

EU PROGRAMME ACTIVITY 2 (KA2)
PROJECT “Ecofriendly worker 1.0”
(Nr. 2021-1-PL01-KA210-VET-000032894)

GUIDE

Content

1. Introduction.....	3
2. Project “Ecofriendly worker 1.0” – good practice exchange	3
3. Research and analysis of the catering, construction and electricity. „Eco-friendly worker 1.0”Erasmus+ Project	4
4. Development of an ecofriendly worker certificate.....	5
5. Incorporation of elements ecofriendly pro-ecological behavior into school activities – Catering	14
6. Incorporation of elements ecofriendly pro-ecological behavior into school activities – Construction	22
7. Incorporation of elements ecofriendly pro-ecological behavior into school activities – Electricity.....	29

1. Introduction

Description of the project

Project Leader:

(CUP) Fundacja Centrum Umiejętności Praktycznych
www.cup.org.pl/en/

Project Partners:

VIESOJI ISTAIGA VILNIAUS JERUZALES DARBO RINKOS MOKYMO CENTRAS
(VJDRMC)

www.vjdrmc.lt

PROFESIONĀLĀS IZGLĪTĪBAS KOMPETENCES CENTRS "RĪGAS VALSTS
TEHNIKUMS"

www.rvt.lv

The main goal of the project is to raise environmental awareness among employees of 3 sectors of the economy during 24 months through the cooperation of two schools and a non-governmental organization operating in the field of vocational education.

Tasks:

1. Creating a set of examples of pro-ecological behavior in the workplace in the following industries: catering, construction and electricity.
2. The use of the so-called green means of transport, implementation of project activities using ecological methods.
3. Development of an ecofriendly worker certificate.
4. Raising the level of the so-called ecological skills, encouraging behavioral changes in individual preferences and habits.

The results:

- developing a set of examples of pro-ecological behavior in the workplace in the catering, construction and electricity industries based on the knowledge and experience of members of the project consortium,
- increasing environmental awareness and developing ecological behavior in the workplace,
- increasing knowledge in the field of: green management, green environment, recycling, paperless and digitalisation.

2. Project “Ecofriendly worker 1.0” – good practice exchange

In addition, each of the partners prepared 2 tools to exchange good practice about pro-ecological principles and behavior in the workplace:

Lithuanian partner: videos highlighting environmentally friendly behavior in construction and an article that will be disseminated in schools and building associations.

<https://drive.google.com/drive/folders/1JK9yjbdb6pggCVIDO9eJ9PhP18rt9tp>

<https://cup.org.pl/wp-content/uploads/2022/11/Article-environmentally-friendly-behavior-in-construction.pdf>

Latvian partner: prepared a brochure and poster as well as a questionnaire for students on pro-ecological behavior in the workplace in the energy sector.

<https://cup.org.pl/wp-content/uploads/2022/11/Brochure-on-environmental-behavior-in-the-workplace.pdf>

<https://cup.org.pl/wp-content/uploads/2022/11/Poster-on-environmental-behavior-in-the-workplace.pdf>

Polish partner: organized a series of seminars at vocational schools in the Podlaskie Voivodeship and a competition for a film on pro-ecological behavior for students promoting pro-ecological principles and behavior in the workplace.

https://cup.org.pl/wp-content/uploads/2022/09/Ostateczny-Regulamin_Konkurs-Ecofriendly-worker1.0.pdf

3. Research and analysis of the catering, construction and electricity. „Eco-friendly worker 1.0”Erasmus+ Project

Conclusions – the most important principles of pro-ecological behavior in the workplace

Conclusions

10 most important principles of pro-ecological behavior in the workplace in gastronomy sector has these components:

- 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;
- making employees aware of the need to introduce pro-ecological activities - additional courses and trainings.

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.

7 most important principles of ecological behavior in the workplace:

Employee education for the implementation of ecological behavior

Availability of resources for the implementation of ecological behavior

Collection of information on ecological behavior

Assessment of ecological behavior

Designation of those responsible for ecological behavior

Take it step by step! Even with limited resources, at least one environmentally friendly step can be taken.

Achievable and measurable goals for ecological behavior have been set.

6 principles of an environmentally friendly employee:

Principle of reuse or recycling

The principle of waste

Principle of sustainability

Principle of cooperation

Family-friendly workplaces

Environmentally friendly measures

As it is widely acknowledged that an environmentally friendly work culture depends on the demonstration of environmentally friendly behavior and the management of environmentally friendly activities by senior construction workers, the role of an environmental engineer is crucial in every construction site. Environmental engineer must be responsible for a variety of tasks relating to reporting on the environmental impacts of construction work. The job role of an environmental engineer involves the following duties:

- Carrying out site assessments and conducting technical audits;
- Evaluating environmental impact;
- Making recommendations on clean-up, reclamation and waste management activities;
- Assessing how a site complies with environmental regulations;
- Using mathematical techniques and computer modelling to assess or forecast past, present and future environmental problems;
- Designing, developing, testing and implementing technical solutions which will help organizations actively reduce their negative impact on the environment;
- Interpreting data;
- Keeping abreast of legislative changes in environmental law;
- Identification and consideration of potential contaminant sources;
- Obtaining and maintaining plans, permits and standard operating procedures.

4. Development of an ecofriendly worker certificate

- Logo ecofriendly worker certificate – dissemination



SCAN CODE IF YOU ARE
Ecofriendly






- Pro-environmental activities the company conducts in the workplace





List of companies, address	Description of the company	Pro-environmental activities the company conducts in the workplace
SIA "EkstraCom" 120G Dzelzavas Street, Riga, Latvia, LV-1021	The main activities of the company: installation and maintenance of electric vehicle charging equipment, as well as design and installation of green energy generating systems.	Offering customers the latest industry products - in electromobility and renewable energy production.
SIA "DOMA-būve" Ulbrokas iela 44A, Riga, Latvia, LV-1021	Engineering communications construction and design company that has been operating in the European energy industry for 25 years.	The company has purchased an electric car, waste is sent for recycling, used paper is sent to Līgatne paper.
AS "Latvenergo" 12 Pulkveža Brieža Street, Riga, Latvia, LV-1230	The leading producer of electricity and thermal energy in Latvia, which continues to develop the use of renewable resources.	Since 2017, the company with the trade brand Elektrum offers its customers throughout the Baltics to buy solar panels and become green energy producers.
AS "Sadales tīkls" Šmerļa street 1, Riga, Latvia, LV-1160	The company takes care of the maintenance and development of the distribution network, provision of electricity connections, accounting of electricity consumption data and related services.	The company makes sure that the power grid is safe for white storks. Approximately 70% of Latvia's white stork population nests on power line poles, so we organize the construction and maintenance of the power grid in such a way as not to harm them.
Schneider Electric SIA "Lexel Fabrika" Krustpils iela 35a, Rīga, Latvija , LV-1073	Electronic products manufacturing company	Discover the Schneider Electric Technology Partner Program – an ecosystem of experts in industrial automation and energy management, potential business partners, and qualified leads on an open business platform.
AS Energofirma "JAUDA" 119 Krustpils Street, Riga, Latvia, LV-1057	One of the largest manufacturers of electrical materials and equipment in the Baltics. More than 60 years of experience in manufacturing products for energy and electrification needs.	An environmental policy has been developed and is being implemented (in accordance with ISO certification), with the main goal of production sustainability, including reducing as much as possible the irrational use of energy, raw materials and natural resources.

List of companies, address	Description of the company	Pro-environmental activities the company conducts in the workplace
<p>"AEDILIS", UAB Europos pr. 121 LT-46339, Kaunas Lithuania http://aedilis.lt</p>	<p>Aedilis through years of work has earned a track record of being competent as system integrator of PLC and SCADA based solutions. It specializes in boiler, biofuel and water treatment equipment automation and has one of the strongest SCADA engineer teams in Lithuania.</p>	<p>Aedilis supplies cubicles and services to power supply companies, industrial customers, and customers in the renewable energy sector (e.g. wind power, biomass, biogas and solar energy).</p>
<p>"ELSETA", UAB L. Zamenhofo g. 3 LT-06332 Vilnius Lithuania https://elseta.com/about/</p>	<p>Elseta is a team of energy management equipment creators, who believe that electrical energy is main energy source of future society. They also believe in energy management with digital products and do modular and scalable products (RTU's, I/Os, FPI) with centralized management in mind.</p>	<p>Elseta specialises in secondary substation automation; overhead lines automation; solar/ wind/ hydro plant monitoring and power control; energy storage solutions; vehicles charging infrastructure solutions.</p>
<p>PAŽANGIOS INOVACIJOS, UAB (Smart Innovations) Nalšios g.11, LT-14332 Vilnius Lithuania https://www.manuvalley.tech/en/</p>	<p>Smart Innovations is the first innovation space for manufacturing enterprises in the Baltic States! In the Manufacturing Innovation Valley, they help to understand and apply various technologies and innovations in ones work. The Digital Innovation Hub (DIH), Business Incubator and Accelerator are operating in the Manufacturing Innovation Valley.</p>	<p>The Manufacturing Innovation Valley is a space where not only start-ups operate, but also where innovative products of the future are developed, which are needed to reduce carbon dioxide emissions in production and use as little as possible different energy. The operating principles of the Manufacturing Innovation Valley, the services provided and the products created are inseparable from the environment-friendly work culture.</p>
<p>LIETUVOS STATYBININKŲ ASOCIACIJA Lukiskiu str. 5-501, 502 LT-01108 Vilnius, Lithuania https://www.statybininkai.lt/en/</p>	<p>The Lithuanian Construction Association (LCA) is the largest organisation uniting companies involved in construction, design work, manufacturing of building materials and structures, maintenance and other companies as well as education institutions.</p>	<p>For 26 years, the LCA has been professionally representing the interests of the construction business, building partnerships, promoting competitiveness and improving the business environment, strengthening the construction business community, promoting corporate social responsibility, shaping a positive image of the construction worker's profession, and striving to achieve</p>

		<p>technological progress and sustainability in the country's construction sector.</p>
<p>"OREX GROUP", UAB Konstitucijos pr. 26, LT-08105 Vilnius, Lithuania https://www.orexgroup.eu</p>	<p>Orex Group is the official representative of Turkish manufacturers Gentas Group and Saray Aluminum in the Baltic countries. The main activity of the company is the design, production and wholesale and retail sale of high-pressure laminate (HPL panels), aluminum composite panels, aluminum profiles, rivets and other fastening elements for ventilated facades.</p>	<p>The ventilated facades developed and distributed by Orex Group help buildings to be much cooler in the summer. In the hot season, the air gap between the HPL panels and the insulation layer ensures natural ventilation of the facade, while the HPL panels protect against direct sunlight, and thus the HPL panels keep the walls of the house in the shade. In this way, a comfortable indoor microclimate is achieved, which does not require additional expensive air conditioning systems and high energy consumption.</p>
		

School, address	Description of the school	What environmentally friendly measures does the school (students, teachers) take in the workplace?
<p>Riga State Technical School</p> <p>Krišjāņa Valdemāra street 1C, Riga, LV-1010</p>	<p>RSTS implements the functions of the education program of the third professional qualification level, methodical center and assessment of professional competence acquired outside the formal education system, provides the state with qualified specialists.</p>	<p>Reuse of waste and recycling activities Teacher reminds students to sort waste: plastic to plastic, paper to paper, glass to glass. We collect waste paper at school to promote green thinking. The group that has given the most waste paper will have prizes.</p> <p>To promote green management, we have light on motion sensors in the corridors. Solar batteries are installed on the roof of the technical school, the energy of which is used. In order to save natural resources the Green Course in the implementation of practice/work based learning is introduced:</p> <ul style="list-style-type: none"> - e-format of practice documents (3-sided agreements, agreements); - use of e-practice diary.
School, address	Description of the school	What environmentally friendly measures does the school (students, teachers) take in the workplace?
<p>Vilnius Vocational College of Technologies and Engineering (TECHIN)</p>	<p>The mission of TECHIN is to serve the public interest through education and vocational training: to provide basic, secondary, formal initial and continuing non-formal vocational training; to provide conditions for qualification improvement and retraining; to meet students' cognitive, educational and self-expression needs; to enable students</p>	<p>In addition to the fact that TECHIN has implemented a management system that meets the requirements of the ISO 14001 standard and strictly adheres to the requirements of sustainable training services and environmental protection, TECHIN is one of the leaders in implementing "green" initiatives. He has received an award for the "greenest" successfully implemented project</p>

<p>Trinapolio g. 2, LT-08313 Vilnius, Lithuania https://techin.lt</p>	<p>to develop key competences and qualifications; developing cooperation with employers and social partners.</p>	<p>"Development of environmentally-friendly (green) training for specialists in the construction sector" (No 2019-1-LT01-KA202-060695), financed by the Erasmus+ program.</p>
		
<p>Amatų mokykla "Sodžiaus meistrai" Rūdiškės, Trakų raj. 21177, Lithuania https://sodziausmeisterai.lt/english/</p>	<p>Vocational school „Sodžiaus meistrai“ encourages young people to fulfill their dreams. They believe that opportunities for young people are coming when they choose the specialty, which motivates, inspires the creation, encourages to proceed. This is confirmed by their 18-year successful experience in teaching young people and in integration them into the labor market.</p>	<p>There are 4 professions taught at this school currently: carpenter – joiner, confectioner, cook and landscape worker. They are creating educational programs which corresponds to the needs of the labor market, so their students easily find the practice during learning time and the job after graduation. The school appreciate the cozy and Eco-friendly environment. The school is surrounded by nature. Their students and teachers spend their break times in the fresh air, playing volleyball and other sport games.</p>
		

<p>Vilniaus automechanikos ir verslo mokykla</p> <p>Geležinio Vilko g. 16, Vilnius, 03163, Lithuania</p> <p>https://vavm.lt/apie-mus/</p>	<p>Vilnius School of Auto Mechanics and Business is a professional training institution, which started its activities in 1965. The main purpose of the institution is to provide secondary education, formal primary, continuing vocational and non-formal vocational training. Training is carried out in accordance with the programs of secondary education and professional education, and documents certifying qualifications and educational achievements are issued. The language of instruction is Lithuanian.</p>	<p>The school has a rich technical base: well-equipped workshops for sewing, clothing construction, blacksmithing, car maintenance and repair, classrooms for teaching traffic rules, car equipment and general education subjects, modern information technology and multimedia classes. During the implementation of all training programs, students are introduced to an environmentally friendly work culture, the development of which always begins with the formation of personal values and beliefs, thus preparing each future specialist to become a role model and a pioneer of environmentally friendly initiatives in his new team.</p>
	 <p>The image shows a man in a dark suit and white shirt standing in front of a large banner for VAVM (Vilniaus Automechanikos ir Verslo Mokykla). He is holding a small brochure or flyer. The banner features the VAVM logo and text in Lithuanian. The background also shows some cars parked.</p>	
<p>Kaunas Food Industry and Trade Training Centre</p> <p>Adress: Taikos pr. 133, LT-51123 Kaunas, Lithuania</p> <p>https://mpcentras.lt/en/</p>	<p>Kaunas Food Industry and Trade Training Centre is a modern initial and continuing vocational training institution with a gymnasium class department, which includes sectoral practical training centres, that guarantee the quality and accessibility of educational services. The centre provides education for young students who want to receive their first profession, as well as for people who are changing their qualifications and are seeking practice for an additional professional qualification.</p>	<p>Kaunas Food Industry and Trade Training Center has two sectoral practical training centers. Support from European Union funds in 2014. at the end of March, the SPMC of Food Industry (meat and bread - confectionery) was established in the Food Technology and Trade Department (Taikos Ave. 133), and the SPMC of Hotels and Restaurants was established in the Hotels and Catering Department (D. Poškos St. 23). This practical training center has been transformed from an old and neglected 19th century building into a vibrant, modern vocational training space. Excellent conditions for the development of environmentally friendly competences</p>

have been created for the implementation of the training programs offered in the training center in the sectoral practical training centers.



Visagino technologijos ir verslo profesinio mokymo centras

Festivalio g. 7, LT-31143 Visaginas, Lithuania

<https://www.vpm.lt/en/>

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Visaginas Technology and Business Vocational Training Center is an attractive, modern and constantly renewing vocational training center that provides quality vocational training services. Visaginas TVPMC provides the following training programs: basic education program, secondary education program, initial vocational training, continuing vocational training and retraining programs, non-formal education programs. Taking into account the changes and needs of the labor market, the center constantly updates and supplements the programs of initial professional training, continuing professional training (formal and informal).

Although it is impossible to give up paper in a vocational school, tablet or laptop computers are used for part of the notes or tasks at Visaginas TVPMC. Instead of buying printed books, the school gives its students the opportunity to conveniently send their digital versions to special readers or other mobile devices - this not only contributes to the preservation of forests, but also saves money. Taking advantage of every opportunity, the school participates in projects that contribute to the creation of a cleaner environment. It can be a tree-planting initiative, a competition of sustainable ideas or a challenge of ecological habits - the active activities of each of us and the dissemination of information about sustainable choices contribute to the preservation of the planet.



5. Incorporation of elements ecofriendly pro-ecological behavior into school activities

Catering

a. Plant food

The main food groups in everyday diet can be presented in different ways, including as the food pyramid or the food plate. Nowadays, the main food groups are more often presented as a food plate diagram:

- half of the plate is filled with vegetables and fruits (more or 3 parts vegetables and 2 parts fruit);
- one quarter is filled with grains (including buckwheat, rice, pasta, bread) or potatoes;
- one quarter is devoted to foods containing protein – meat, fish, milk or dairy products, eggs, legumes;
- the centre of the plate is the smallest part – for fats and oils use in meal preparation, for example, vegetable oil in salads.

Whereas sweets and unhealthy snacks are usually placed outside the food plate, thus showing that foods that are high in sugar, salt, or fat should be included in the diet only occasionally. Moreover, do not forget to consume enough water.

Every nutrition specialist recommends including more plant-based foods. The World Health Organisation recommends having fruits and vegetables every day, which reduces the risk of excess weight and obesity, as well as the risk of type 2 diabetes, cardiovascular disease, and some cancers, such as bowel and stomach cancer.

Recipes of dishes with plant food

Quinoa salads with sweet potatoes and beets



Ingredients: (6 portions)

350 gr quinoa, 600 ml water, 1 avocado, dried tomatoes in oil, garlic clove, chili powder, 1 large sweet potato, herb mixture, olive oil, thyme.

Cooking:

Boil the quinoa for about 20-25 minutes until all the water has boiled. Put the prepared quinoa in a bowl and allow to cool. Then add the chopped avocado, garlic, chopped dried tomatoes, a little chili powder. If you want, you can add soy sauce to the quinoa.

Peel the sweet potatoes, cut into rounds, sprinkle with a mixture of Provençal spices and fry in oil, in which you have poured a little chopped thyme. Bake on each side for about five minutes. Peel and grate beet. Add the sprouted radish seeds and a little mixture of nuts and seeds. Add pepper and salt, add a little walnut oil. Sprinkle over chopped green onions.

Pumpkin and coconut milk cream soup



Ingredients: (4 portions)

Small pumpkin (1.8-2 kg), 2 carrots, 1 onion, 3 glasses of roots broth/bouillon (can be made from a cube), 2 tablespoons lemon juice, 1 glass of orange juice, salt, pepper, 165 ml of coconut milk, 2 tablespoons of sweet chili sauce, 1 potato, frying oil, a little parsley

Cooking:

Cut the upper third of the pumpkin, remove the seeded part, cut out the flesh, leaving a skin about 1 cm thick.

500-600 g of pumpkin flesh cut into pieces, also onions and carrots cut, fry in oil.

Then pour the broth and orange juice, boil until the vegetables are soft.

The potatoes are cut into small straws, fry in golden oil, fry golden, dry on a paper towel, add a little salt.

Soup is blended, stir in lemon juice, coconut milk, chili sauce, add salt and pepper to taste.

Cauliflower steaks with greens and olive sauce



Ingredients: (4 portions)

Big cauliflower, olive oil, 50 g pitted green olives, 1 tablespoon of lemon juice, 1 tablespoon of capers, 1 tablespoon of chopped parsley, 1 tablespoon of chopped oregano, salt, sugar, pepper

Cooking:

Cut cauliflower is across into 1.5 cm thick slices, fry in a pan in heated oil in portions till golden. Put baking paper on the pan, put on the paper, sprinkle with salt and pepper.

Bake in the oven at 180 degrees for a soft 12-15 minutes.

Meanwhile, mix Extra virgin olive oil with lemon juice, chopped olives, capers, parsley and oregano, add salt, sugar and pepper to taste.

Cauliflower steaks are placed on plates, poured with herbs and olive sauce.

Pavlova cakes



Ingredients: (4 portions)

Meringue: liquid from 1 can of Turkish peas (chilled), 1 glass powdered sugar, 1.5 tbsp. cornstarch, a pinch of salt, 1 tsp. apple cider vinegar, 1 tsp. vanilla extract.

For coconut whipped cream: can of coconut milk, 1 glass sugar, 1 tsp. vanilla extract

For decoration: 100 g of shelled pistachios, 2.5 glasses of fresh fruit and berries,

Cooking:

Leave the coconut milk in the refrigerator overnight. The next day, carefully remove the can from the refrigerator, open and take out the fat, the hardest part. Place it in a deep bowl, whisk until the mass becomes creamy. Then add sugar and vanilla extract. Leave to cool in the refrigerator. Preheat the oven to 110° C.

Prepare two baking trays on which to lay baking paper. Add cornstarch and salt to the sugar, mix well. Pour Turkish pea liquid into a large bowl, start foaming at low speed, gradually increasing the speed, whipped liquid in light foam (about 15 minutes).

While reducing speed, continue to froth and add a tablespoon of powdered sugar. Whisk the mass until the foam is firm and shiny and the sugar has melted. Then add the vanilla extract and apple cider vinegar, beat for about 10-15 seconds. Fill the dough into a pastry bag and, squeezing on baking paper, a socket about 6 cm in diameter with slightly raised edges.

There should be gaps between the cakes, as they will expand when baked. Place the meringue in the oven and immediately reduce the temperature to 100 ° C. Bake for about 2 hours. Turn off the oven, leaving the cakes to cool completely for 4 hours. Decorate shortly before serving to keep the cakes crispy. They are richly covered with a layer of whipped cream, sprinkled

Rye bread truffles



Ingredients:

150 g of rye bread pulp, 150 g of dried berries and fruits (plums, apricots, cranberries, raisins), 100 g of dried cranberries, 50 g of brown sugar, 1 tablespoon of brown syrup (beet or sugar syrup), 1 tablespoon of Riga black balsam (rum , brandy), 100 g of chocolate.

Cooking:

Crushed bread dough with dried fruits and berries, sugar and syrup is blended into a loaf mass, 100 g of dried cranberries are coarsely chopped and mixed with the balm into the mass. Chest the size of chestnut balls with your palms, put in the refrigerator to dry and freeze.

Roll with your palms into chestnut-sized balls, put in the refrigerator to dry and freeze.

This can be done the night before. Melt the chocolate in a water bath and dip the bread balls one by one. This is easier to do by plugging each one into a chopstick. Place the chocolate-coated balls on parchment paper or foil.

Breakfast

Oatmeal with banana and raspberries

- Banana - 120 g (one piece)
- Raspberries, frozen - 100 g
- Oatmeal - 60 g (six tablespoons)
- Oat bran - 3 g (about half a spoon)
- Cinnamon - 5 g (one teaspoon)

Boil the oatmeal in water. Add the cinnamon and bran and mix well. Add fruit.

Dinner

BROCOLI CREAM SOUP

(8-10 servings):

- 1 broccoli
- 2 medium carrots,
- 1 medium leek,
- 5-6 small potatoes,
- 2 medium onions,
- 2 cloves of garlic,
- 1 cup of cream 30%,
- 1 tablespoon of clarified butter,
- optionally dried vegetables,
- water,
- salt and pepper,
- roasted pumpkin seeds are serving.

Wash all vegetables. Heat the butter in a pot, add the chopped onion and pressed garlic, salt and pepper. Finely chop the leek, add to the onion and stir. Scrape the carrots, grate them and put them in the pot. Cover the whole with a lid to start choking. Peel the potatoes (if they are young, you do not need to), dice them and add to the rest of the vegetables. Stew for about 10 minutes, then pour boiling water from the kettle (about a liter of water, then you can add more to control the thickness of the soup). Divide the broccoli into florets, put them in a pot and continue to stew, at this point you can add dried vegetables (dried vegetables usually contain carrots, celery and leeks). Simmer over medium heat until the potatoes are tender. Then remove from heat, set aside for a few minutes to cool slightly, then blend everything to a smooth mass. Put it back on low heat, harden the cream (add a tablespoon of warm soup to a glass with cream) and then pour it into the cream. Season to taste with salt and pepper, or add more water or cream :) Serve with pumpkin seeds or sunflower seeds roasted in a dry frying pan.



SPAGHETTI WITH ZUCCHINI

- spaghetti noodles 200 grams
- carrots 2 pieces
- zucchini 1 piece
- parmesan cheese 100 grams
- Fix Spaghetti 4 cheeses with broccoli Knorr 1 pack
- olive oil 2 spoons

- sour cream 12% 100 milliliters
- fresh basil, leaves
- a clove of garlic 1 piece

1. Cook the pasta al dente, according to the instructions on the package.

2. Peel the carrot. Cut the carrots and zucchini into Julienne, which is very thin, long strips. Finely chop the garlic and grate the cheese.

3. Fry the garlic in hot oil, when it is slightly brown add the carrots and zucchini. Fry the vegetables for two or three minutes until they are tender. Add the sauce mixed with 100ml of water and cream, and cook together for 3 minutes. Add basil leaves and hot pasta to the sauce, mix thoroughly.

4. Serve the pasta sprinkled with Parmesan cheese.



Supper

A light salad with corn, pepper and chia seeds

- Corn, canned - 50 g (over three tablespoons)
- Olive oil - 10 g (one spoon)
- Red pepper - 50 g (about 1/3 pieces)
- Tomato - 50 g (about half a piece)
- Lettuce - 100 g (20 leaves)
- Natural Tofu (with the addition of calcium) - 50 g
- Chia seeds - 10 g (two teaspoons)
- Ground black pepper - 2 g (two pinches)
- Sea salt - 1 g (pinch)
- Barley groats, pearl barley, cooked - 60 g (four spoons)

Prepare a salad with the given ingredients.

SNACK

Dried apricots - 32 g (four pieces)

- b. Less waste
- Meals use gastro waste

Pickling, drying, canning, fermenting, freezing and curing are all methods that we can use to make food last longer, thus reducing waste. Not only will these methods shrink carbon footprint, they will save money as well.

Recipes for dishes made from leftovers and food waste:

1. Vegetable leftover soup

Ingredients:

- Leftover vegetables (such as carrots, parsley, celery, cabbage, onion)
- Water
- Dried croutons
- Seasonings (such as salt, pepper, herbs)

Instructions:

Cut the vegetables into smaller pieces, put them in a pot and cover with water. Cook on low heat for about 30 minutes. Then blend until smooth. Season with salt, pepper and herbs to taste. Sprinkle with dried croutons on top.

2. Vegetable and Bread Leftovers Salad

Ingredients:

- Leftover bread (e.g. slices, rolls, baguettes)
- Leftover vegetables (e.g. lettuce, tomato, cucumber, bell pepper)
- Vinaigrette dressing (e.g. oil, vinegar, mustard, honey, spices)

Instructions:

Cut the bread into smaller pieces and sauté them in a pan. Cut the vegetables into smaller pieces. Mix the bread and vegetables together and add vinaigrette dressing.

3. Meat Leftovers Soup

Ingredients:

- Leftover meat (e.g. chicken, turkey, beef)
- Leftover vegetables (e.g. carrots, parsley, celery, cabbage, onions)
- Water
- Seasonings (e.g. salt, pepper, herbs)

Instructions:

Cut the meat and vegetables into smaller pieces, put them in a pot, and cover with water. Cook over low heat for about 30 minutes. Then blend the mixture into a smooth cream. Season to taste with salt, pepper, and herbs.

4. Vegetable Leftovers Omelette

Ingredients:

- Leftover vegetables (e.g. lettuce, bell pepper, tomato, onion)
- Eggs
- Milk
- Salt, pepper

Instructions:

Cut the vegetables into smaller pieces. Beat the eggs with milk and season with salt and pepper. Add the vegetables to the eggs and mix. Pour onto a frying pan and cook until golden brown.

5. Buckwheat Cutlets

Ingredients:

- 1 cup cooked buckwheat
- Onion
- 2 cloves of garlic
- 2 eggs
- ½ cup breadcrumbs
- Salt and pepper to taste
- Oil for frying

Instructions:

Chop the onion and garlic, and sauté in a pan until soft. In a large bowl, combine the cooked buckwheat, sautéed onion and garlic, eggs, and breadcrumbs. Season with salt and pepper, and mix well. Let the mixture rest for 30 minutes to allow the ingredients to combine. Heat oil in a frying pan and form the buckwheat mixture into patties, placing them in the pan. Fry until golden brown on both sides.



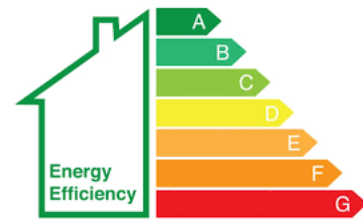
Construction

Energy consumption during use of construction works

- a. Use of environment friendly construction products and auxiliary materials
- b. Durability of construction works

The construction works itself and the users are main “influencers” of energy consumption of construction works.

The energy consumption of buildings first of all determined by designer and expressed by energy performance class. The requirements for class may be slightly different in every country. Highest is “A” or “A++” class. For buildings it is mandatory to start designing having targeted energy performance class not lower than required by country legislation for certain type of building.



For engineering works (as roads, pipelines, sport fields etc.), where usually is no heating or cooling systems or they are radically different from buildings, energy consumption as a target is set by the owner and it’s needs.

In other words **intended use** or predicted processes in building and engineering works, users’ needs and typical users’ behavior are primer preconditions for energy performance as a target. It is because high energy performance may fail when owner starts using building or engineering works for different, than was foreseen in design purpose.

Every user of building shall follow rules (in most of cases unwritten), but not refuse of hygiene, health or beauty habits and living comfort.

Very low or zero external not renewable energy use of building is final goal of designers, construction products or elements producers and construction engineers as well as workers, not compromising high comfort and hygiene level.

Buildings are responsible for approximately: 40% of EU energy consumption, 36% of the energy-related greenhouse gas emissions. Buildings are therefore the single largest energy consumer in Europe. Heating, cooling and domestic hot water account for 80% of the energy that we, citizens, consume. At present, about 35% of the EU's buildings are over 50 years old and almost 75% of the building stock is energy inefficient. At the same time, only about 1% of the building stock is renovated each year. Investments in energy efficiency stimulates the economy, especially the construction industry, which generates about 9% of Europe’s GDP and directly accounts for 18 million direct jobs. SMEs in particular, benefit from a boosted renovation market, as they contribute more than 70% of the value-added in EU’s building sector.

Energy performance of building must cover at least the following aspects of energy consumption:

- a) Actual thermal characteristics of the building (thermal capacity; insulation; passive heating; cooling elements and thermal bridges);
- b) Heating installation and hot water supply, including their insulation characteristics;
- c) Air-conditioning installations;
- d) Natural and mechanical ventilation which may include airtightness;
- e) Built-in lighting installation;
- f) The orientation of the building and outdoor climate of the place of building;
- g) Passive solar systems and solar overheating protection;
- h) Indoor climatic conditions;
- i) Internal loads of heating (people, equipment generating heat (computers, TV and other).



Energy performance of building must cover also the positive influences – energy saving aspects:

- 1) Solar exposure conditions, active solar heating and electricity systems;
- 2) Electricity produced by cogeneration;
- 3) Natural lighting;
- 4) Use of on energy from renewable sources at the building or nearby.

The set of **Energy Performance of Buildings standards** play a key role to support the Energy Performance of Buildings Directive (EPBD) of the European Union. The first version of the EPBD was published in 2002 ([Directive 2002/91/EC](#)). In the interest of clarity the EPBD was recast in 2010 ([Directive 2010/31/EU](#)). A revised version of the EPBD was published in 2018 ([Directive 2018/844/EU](#)).

The EPBD aims to promote the improvement of the energy performance of buildings within the European Union, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. Although the new EPBD does not force the Member States to apply the set of EPB standards, the obligation to describe the national calculation methodology following the national annexes of the overarching standards will push the Member States to explain where and why they deviate from these standards. This will lead to an increased recognition and promotion of the set of EPB standards across the Member States and will have a positive impact on the implementation of the Directive.

The five ‘overarching’ EPB standards ISO 52000-1, 52003-1, 52010-1, 52016-1 and 52018-1 have in common that each of these describes an important step in the assessment of the energy performance of building:

- **ISO 52000-1** is the overarching EPB standard, providing the general framework of the EPB assessment. It establishes a systematic, comprehensive and modular structure for assessing the energy performance of new and existing buildings (EPB) in a holistic way. It is applicable to the assessment of overall energy use of a building, by measurement or calculation, and the calculation of energy performance in terms of primary energy or other energy-related metrics. It takes into account the specific possibilities and limitations for the different applications, such as building design, new buildings 'as built', and existing buildings in the use phase as well as renovation. It also contains an overview of common terms and definitions and symbols for the whole set of EPB standards.
- **ISO 52003-1** provides general insight on how to make good use of the outputs of the set of EPB assessment standards for different purposes (post-processing) in the form of overall and partial EPB indicators. It describes the relation between the EPB indicators and the EPB requirements and EPB ratings. It also includes a couple of possible EPB labels and it lists the different steps to be taken when establishing an EPB certification scheme.
- **ISO 52010-1** contains procedures to assess the climatic data needed as common input or boundary condition for many elements in the energy calculations. For instance as input for energy and daylighting calculations, for building elements (such as roofs, facades and windows) and for components of technical building systems (such as thermal solar collectors, PV panels). But also as boundary condition for the performance of specific heating, cooling and ventilation systems.
- **ISO 52016-1** provides the procedures to calculate the internal temperatures and energy needs for heating and cooling for the building as such.

This is the core of the calculation of the energy use, because many aspects coincide in this calculation: thermal insulation, air tightness and ventilation, the building mass, solar heat load and passive solar energy and internal heat gains (e.g. from lighting). Many countries have introduced or consider to introduce specific EPB requirements at the level of ‘the energy needs’ of the building or the ‘skin’ or ‘fabric’ of the building, independent from the choice of technical building systems and renewable energy systems.

- **ISO 52018-1** provides an overview of options of indicators enabling (optional) specific EPB requirements (post-processing) at the level of the building as such (building energy needs or building fabric).

Energy performance certificate of building shall be issued before starting use of building after construction or refurbishment. Issuing the certificate includes simple check of building, “A” and higher classes usually includes airtightness testing by accredited laboratory. Threshold values.

Energy consumption during use of construction works mainly depends on design solutions and use of right products and materials. Bad quality of installation works has crucial influence on it: thermal bridges, airtightness, thermal insulation envelope, heat loss in piping system or overheating of some parts of building because of that (extra cooling needs), lower than foreseen thermal insertion of walls and ceilings - in buildings, heat loss in pipelines, extra heating needs against dangerous icing of outside elements – in engineering works and other.

Correct maintenance of building is underestimated today. For example adjusting and lubricating windows and doors in every second year to have the same airpermeability class of building envelope or reprogramming the automated heating/cooling system depending on number of residents or schedule of use.

Big danger of bad quality or defects – mostly it has no evidences at the beginning of use. When evidences appear – it is much too expensive or sometimes impossible to correct!

- c. Use of environment friendly construction products and auxiliary materials

Green building materials, also called eco-friendly materials, are building construction materials that have a low impact on the environment. They are composed of renewable resources rather than non-renewable resources. These have to be natural and will not spoil by the heat, humidity, or cold. Here are some lists of the building materials that will make your construction project green:

- **Bamboo** has an incredibly high generation rate and is considered one of the best eco-friendly materials in buildings. It continues spreading and growing without the need for replanting after the harvest. Bamboo is a perennial grass and not wood and grows almost everywhere except in Antarctica and Europe. Bamboo has a high weight-to-strength ratio, comprehensively greater strength than brick and concrete, and lasts incredibly long. Bamboo is the best choice for cabinetry and flooring material. However, it requires a treatment to resist rot and insects, and if left untreated, the starch contained with it will significantly invite rots and insects, and it will crack or swell after absorbing water.
- **Cork** proliferates like bamboo and grows after harvest in a living tree and will continue to produce more cork, like tree bark. Cork is resilient, reverts, and flexible to its original shape even after sustaining pressure for a long time. It is also resistant and resilient to

wear, making it a popular element in the floor tile. It is excellent in absorbing noise and perfect for insulation sheets material. And because of its superb qualities in shock or pressure absorption, it is also the best material for subflooring. It is also a fire-resistant material and a good choice for thermal insulators, especially if it remains untreated when it burns; it will not release toxic gasses. It will not absorb water or attract rot.

- Another building material is **straw bales** and can be used as framing material and can act as a soundproof material, and have excellent insulation properties. It is also the best choice as a fill material between beam framework and columns. Straw can be replanted and harvested easily with a very minimal environmental impact. Making straw into bales has a meager influence. It can place ceilings, attics, and walls to contribute to warmer house temperature during winter and cool the house during summer.
- Using **reclaimed wood** is one of the responsible ways environmentally to save trees and minimize the volume of lumber in landfills. Mostly they are found from home remodeling companies or contractors, shipping crates, salvage yards, pallets, excavation companies, and retired barns. It is suitable for structural framing, flooring, and cabinetry. Reclaimed wood is primarily lightweight and has less strength, and every piece should be chosen and assessed for inappropriate projects to prevent risk. And also, it is susceptible to degradation and insects, so it needs additional treatment or reinforcement when used.
- **Sheep's wool** is an excellent alternative to chemical-laden insulation material. It can insulate homes just like conventional insulation and requires less amount of energy to manufacture. It can increase soundproof and energy efficiency in the structure. It will not degrade quickly like other natural insulation materials such as cotton and straw. It is more prevalent and easy to harvest and generates quickly.
- **HempCrete**. This green material is concrete like made from woody inner fibers from hemp plants. The fibers are mixed and bind with lime to form concrete-like shape blocks that are light and strong. It dramatically reduces the use of energy in transporting blocks, and it is lightweight. It is sturdy and also has excellent fire-resistant, acoustic, and thermal insulation qualities. Additionally, it is the largest sustainable property and absorbs CO₂ more than it emits because of its negative reading of CO₂ content. Hemp itself is a renewable and fast-growing resource. Many green building materials are available today, and their properties contribute mainly to energy saving. However, the aim of using those eco-friendly construction materials is to have an energy-efficient building structure and to construct a responsible and sustainable building structure that is also beneficial to our environment. Make sure that your next commercial build uses green construction materials!

Some countries already have databases of environment friendly products or suppliers of them. **Even two identical construction products can be totally different in impact on environment because of different quantity of energy used to produce and transport them to construction site!** Today is slowly growing initiatives, but in near future can become mandatory in European countries to calculate and declare the amount of energy used to produce and transport every construction product! It should be a part of Declaration of performance of construction product.

In present time in EU and in many countries legislation limits or prohibits some substances in construction products. European Union regulations REACH adopted and directly valid in every EU country to improve the protection of human health and the environment from the risks that can be posed by chemicals. It also establishes assessment methods to be used, order and rules for registration of products, declaration of substances in them and information of uses of

products. Worker shall know that the result of REACH is safety label on every construction product, containing substance from the REACH register. Safety Data Sheet demonstrates that the product conforms to legal requirements and there are mandatory workers' and environment's protection measures on it.

Water-based materials - they do not need the solvents needed to prepare the mixture or wash the instruments; they are also an important ingredient in the preparation of many dry mixtures (paints or glues) by hand.

Eco-labels contribute significantly to the selection and development of environmentally-friendly building products. Their purpose is very wide, as they can be used starting with providing clear information to the user and ending with evidence supporting building certificates.



There are 3 types of ecolabels: Type I Ecolabels - Consumer-friendly and externally-tested; Type II Ecolabels: Self-declared environmental claims; Type III Ecolabels: Transparent, Comprehensive, and Independently Verified.

Packaging of some construction products and auxiliary products often is an issue for environment as well. There is usually a choice of products or materials packaged in different ways. It is possible that the method of packaging is determined by the quantity of products or materials selected as well as the way they are transported to the site. However, when choosing materials or products, the company could assess the amount of packaging waste each time and try to choose a packaging method that minimizes waste.

Due to the wide range of offers on the market, an environmentally friendly company should only look for and purchase auxiliary products and materials that can be reused or have the shortest life cycle.

If the choice of construction products is the task of the worker, it is necessary for him to consider the choice of such products which: are the most natural; contains no solvent; uses as less as possible packaging material; are Eco labeled with manufactures declaration of performance; are the shortest transported to the construction site; are supplied by supplier from “green suppliers” list or those who have ISO 14001 certified environment management system; are recyclable after use, but durable at needed degree.

d. Durability of construction works

Thirty years from now, 70% of the existing stock of buildings will still be standing. This means that the emphasis will be placed on operating the existing buildings by updating them and providing maintenance, in order to meet the expectations and requirements of the users-to-be.

In the case of existing buildings, some compromises have to be made as the construction is already there and the freedom of intervention is limited: interventions in the built space may require the demolishing of some non-bearable building components, adding new partitions or floors, changing or introducing the new generation of building services, replacing or adding new and more performant components (mainly in the building envelope area).



Durability

Compared with a new building, tackling an existing construction is more complicated, as the physical boundaries of the building are defined – the house is there already – and after removing the finishing layer, sometimes great surprises rise, as the relation with the original project (if it still exists) may be loosely. On the other hand, the impact on the environment, measured by the carbon footprint, is smaller compared to a new building.

If an existing building is subject to a rehabilitation, it must have proven to be durable and implicitly, resilient. If the new intervention is sustainable, this is another discussion.

What durability characteristics shall be respected of certain elements of construction works: wear resistance of flooring, paving and other surfaces; freeze-thaw cycling resistance; resistance to light and UV radiation exposure; resistance to rotting of organic materials; resistance to corrosion of steel elements; resistance to crumbling or other failure as a result of evaporation of bonding resin or plasticizer; resistance to loss of thermal resistance because of leakage of inert gasses; resistance to cleaning agents and solvents; resistance to fatigue from many times repeated loading.

The key to ensuring building durability is to keep building assemblies dry to prevent rot and to facilitate the drying of assemblies whenever they do get wet. This means managing bulk water (rain, mostly), airborne water vapor, vapor transmission at the molecular level (across assemblies from areas of high vapor concentrations to low vapor concentration), and condensation.

The old way of doing all this was to build walls full of air leaks, clad them well, put on a good roof, and blast the building with heat from a fireplace, boiler, or furnace throughout the winter. Even with this blast of internal heat, the leaky walls might accumulate moisture during the winter in our maritime NW climate, but they would dry out during the summer: all that air and heat passing through them did the trick. It was a resilient approach. Unfortunately it was also wasteful of energy, uncomfortable, and led to poor indoor air quality.

What's the new way? How do high performance buildings ensure durability? A prerequisite is to execute the level of craft necessary to eliminate bulk water intrusion, of course. With that accomplished, the first priority of high performance building is airtight construction because by controlling the movement of air we also control the movement of moisture and heat. We know that one of the quickest ways to drive moisture into a wall is through an air leak. Warm interior air carries water vapor with it into the wall assembly, and if it hits a cold surface, that vapor can condense into liquid water and wreak havoc. Airtight construction stops air movement – and therefore the movement of airborne vapor – into building assemblies.

The next step in ensuring durability in high performance building is thermal bridge-free construction. Because thermal bridges (any building element that cuts across and bypasses a building's insulation or "thermal envelope") create cold penetrations through otherwise warm parts of building assemblies they can become focal points of condensation, moisture build-up, and rot. By eliminating or mitigating these thermal bridges, high performance building removes these condensation-inducing cold points in building assemblies.

Durable structures offer numerous benefits, including:

- **Cost savings:** By focusing on long-lasting materials and better resource allocation, durable buildings reduce the costs associated with demolition and premature repair or rehabilitation.

- **Lower maintenance needs:** Durable structures require less upkeep because they use sturdy and decay-resistant materials.
- **Greener practices:** The connections between sustainability and durability are unmistakable — long-lasting structures prevent unnecessary demolition and rebuilding.
- **Better air and water quality:** Less waste means less environmental pollution, resulting in healthier air and water.

Electricity

5.1. Creating environmentally friendly solutions in the study process.

Students have been taught using the curriculums and topics that correspond with the efficient use of energy, saving resources, renewable energy, protection of the environment, circular economy etc. Thus, the curriculum “Renewable Energy Technician” (4 years) was developed. This curriculum is about the renewable energy (solar, wind, hydrogen alternative energy).

The aim of the curriculum “Renewable Energy Technician” is to prepare a renewable energy technician who plans, organizes and know how to use the renewable energy equipment that is used in the production of electricity and thermal energy. The renewable energy technician knows construction (structure) and supervision, plans and organizes the materials required for production, supply, placement, storage and the recycling of production waste according to the work assignment and/or instructions of the supervisor, attracting the necessary specialists.

As a result of the educational process, it is possible to acquire professional, general and lifelong learning competences:

1. Read, fill in and supplement technical documentation, understand drawings, electrical schematics and material specifications.
2. Draw simple basic and assembly electrotechnical diagrams, using the appropriate applications.
3. Comply with the requirements of labor protection laws, use personal protective equipment and collective protective equipment, assess the danger of the situation in the object, carry out preventive measures and provide first aid.
4. Choose the appropriate goods and services for electrical assembly work, create and maintain the material and technical base of individual electrotechnical work for carrying out Renewable energy devices.
5. Perform electrical equipment locksmith work and assembly auxiliary work.
6. Build, install and assemble distribution equipment, choosing the appropriate materials, equipment and tools, according to assembly work technologies and manufacturer's instructions.
7. Carry out electrical, non-electrical measurements of electrical assembly and in the technical operation of electrical equipment.
8. Carry out electrical equipment malfunctioning, eliminate discovered defects in electrical equipment, using appropriate materials and tools, perform works to maintain the working capacity of electrical equipment and extend its working life.
9. Use renewable energy resources for electricity and in heat energy production, plan and organize what is used in production supply, placement and of renewable energy materials, resources and equipment storage, develop a schedule of work to be performed.
10. Attract specialists for the task of assembly of renewable energy objects and systems to perform, communicate and coordinate work within their competence.

11. Carry out assembly and installation of renewable energy equipment.
12. To organize commissioning (exploitation) of Renewable energy devices within the scope of its authority.
13. Independently monitor and maintain the operation of Renewable energy devices, perform the necessary Renewable energy devices and visual, acoustic, hydraulic and pneumatic inspections of systems.
14. Carry out dismantling of Renewable energy devices and structures in accordance with the technical documentation.
15. Organize production residue, waste sorting, storage, disposal, in accordance with labor and environmental protection requirements, observing the dangerous substance disposal requirements.
16. Carry out quality inspection, approval and coordination with the direct supervisor.
17. To observe the norms of labor legal relations.
18. Understand and comply with the requirements of environmental protection laws, perform work duties without harming the environment.
19. Do work independently and take responsibility for the result of his/her work.
20. Supervise subordinate technical personnel and the workplace for safe work for performance, evaluate the work done and make proposals about the progress of the work in electrical equipment, using the necessary technologies.
21. To observe the basic principles of professional and general ethics.
22. Communicate in the national language and in one foreign language, use professional terminology in the national language and in one foreign language.

The three-step green thinking principle (reduce - reuse – recycle) was used in the development of this curriculum.

The professional module regarding unmanned aircraft pilot training (drones) for the needs of different economic sectors (construction, energy, railway) has been developed and integrated into the curriculum of programmers.

5.2. Practical measures at Centre for technologies and innovation in RSTS

- Alternative forms of energy production: 20kW solar collectors had been installed on the roof of the educational building. Mountings for solar collectors have already been installed on the roof of the dormitory and now it is necessary to buy the collectors and install them on the roof of the dormitory.



- Rainwater treatment and reuse installed.
- On the roof wind generator for research in the background dormitories on which we will install solar collectors.



- Training in the classroom: renewable energy laboratory with heat pump, solar panel systems, solar collector, wind generator and hydrogen cell technologies.



- Creation and installation of solar panel canopy prototypes for charging electric cars.



In the future - a gradual transition of the RSTS car park from internal combustion engines to electric engines.

5.3. Green management and raising awareness of “green thinking” through different activities and events:

The definition of green management: the organization-wide recognition of the legitimacy and importance of the biophysical environment in the formulation of organization strategy, and the integration of environmental issues into the strategic planning process (Banerjee, Corporate environmentalism: the construct and its measurement, 2002).

Green management includes the following main elements:



Figure 1. The main elements of green management.

Green management as a movement. Latvian organization “Zaļā josta” invites Latvian pre-school, primary, secondary and professional educational institutions to participate in the waste paper and batteries collection competition "Clean Latvia!". Riga State Technical School (RSTS) has established a regular waste collection and delivery system. Also, the cooperation working group at RSTS (teachers, employees and students) has been created to participate in the waste paper collection competition

During the whole study year, educational institutions can participate in this competition by collecting waste paper and participating in other environmental activities and involvement projects. RSTS also actively participates in the waste paper and batteries collection competition. RSTS participated both in the Latvia-wide competition and organized the internal, inter-group competition. It is expected to be introduced as a systematic movement in the next planning period. Students participate in environmental cleanups and organize various events to educate the public on how to help the environment and reduce its pollution.

Information about it has been posted in social media, the website of RSTS, posters, and through teachers in the lessons who explain to students that by collecting waste paper, we would jointly preserve and save natural resources, thereby drawing the attention of students to the need and importance of sorting waste paper and batteries in everyday life, as well as creating an understanding that properly sorted and recycled waste becomes valuable raw materials for the production of new products.

Green management as an idea. Through the different instruments, it is important to focus students’ attention on the protection of the environment, green thinking and pro-ecological behavior.

The occurrence of ecological imbalances has gradually come to the conclusion that the damage inflicted by human activities on the natural environment renders those activities unsustainable. This has created a need for a new worldview to serve as a basis for global consensus, which eventually led to the coining of the term —sustainable development (Y. Loknath, B. Abdul Azeem, Green Management – Concept and Strategies, 2017).

Green management as the lifestyle. It refers to a person's individual approach to living green. For example, sorting waste, eating organic food, using only natural products, traveling by bike or electric car or practice a lifestyle that does not harm either nature or health.

Green management as the system. For systemically and regularly planning, coordinating, and implementing the green management elements (movement, an idea, the lifestyle) the supervising body of educational institution is important. Thus, the “Eco Council” working group was founded at the end of 2022 in the RSTS. Their targeted activities promote the development of environmentally friendly ("Green") thinking in the education process. They have organized several meetings. The aims of meetings are to discuss ecological behavior at RSTS, recycling of waste paper, and used batteries, planning different activities etc. They encourage students to take part in these activities and to establish a council of students working with “Raising awareness of green thinking and ecological behavior”.

Green management goes together with corporative social responsibility (CSR). Considering CSR in the process of green management enhances a better green management system.



Figure 2. The Pyramid of Corporate Social Responsibility (Carroll, 1991).

5.4. Promoting “Green thinking” through different activities and events.

Self-made electric bicycle - the charger was created and exhibited in the event: “Latvia skills”. It is a way how to attract students’, their parents, teachers’ attention to ecological behavior. Also, during the “Open door” days at VET school students and their parents were informed about our all responsibility and RSTS will try to inspire them to use resources in a smart way.

Schools, families and every nature lover were invited to get to know sustainable thinking at the grandest Forest Days event "Latvijas meža dynes" in which technical school employees invited them to make their careers environmentally friendly, referring to an electric exercise bike built by technical school students, thus producing energy for alternative charging of their smart devices.







5. Lessons scenarios for school
 - 3 lessons scenarios of the catering, construction and electricity.
6. Curriculum training for school and firm
 - 3 Curriculum training of the catering, construction and electricity.
7. Conclusions