-environmental behaviour is a behaviour that harms the environment as little as possible but at one provides huge benefits to the environment.</p>
<ul style="list-style-type: none">▪ <i>political and law regulations in each country and regarding certain industry</i>	<p><i>The State Ecological Policy 2030 (Polityka Ekologiczna Państwa 2030)</i> is the basic document in the country's development management system.</p> <p>PEP covers the following topics:</p> <ul style="list-style-type: none">- biosafety, including genetically modified organisms,- acoustic climate,- best available BAT techniques,- waste,- electromagnetic fields,- ground surface,- air,- ionizing radiation,- environmental protection services and entities involved in environmental management,- environmental protection financing system,- environmental impact assessment system,- environmental technologies,



This project is funded by the European Union

	<ul style="list-style-type: none">- sustainable consumption patterns and environmental education, including access to information,- geological resources,- natural resources, including landscape, forestry and biodiversity,- water resources, including water quality,- climate change (mitigation and adaptation). <p>Building an innovative economy in accordance with the principles of sustainable development is a requirement modern state policy. Sustainable development means stable economic growth related to the rational management of environmental resources and respecting human rights. This man is the overriding value in the 2030 State Ecological Policy through thematic concentration on the quality of life, health and well-being of Poles.</p> <p>The need to reduce and replace disposable plastic products made of raw materials, not recyclable, in accordance with the EU's so-called <i>The plastic directive, which will enter into force on July 3, 2021</i>. The introduced recommendations and bans are intended to increase the responsibility of consumers for environmental protection. The provisions of the directive assume a reduction in the production and use of plastic, including: cutlery (including forks, knives, spoons and sticks), drink stirrers, straws, plates, containers and food packaging made of expanded polystyrene (including cups for drinks) , as well as all oxo-degradable vessels and containers, thus protecting the natural environment.</p>
<ul style="list-style-type: none">▪ <i>statistical data of pro-ecological behavior in the workplace use in each country, EU.</i>	<p>The nationwide survey conducted in 2019 by the Coca-Cola Foundation and the Our Earth Foundation entitled "<u>Are Poles eco?</u>" (an online survey on a sample of 14613 respondents) showed that the majority of respondents undertake pro-ecological actions (https://swiatbezodpadow.pl/czy-polacy-sa-eko-zobacz-wyniki-naszej-ankiety, 2019).</p> <ul style="list-style-type: none">- The most common form of these activities is reducing water consumption (82% of answers).- The second most frequently indicated form of pro-ecological actions is the use of reusable



This project is funded by the European Union

	<p>shopping bags (77%), and the third segregation of garbage (70%).</p> <p>The overall results of another survey, i.e. entitled '<u>Poles and ecology</u>' conducted in 2019 at the request of Gumtree Poland (CAWI method on a sample of 1036 Poles aged 18-65) were similar (https://blog.gumtree.pl/polacy-zyja-ekologicznie-jesli-stac/, 2019).</p> <ul style="list-style-type: none">- They also proved that almost 90% of Poles would like to be more eco-friendly, but finances are an obstacle (about 60% of answers).- The financial factors were also indicated by the ARC Market and Opinion survey results (from 2019) regarding the purchase of organic food and cosmetics (https://arc.com.pl/-Nie-ekologiczne-zakupy-Polakow-blog-pol-1568893745.html, 2019). These results suggests that future studies should consider consumer income because they are an important determinant of pro-ecological behavior.
<ul style="list-style-type: none">▪ <i>pro-ecological behavior in the workplace and local products. Local traditions, history in field of gastronomy, construction and electricity industries with local products traditions in each country.</i>	<p>Pro-ecological behavior in the workplace are one of the biggest challenges for the owners of restaurants, bars, cafes and catering companies. <u>Examples of them are:</u></p> <ul style="list-style-type: none">- ecological take-away packaging. In the offer of stores are packaging, cutlery and dishes made of paper, wood or sugar cane. This is the easiest way to make your business greener and more environmentally friendly;- replacing plastic straws with reusable paper or metal straws, Although plastic will not disappear but its use in restaurants can be successfully limited.- the waste that ends up in the kitchen garbage can be carefully monitored. The food waste diary is helpful. This is the way, by recording why the products were wasted. It is important not to buy products in stock.- focus on seasonal fruits and vegetables, local products;- investing in good, high-quality and energy-efficient devices in the kitchen; energy-saving light bulbs or a refrigerator or other household appliances that will not consume as much electricity.



This project is funded by the European Union

	<ul style="list-style-type: none"> - the use of renewable energy sources. Recently, more and more popular photovoltaics are an excellent solution in some cases.
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. Pro-ecological behavior in vocational school curricula on an example school from Poland, Lithuania and Latvia.

<i>Chapter subject:</i>	<i>Who is preparing:</i>
<ul style="list-style-type: none"> ▪ is there pro-ecological behavior in school programs? 	<p>The aim of vocational training is to prepare learners for living in the conditions of the modern world, to work professionally and to work actively in the changing labor market.</p> <p>The tasks of the school and other bodies engaged in vocational training and the way they are implemented are conditioned by changes in the socio-economic environment influenced by: the idea of economic development, the globalization of economic and social processes, the growing share of international trade, geographic and occupational mobility, new technologies, as well as Increase in employers' expectations regarding employee knowledge and skills.</p> <p>The vocational training system's response to the needs of the labor market, its openness to lifelong learning and the learning and professional mobility of graduates is to serve to distinguish qualifications within particular occupations included in the classification of occupational education.</p> <p>The school programs contains the following items:</p> <ul style="list-style-type: none"> - <u>Consumption – Food</u> - Buying organic products; Trying to avoid food waste; focus on seasonal fruits and vegetables; - <u>Consumption –Products</u> - Not using disposable plastic products (e.g. cutlery, plates); - <u>Consumption – Reuse</u> - Using reusable shopping bags; - <u>Recycling</u> - Waste segregation; taking rubbish to special collection points (e.g. batteries); - <u>Conservation of Energy</u> - Saving energy by turning off the light in empty rooms; Saving energy by switching off devices that are not used at the moment; use of energy saving devices;
<ul style="list-style-type: none"> • is school teaching pro-ecological challenges? Examples, professions • foreign cooperation, implemented internship programs pupils in sector - gastronomy, construction, electrical. 	



This project is funded by the European Union

- Conservation of water - Saving water during food preparation;

- Transport - Using public transport instead of car; shopping for food products in local stores close to restaurants;

School is teaching mentioned above pro-ecological challenges.

The school teaching program in Poland contains some aspects connected with healthy nutrition and organic food.

Health education program is implemented in a kindergarten. By teaching children eating habits we take care of their future and help to develop their taste buds.

We show them how healthy products look and taste.

Paying attention to the content of our baskets while shopping we also show our concern not only about our own health but also about the health of our family.

Within the framework of ecological and health education a lot of contests, culinary workshops and promoting healthy life style campaigns are organised in primary and secondary schools. Programs like „Fruit and vegetables at school”, „A week with a carrot”, „Health – an easy choice” are also run in these schools. The aim of this action is promotion of healthy eating habits among children and teenagers. It’s important to be a conscious and curious consumer.

Polish school programs raise issues regarding to methods of production, ecological factors used in refrigeration equipment, Good Hygienic Practice, the ecolabeling, the food safety, the environmental protection, the waste management, planning of catering and gastronomic production.

The issues connected with organic food and methods of its production are discussed mainly in technical secondary school of farming and of nutrition and catering services.

For example:

- during the lessons of nutrition the subjects like healthy nutrition (used in catering of ecological and regional products) are mentioned,



This project is funded by the European Union

- during the lessons of cooking -dishes made of organic fruit, vegetables and regional products are prepared
- during the plant production lessons students learn the rules of an organic farm functioning and the methods of production used there
- students take part in contests and competitions promoting healthy lifestyle (“Stylish cooking” or “Contest about food and nutrition”)
- young people take part in healthy food (both ecological and traditional one) fair
- students participate in trips to the places producing healthy food like “Ziołowy zakątek” (“Herbal corner”) in Koryciny.

Foreign cooperation, implemented internship programs pupils in sector – gastronomy:

Changes in education refer not only to the curriculum, but also to the methods and techniques of learning. Their aim is to increase both the students' and the teachers' competence.

Introducing modern teaching solutions into the classroom, i.e. interactive boards, activities on e-learning platforms or realisation of international projects, make it possible to learn quicker and more interesting.

Foreign cooperation should also take into account Internship in foreign country. Internship in a foreign country will prepare the students for work in a multicultural environment, while familiarizing with new technologies and solutions will promote the transfer of experience and innovations into the craft workshops in the region. The internships will contribute to the increase of social competence of their participants and improve their ability to adapt.

The example of foreign cooperation, implemented internship programs in gastronomy sector is The *InnoGastro* Project, realised within the Erasmus+ Programme, Key Action 2: Strategic Partnerships Vocational Education and Training Sector, gives such opportunities.

The general aim of the *InnoGastro* project was gaining new abilities by catering industry teachers and developing acquired ones. Furthermore it is essential to form partnership relationship between entities operating in catering industry around the world.



This project is funded by the European Union

	<p>The accomplishment of established aim was enabled to broaden the horizons and exchange experiences between teachers and foreign entrepreneurs of catering industry. Acquired and extended knowledge let teachers be more motivated and self-confident which will affect the growth of students' education effectiveness in catering schools of Podlasie voivodship.</p> <p>Accomplishment of the project gave the opportunity to acquire new skills and making comparisons between cuisines of different countries. They will be comparisons on the country level – between schools and entrepreneurs – and international ones. Accomplished teachers' trainings within InnoGastro program allowed to improve education process by improving the qualification of human resources of schools in Podlasie region. It was used for adjusting them to changing economic conditions, continual technological progress and globalisation.</p> <p>Furthermore, collected information and contacts helped in practical actions for schools in terms of planning and organizing vocational training of their employees and students.</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3. Pro-ecological behavior in menu of catering, construction and Energetic industry on an example companies from Poland, Lithuania and Latvia.

<i>Chapter subject:</i>	<i>Who is preparing:</i>
<ul style="list-style-type: none"> ▪ - examples of pro-ecological behavior in the workplace in the catering industry, i.e. in a restaurant, a bakery, a cafe, a food production plant, ▪ - examples of pro-ecological behavior in the workplace in the construction industry, i.e. in producing prefabricated houses, at construction sites, in architectural offices, 	<p>I. Food should be minimally processed, naturally preserved, healthy, fresh, with good nutritional properties.</p> <p>Unfortunately, such food is not durable. Food products are one of the least durable that's why food is given up special treatment according to the principles of ecological storage. It is not enough to talk about organic food but it on an organic farm. It should be properly processed so that it does not lose its valuable health properties and nutritional. Fortunately, there are ecological ways to do this.</p> <p>The example of them are:</p> <ol style="list-style-type: none"> 1) thermal treatment, 2) drying (types of thermal treatment), 3) Fermentation 4) marinating 5) smoking



This project is funded by the European Union

- - examples of pro-ecological behavior in the workplace in the energetic industry, e.g. in production sensors, components.
- How often, when, why? Examples. Good and bad practices on an example of real companies.

II. Thanks to the constantly evolving technology and materials engineering it is possible to create newer packaging that does not harm the environment and ensures the preservation of maximum values and nutrients for food. Plastic packaging biodegradable products are an interesting alternative to traditional plastics used in the production of packaging mainly for single use, intended for a short period of time using. It is possible to dispose of used the composting method, thanks to which they do not endanger the natural environment. The use of such packaging should become commonplace in modern hotels that wish to define themselves as ecological, and which produce a significant amount of waste, including packaging for food products.



Pieprz i wanilia
Podrózuj ze smakiem

Bistro “Pieprz I Wanilia” is a business which have been open by people which worked and still working in gastronomy for ten years. Our experience was taken from big corporation allow for us to create concept for giving our services for companies, students, and for an employers. Customers in our bistro, have a knowledge about ecological food, and they prefer healthy lifestyle, so we cannot be indifferent for their expectations, we are facing them.

In our opinion good restaurant, first of all, have to take care about good food, and good quality of our products. Interior design, competent service and nice atmosphere make restaurant complete. We currently have a three points of our bistro, where we served good, health and delicious food. Come back to the tradition of our region and piece of modernity gave us a success as a bistro. Podlasie- region where we living is called “Green Polish lungs”. We have a fresh air and a lot of possibilities to use qualities of our region. Dishes and meals in our restaurants are made from vegetables and fruits from the small local farms, which working in harmony with ecological rules. Cheese from a cow milk with herbal and dried fruits are typical for our



This project is funded by the European Union

region, and we use it to our snacks, meals, and salads. To prepare this cheese is one way, just natural fermentation. "Sery korycinskie" and smoked cheese are typical for our region too, and we also use it in our dishes. Meat, the main ingredient of our lunch-meals, is from local slaughterhouse, what guarantee us best quality and irreplaceable taste.

Summarizing, we try to cooperate with companies, which guarantee us quality of their food. However, factors like a high price of ingredients with ecology certificate, big losses, forces us to cooperate with a big food wholesaler. This is very sad but sometimes ecology loses with economy. Restaurants take care about quality of served meals but they have to lead business on responsible way, and they have to compromise. In our activity we must guarantee small prices cause we're working as a bufet, this is the reason why we looking for a new recipes and providers.

Ecology is the word we often use while we talking with a providers. They ensure us about right breeding, with European norms. Verifications of ingredients is really hard. We have to based on words which are given for us and the taste of products which is a guarantee of quality.

The other form taking care of comfort and satisfaction our customers is comeback to homemade meals and receipts of our grandma's. This is just a simple way without chemicals and preservations, Healthy and no-chemical food is our motto, which is implemented all the time when we're working. We're cooking for our customers, our families and friends.

Running restaurant, where are serving ecological meals giving us a possibility to development and giving a big potential, and firstly satisfaction that we're taking a part with healing our earth.

Health, ecological food, is our goal. Now we can not realized it in one hundred per-cent, but we're working together, looking for the best solutions, and trying to realize ideas, which help us achieve our goal. We're always working under pressure, and because of that we are more motivated and we don't waste time for a boredom. We're creating with people for other people, what makes this job beautiful.

From year to year, more people make changes about they eating habits, they looking for products without chemicals, and they try to live healthy. Turns out that the physical



This project is funded by the European Union

	<p>activity and correct diet cooperate so close, and have an influence on our condition. Through good choices we can prevent many disease and make faster convalescence. We start to pay attention what we eat, we looking for restaurants which serve healthy food. Ecology food giving us vitality, well-being. We have to remember that the ecology food is more expensive than normal, and that is the reason why people can't decide to healthy eating, just because they have not enough money.</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

4. Latest trends of catering, construction and energetic industry and people expectations.
Pro-ecological behavior in the workplace Trends 2022.

Chapter subject:	Who is preparing:
<ul style="list-style-type: none">▪ expert's opinions on market expectations, the main challenges and impacts.	<p>A dynamic development of culinary tourism has been noticed recently (ecological food is also included). People have been constantly looking for fresh healthy and natural products of high quality.</p>
<ul style="list-style-type: none">▪ pro-ecological behavior – local activities and local culture.	<p>Polish people appreciate healthy food. They search new unique dishes. That's why it's getting more and more popular to eat out at the weekends or on holidays. While trying to meet the customers' needs a lot of polish regions have more and more to offer both for Polish and foreign tourists.</p> <p>The still growing amount and the variety of culinary events help to promote local products. Tourist are also getting more conscious and they want to find out as much as possible about the food production process – and even take part in it if it's possible.</p> <p>There are many both culinary and touristic attractions and events in Poland called "a flavour festival" (Honey Festival in Pokdarpacie, Dumplings Festival in Pilzno, "Powidlaki" – Plum Jam Festival in Krzeszow, National Festival of a good taste in Poznań).</p> <p>You can also take part in cooking workshops, meetings with local food manufacturers where while tasting the food you can learn the history and culture of the region.</p> <p>The development of culinary tourism can play an important role in a dynamic development of agritourism. It can stand a great chance to promote a place or even the whole region as trying new regional dishes and products we get to know its culture, monuments and nature.</p>



This project is funded by the European Union

	<p>The research shows (M. Kieźel, P. Piotrowski, J. Wiechoczek, <i>Pro-ecological Behaviours of Polish Consumers</i>) that pro-ecological activities are most often undertaken by respondents with higher education. Also, women statistically more often than men take pro-ecological actions. In turn, age has the least impact on ecological activities of respondents. The surveyed consumers saving energy, segregating garbage, reducing waste most often. They are also increasingly looking for healthy food grown organically.</p>
<ul style="list-style-type: none">▪ conclusions:<ul style="list-style-type: none">- 10 most important principles of pro-ecological behavior in the workplace- 10 principles of an environmentally conscious employee.	<p>Pro-ecological behaviours in gastronomy sector has these components:</p> <ul style="list-style-type: none">- purchase and use of products with lower environmental impacts, such as biodegradable products;- purchase and use of products recycled - use of reusable utensils and accessories;- reduced packaging - offering cutlery, accessories and additions (straws, napkins and other disposable accessories). Research shows that half of the people asked about their willingness to use them refuse. This means that a polite question can help to protect the environment. It is always worth describing such a habit on a poster or menu to make customers more aware.- low energy usage -when buying electrical appliances for food preparation, cooling or other tasks, pay attention to their energy requirements. Modern economical refrigerators and hoods may cost a little more, but they will pay off in the long run. Pro-ecological activities in gastronomy in this area also include the installation of energy-saving lighting for the sales hall or illuminated advertising in front of the facility.- low water use - It is worth installing aerators that will reduce its consumption when washing meat or fruit. Water consumption is an important parameter that should be considered before buying a dishwasher;- buy food products in local stores close to restaurants;- eliminate plastic packaging and cutlery- not wasting food - reasonably conducted orders, do not order for the future;- pro-ecological activities in gastronomy also include repairing old equipment, instead of replacing them with new ones;



Erasmus+

Changing lives. Opening minds.
Erasmus+

This project is funded by the European Union

	<p>- making employees aware of the need to introduce pro-ecological activities - additional courses and trainings.</p> <p>Pro-ecological activities in gastronomy are in line with the general trend and are an opportunity to attract customers who care for the good of planet.</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------