

Examples of Best practices

Project : „Reduce, reuse, recycle: regional policy and local actions“



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Foreword : Why we recycle so little

If citizens carefully separate waste items, responsibility organizations called „Organisation of Responsible Producers (ORP)“ would have had to pass it to the assessment (processing). Citizens are motivated to the good quality separation through lower fees, so why then waste recovery rate is so small and there is a growing volume of landfilled waste? ORP not acting enough? He also wants to make profit from the sale of separated waste. But, do they have enough purchasers for separated waste?

Somewhere around here there is a problem. It turns out that compared with Sweden, for example, our recycling capacity is significantly underpowered. When there is no place where to sell the waste, it ends up in landfills. Unfortunately also one that could be of high quality secondary raw material.

After a year of validity of the new law on waste, as the main weakness of it is - what critics pointed already in his being - based on insufficient recycling capacity. Their completion is neither in law nor in practice does not pay the necessary attention. Their sufficiency should be in the interest of producers, respectively of ORP, but they are not interested on that. In this situation it is funny to listen such as "motivational" information about the need to better separate the plastics, because of this waste is then making swimwear, jackets, sleeping bags and the like. They do, but in China and not in our country.

Increasing landfill taxes is probably only a matter of time. If it will bring the expected results in terms of lower volume of waste in landfills is very doubtful. It is probably very unrealistic to think that someone (ORP, municipality) fulfills the landfill because it is cheaper, less labor-intensive to deal with sales in recycling plants. Or there is a discrepancy in prices for landfilling and prices for separated waste? It will also deal with these issues relevant ministry or only increased landfill taxes? Higher landfill taxes certainly do not increase the percentage of waste recovery, but will almost certainly increase fees for residents 'garbage'.

František Mátl, expert
Pravda.sk | 09.02.2017

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From the aforementioned, it is clear that separate is no longer enough and that towns and cities have to deal creatively, how to make profit from the waste arising on their territory.

In this brochure we present examples as possible of the waste through upcycling, that increase value of waste and produce new products and in this way not only reduce the amount of waste generated, but generate employment and financial gain.

What is circular economy?

This term is increasingly resonates in all media, unfortunately, especially those from abroad. Circular economy and its basic principles are based on the idea that all product and material flows can be re-involved in your cycle after use where they again become resources for new products and services. That is, the waste itself will no longer exist. Circular economy is more than recycling.

Put simply, this can be compared to a traditional farmstead where practically there is no waste. Local sources in the economy completely recycle - garbage from the kitchen, have been as feed pigs and chickens, what could SKRM it went into compost, manure compost was exported along with the land. Old clothing is cut into strips from which wove carpets. Local building material - stone, war, straw (on the roof) or wood can also recycle or compost or go on to the furnace. It took the scrap metal to a blacksmith to him Preki for tools or nails. Nevyhadzovalo nothing. And it is indeed high time to take a cue from this system that was environmentally friendly and economical.

Of course, the development goes forward, but as I know, it rotates in a spiral, which means that the old ideas will improve the new ideas, technologies ...

Abroad, is already a huge success examples of local reuse of waste to reduce the amount of municipal waste and to generate profits.

Coffee shops boom everywhere produce large volumes of waste of brewed coffee.



Funghi Espresso was born in Italy in 2013 of a pilot project of environmental education, which taught children to grow mushrooms using coffee grounds as a substrate for mushrooms. The success of the project led to the founding of the company Funghi Espresso, which collects decommissioned coffee grounds from bars and restaurants, and uses them as a substrate for growing mushrooms, which are then sold to local restaurants and consumers. Since its inception in 2014 the company received more than twelve tons coffee grounds on which cultivated more than one tonne of fresh mushrooms.

A similar successful example is from a small brewery in England, which in addition to being brewed beer and mushrooms grown on the malt used, which would otherwise be sacked without benefits.

In Romania, we have seen a small biogas generator to which the daily order fresh manure from stables and family had all day on what to cook in the kitchen, "used" manure could then go to the field without compromising the climate escaping methane.

And it is these ideas push the company toward better ...

Examples of small and medium businesses

The principle of Zero Waste focuses its attention on the lifecycle of products. Thus does not only recycling, but also the replacement of non-renewable materials, renewable alternative. Zero Waste also motivates to industrial producers have realized the value of waste and looking for new uses for it.

Bezodpadu.sk :

Bezodpadu.sk It is a small family business that allows customers to buy mostly food without using plastic bags - that is returnable, reusable, compostable, or custom packaging. Thus they becoming the pioneers of the first Slovak trade with the idea not to produce waste.

Enterprise was founded at the end of 2015 by Joseph and Martina Fekiačová. Joseph as a former programmer take care of the technical implementation of the company. Martina is mother on maternity leave and she is responsible for management and at the beginning she has also packed the orders. At this time, with package helps their friend Barbara.

Sales assortment gradually expanded from rice flour by over cereals, nuts, dried fruit, cocoa, tea, cereal, pasta, gluten-free foods to organic toiletries, including, for example, biodegradable bamboo toothbrushes or goods made of natural plastics based on starch.



Vetropack Nemšová

Vetropack Nemšová Ltd., produces, sells and distributes glass bottles in Slovakia. Glassworks are located in Nemšová town.

The glass is of the highest quality, produced in a sustainable way out of recycled and natural elements. The main share is silica sand. Soda reduces the temperature needed to melt it. Lime glass adds hardness, luster and durability. In Vetropack however, it plays the biggest role prepared header glass. Manufacture of glass using recycled glass requires less energy and less natural resources than the production of impurities such as sand, lime and sodium

carbonate. Special processes while enabling lightweight glass with maintaining the same quality. In the manufacture of new glass there is used up to 90 percent of waste glass.

PETRUS papier

Classical handmade paper has been restored in Slovakia after more than a hundred years break. PETRUS PAPER Ltd. It is a unique manufactory dedicated to hand papermaking without processing of wood pulp. The main raw material in the production is cotton, which increases its resistance and durability. Employees of the company are the only top experts in Slovakia.

Part of the production is to ensure quality of typography, writing with calligraphic characters, embossing and decorating handmade artistic bookbinding. Rich assortment is completed by artistically decorated greetings, invitations, gift cassettes bound in velvet or leather. Each sheet of paper can be produced with a watermark of our country, the authorities and ministries, with embossing the company logo or emblem of family. Gift of handmade paper Petrus can worthily present worldwide. During an excursion in the business, visitors will be familiar with the products and get answers to their questions.



Examples of small and medium businesses in towns and villages

Municipalities in most cases are aimed at the widest possible dissemination of separated waste collection, which is laudable, but as clearly defined at the outset - the lack of processing capacity in the country caused by the fact that a significant portion of separated waste ends up in landfills or incinerators.

Evaluation of organic waste by means of composting is also very useful approach, but does not address the wide variety of other wastes that arise in the municipality: construction waste, paper, textiles, glass, etc.

Draft of waste policy in Bardejov town

Waste prevention and reuse

It is often an important part of these activities (maybe the most important one) program to support home and community composting. Due to the upcoming system for handling of biodegradable communal waste municipality we do not support home composting in this proposed concept. City is ready to focus on building regional composting site on the former landfills place.

Proposed actions and measures:

- Holding regular exchanges of unnecessary things (clothes, books, electronics, furniture, toys ...) in appropriate and popular areas and with enough promotion. The townspeople would have the opportunity to bring their unwanted things that while other residents could still serve. The recommended interval is proposed to organize about every two months. Monitored is change of habits of population, for example in the case of community markets at City Hall Square.
- Establishment of a restricted area in the collecting yard for waste suitable for preparing for re-use (electronics, furniture ...) within the meaning of the Waste Act and in accordance with it.
- To collect textiles for reuse is recommended modification of the bins. Due to the problem of collecting the contents of bins and its elimination is recommended to use containers with the rotary hole to throw. It is also proposed adding collecting stations for stations on two another streets.
- Preparation and distribution of information materials to households with information (tips) on waste prevention, on not wasting food, and the proper storage of food. There is also suggested that part of this materials would be also stickers on mailboxes that says "Do not put here advertisings".
- It is proposed that information on the re-use and waste prevention were published on the website of the city.
- To repair and improve attractiveness of fountains for drinking water in public places with eye-catching labels to promote drinking tap water. To build more fountains in other parts of the central city zone.
- As the measure supporting the reduction of residual waste can be considered also waste fees based on its quantity.

Examples of non-governmental organizations

NGOs often substitute the government, especially in areas which are still little known and little spread and thus "marginal". In this way, they open the way not only for the authorities but also for businesses.

Institute of circular economy:

Institute of circular economy is a nonprofit organization that Slovakia was established in March 2016. The founders are long-time consultant in the field of waste management and environmental management. The aim of this organization is the introduction of innovative solutions into practice at the level of governments, the private and public sectors. An integral part of the organization's activities are educational activities at different stages of kindergartens, elementary, middle and high schools.

Civic association FreeFood:

Activities of civil associations FreeFood focus on the topic of food waste. And what results have we achieved?

- We have made a common cooking jam of apples ugly. Jams we offered further festivals and cooking.
- Together with the public, we weaned hill filled with crates of carrots and parsley and cooked stew boiler, which disappeared in an hour.
- We screened the film Die Essensretter of coping with the waste of the neighboring countries of the EU and we were surprised by the large public interest.
- We participated in the collection through food for Gite Vincent de Paul, where we cooked in combat conditions, together with our volunteers.

Last year we also managed to collect 10,380 signatures in a petition for a change in legislation that prevents alleviate the problem of food waste. We opened the "door" to communicate with the Ministry of Agriculture, which resulted in the creation of a national platform of preventing food losses and food waste, to which everyone can be involved. As a consequence of our Petitions there has been changed a law that took effect since January 2017. It allows retails chaines and businesses to donate food after the minimum durability date for all charities.

We are involved in the project of Pro Bono by Pontis Foundation, where in cooperation with lawyers we are doing overview of food legislation.

Regarding our planes on opening of soup kitchens, our project to create the Public refrigerators received unexpectedly high support in the Internet space and locally in Bratislava and it started discussion on food waste. However, we encountered a problem with the operation and hygiene regulations.

In the near future we plan to start collaboration with the city of Bratislava, so that the concept should help mainly among socially disadvantaged citizens. <http://www.free-food.sk/>



Examples of artists

In Slovakia, there is a number of successful artists, using waste and old materials for their pieces of art. Among the most famous representatives of the older generation are: František Guldán, Peter Kalmus and Otis Laubert.

Marián Huba, sculptor and civil society activists

„My approach to the waste is such, that it is a raw material, which has a value. Topics of schoolworks we often commissioned with my colleagues, so as to have ecological, social, ethical or conservationist educational overlap. Work I present are produced of waste with the students of this department. In this school it is often used waste material for making art. Most of used wood comes from forced cuts in the city. For example, inspirational material we acquired from discarded carious semi-finished products, taken from wood processing factories.“

Social enterprises

Social entrepreneurship within the EU considered one of the most effective tools for solving environmental and social problems. Social entrepreneurship (social enterprise) is a way of doing business, which combines the principles of the business sector and solutions to social problems (which is why in some countries called the "fourth sector").

Social enterprise applies the principles of the current undertaking, as well as common business entity produces and sells goods or services. The only difference is that profits, which creates a social enterprise, not redistribution to shareholders or founders of the company, but is used for addressing a particular social problem.

Numerous traders promotes socially responsible activities, but the difference between socially responsible businesses and social enterprises are currently in the use of profits. Local recovery of waste generated in the community is one of the typical content of social enterprises.

Municipal social enterprise

Social entrepreneurship is becoming increasingly popular tool for addressing issues such as unemployment of disadvantaged groups, particularly in an environment of small municipalities. In this case, the founder of social enterprise is community and social enterprise is controlled by the municipal council. Therefore, it is called municipal (community) social enterprise.

Who feels "the pulse of the times" this know that after a period of ruthless "hard" business has to come up time for socially and environmentally responsible business, having in mind the needs of nature and landscape conservation, reuse of waste (upcycling), sustainable use of local resources, respecting the needs disadvantaged groups



In world there is already an infinite number of clothes, shoes, books, food, furniture, electronics, tools, bikes ... Which still can be used and are waiting for their second chance. And there is equally infinite number of PET bottles, old barrels, glass bottles, tires and other waste awaiting for ideas what to do with them ...



Czech examples

Social Impact Award projects that address various social and environmental issues:

- Rocking social networks - handmade therapeutic workshop for the homeless, where they produce hammocks, which are then rozvěšují in parks and sell on e-shop
- Intelligent rescue module - energy-self-sufficient winter hostels for homeless people
- The Roots - 'green' funeral service and support for survivors
- Rekola - sharing bikes for cycling in traffic
- Rescue Package - awareness against food wastage
- Zdrojovna - recycling center for furniture and household items and craft work

Greenglasses

Currently <http://www.greenglasses.cz/> site offers a directory of green almost a hundred shops, e-shops, services and organizations. Each selected company should meet the triple responsibility based on the three pillars of sustainable development (economic prosperity, social benefits and, of course, environmental protection) and most of their products offer other "added - value" : production in the Czech Republic and EU, eco-certification, support of recycling, sharing , repair or manual work. In the directory, in addition to typical organic farms, you can find also services of selected fashion boutiques, restaurants or even organic hair salon.

Ekodomov

Is a company promoting composting and separation of biowaste in the Czech Republic.

In addition to selling composters, biodegradable biowaste collection bags and other composting accessories (sold through their e-shop ekonakup.cz), they also organize awareness raising initiatives, including a traveling educational theater for children.

Their educational website Kompostuj.cz contains a wealth of information about composting in the Czech Republic, for both adults and children. They also do seminars and consultations for companies interested in starting composting in the office



LeBikes

LeBikes is a bike building, repair and service workshop where the focus is on style and function, with a distinctive retro flair. Specialized in refurbishing old bikes. His service is using a combination of new and salvaged parts (including new retro Brooks saddles) and snazzy metallic paints. Since started 3.5 years ago, they has finished over 350 bikes. You can drop off your old bike or buy one of his creations. Bikes for sale are listed on his website, many of them Czech brands such as Favorit and pre WWII Eska bikes. Prices range from CZK7000-12,000. Vintage bike parts and upcycled bike jewelry are also for sale in the e-shop



Zaspas

They are saving our lives in accidents. Small production **Zaspas** save seat belts from their relentless liquidation. Husbands Lstibůrkovi made from seat belts original handbags and other accessories. The material is unique, diverse and extremely durable. Seat belts, like the offer of products in our market, not only differ in color and wear, but also the structure and pattern.



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Skoba

Skoba is the bindery workshop in Prague's Žižkov. Manual production is focused on pocket notebooks, notebooks and diaries of different designs and sizes. Manufacturers use environmentally friendly paper envelopes and for covers recycled materials is obtained from

old clothes, plastic bags, as well as books and magazines. „Skoba“ is not limited by industrial standardization and its freedom fills with this authentic work.



Examples from Slovakia

Dipa Vasudeva Das

This skilled master reworks old cars on residential homes, using pure natural materials, crafted and aesthetically processed as the perfect level.



Studio REPA

It was established in 2009. It deals with the design and creation of original lighting, home accessories and small furniture. Raw materials for production are old, used, unwanted, discarded, thrown objects or waste material. This creates interesting shapes and materialy unconventional solitaires. It characterized by a unique and uncommon humor hidden in reference to a previous history of objects and materials from which they are made.



Jewelry from waste - for example, made from old electrical resistors, or decorative elements made from waste material can be found already in our e-shop, for example in **Dekofans** or **Drobnosti z radosti**.



Nosené

During the sorting of clothes we have accumulated clothes that had its best times behind. We decided from the bulky, damaged or unmarketable pieces to figure out what to do with them, and this created our own brand **Renewals by NOSENÉ**. Pieces that are more nenositelné or have damage, you will find thanks to our handy girls new owners.

If in your wardrobe are the things that have been more or nevyužiješ shopping "by mistake", we are welcome to them to bring us. We sorted through them, cleaned and either find a new home, or they vdýchly new life within upcycling piece Renewals by the nose. In each of these cases, of course Oved part of the price to help abused women, so the team you will contribute not only a good thing, but also reduces the waste that would be produced by throwing your clothes in the trash.



Fashion Recycling Lab

Fashion label from Bratislava.

F = Fashion.

- ✘ We design and produce clothing, fashion accessories and jewelry for men and women.

R = Recycling.

- ✘ It describes the nature of our attitude and response to the current mode. The material is in good condition all around us. Flooding clothing thrift store, exchange, and also our wardrobe. I can not imagine that the raw material for our collections would be bought in the store. We use material that is found everywhere locally. It's simply just our primary source.

L= Lab.

- ✘ Our work is highly experimental partly, not only combining various materials, but also we are playing with the function of individual subjects. Bookbags example is a collection of books as a new concept handbags and pencil cases and sketchbook or freshly period sew underwear, made from recycled shirts that can be worn as a skirt or shorts. The latest collection of Czechoslovak Post handbags and bigger bags sewn from old Czechoslovak mailbags. Lab says a lot about how we create and live. The team that we have studied textile design or development, we very intuitive and we are learning 'on the road' when together we make contact with our clients.



KLUB in Košice – culture club in abandoned house

The cultural activist Ján Gálik meets me in an abandoned functionalist building on Štúrova 11 in Košice, a building that became the Klub. It is three days after Christmas and in the Klub a

Photoshop workshop has just finished. Apart from workshops, Klub is being used for presentations, art exhibitions, or charities for refugees or homeless persons.

According to Gálik, in the context of Kosice, Klub could be considered a hybrid between a cultural center and a squat. It is 6PM and in the first floor of Klub its pretty cold. The other floors of the three-story building are currently unused. Klub is too punky to be a cultural center, and even though it has its similarities with a squat, the people running it do not live in the building, and it was also not occupied. Jan Gálik has got the keys to it, after persuading the buildings owner, that their activities can be helpful for the otherwise vacant building. The internal organization of the group of people behind Klub is based on the principles of voluntarism.

Galik describes Klub as an alternative community cultural center. The community behind the building has gradually shrunk to just 4 people since Klub's opening. All of them are employed elsewhere and run the building in their free time. Košice, according to Gálik, are in the state of a post-cultural shock. During the project of the European Capital of Culture in 2013, the city was swamped with cultural events that were free or for symbolic entrance. Without institutional support, promoters now face harder times. Klub's future is uncertain, in 2016 it might need to relocate, as the building's owner plans a reconstruction.



Project Life

Project Life supports smart and creative people, organizes many craft fairs, social events, lectures and discussions. Juraj Ciba Manik is also the organizer of the popular zones without money that is held every year before Christmas in many cities and towns throughout Slovakia, Bratislava is the founder of the first community garden, which provides a platform for growing domestic products. It is also the founder of Forests activities without garbage that engages volunteers from all over Slovakia, who collect garbage in its popular tourist and holiday destination and inspire others to be active. In his spare time it is helping the homeless, organizing charity events and gave people joy.



Project Life: Money Free Zone

Short food chains

They belong here:

- „Basket“ system
- community gardens
- Agricultural cooperatives
- Farmer’s Market
- Yard Sale



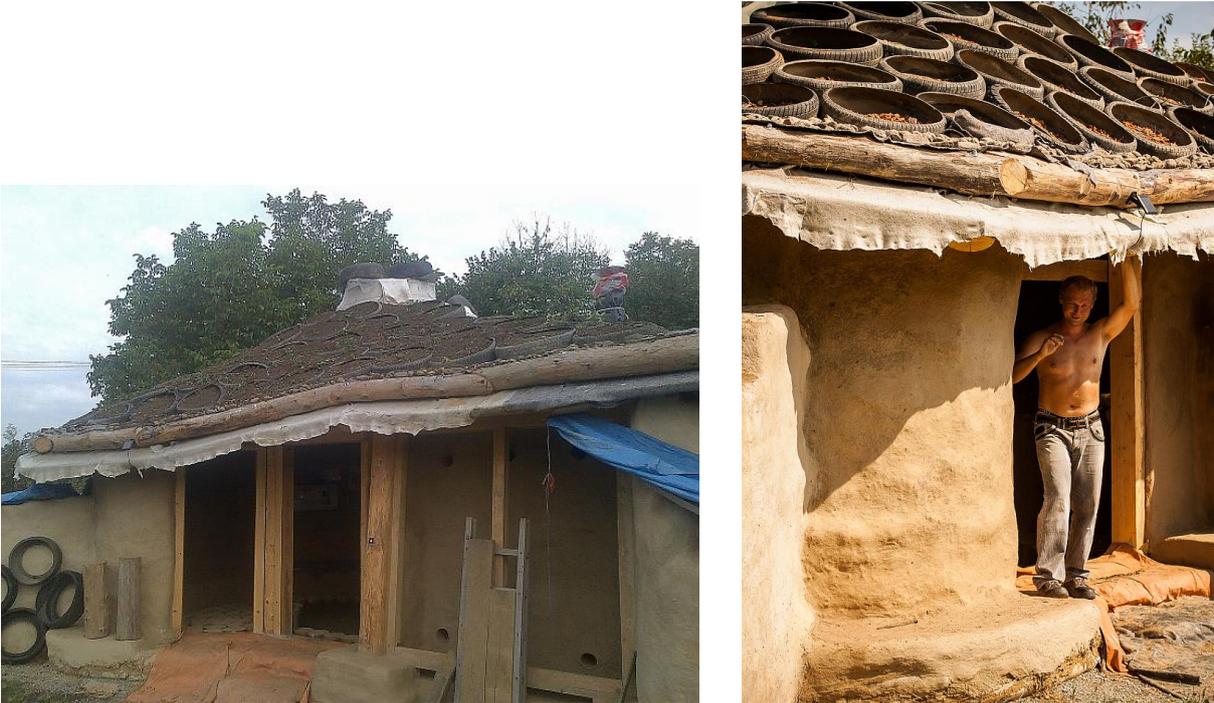
Basket from grandmother – example of the Basket system

Examples of waste materials in green building

Old tyres



Old tyres, filled with soil – i tis so called Earthship technique used for „Hobbit house“ building.



Example of green roof, where structure made from old tyres is fixing the soil to protect it from slide.

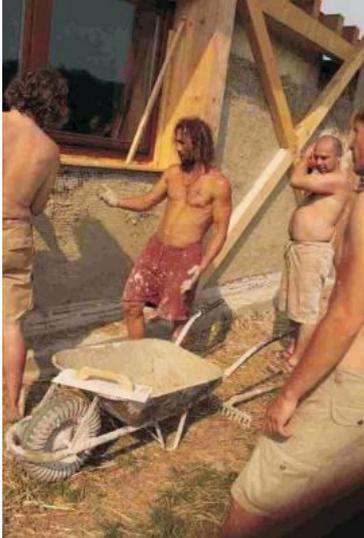
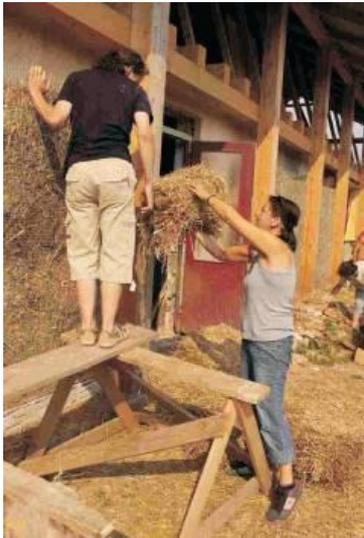
Utilisation of waste earth and clay



Construction of clay oven for pottery burning in made of the old earthen war and old bricks.



Clay plasters, artistic elements and floor created from old wars



Building insulation with straw bales and local clay.

Playgrounds, school grounds



Mayors and directors of kindergartens and elementary schools tend to complain about the lack of money for playgrounds and land. Playgrounds built of local waste material or nursery and primary school grounds and gardens animated with elements from waste are more interesting, more creative, more original, less expensive and more environmentally friendly than those built as "turnkey"

Gardens



Raised beds in community and school gardens, composters and other garden elements can be nicely and effectively created from waste materials: old bricks, stone waste or old lumbars.

Energy



Vind turbine made from old barrel and used bike wheels



Solar collector from old parabola and mirrors

Mind you, there is no waste, just lack of creativity 😊

Therefore, imagination, creativity and manual skill are a way to reduce the amount of waste at the local level.

