

Presentation of the GSCE project Global System of Circular Economy

Our solution - Circular Economy in Life practice

In recent years, the concept of the circular economy has come into the center of attention not only of experts and companies that professionally deal with this field, but also of municipalities and government bodies, which contribute to a climate-neutral economy by recycling waste materials.

The GSCE project is designed by our team in such a way that it can provide solution, support and space for the development of companies operating in the recycling industry and the community where needed.

Based on our more than 15 years of experience, we are able to design tailor-made solutions for the processing use of various types of recyclable waste - textiles, glass, tetrapak packaging, plastics and tires.

The sector of recycling technologies has incredible potential and only through cooperation across disciplines it will be possible to provide solutions for the challenges of the existing recycling system and expand it with a functional solution.

From our experience on the Czech and foreign markets, it is clear that these Life-cycle technologies solutions are often the only possible solution to waste problems, accesable and not necessary to be high level investment-intensive.

Such an example can be the implementation of the project for the liquidation of the textile waste land-field in the Atacama desert, which our company has been focusing for more than two years.

We are involved in complex and practical solutions for complete life cycle of waste.

Based on information from the CzechTrade office in Chile, we found a supplier with suitable technologies for recycling stored textile waste, we were involved as part of a consulting team, and in cooperation with the Chile Ministry of Trade and Industry and the authorities in the selected province, involved into selection of the optimal location for building the technical background for the allocation of the recycling line.

Potentially, we are ready to discuss sharing our experience with the placement of textile recycled products on the market of Chile.

We would like to familiarize experts and the public with possible variants of available technologies, input and output materials suitable for recycling.

Our GSCE(GES) concept is a project for the long-term set up, operation and development of a global network of regional Recycling Processing Centers (RPCs), the HUBs of the circular economy, that will significantly enhance the rate of local recycling, contribute to the creation of new jobs and will develop reachable end markets for the material re-use out of municipal waste.

The building up of such a RPCs not only solve typical problems in waste management, but also contributes in a fundamental way to more efficient water and energy management.

RPCs offers to be developed and utilized all over the world.

Implementing of GSCE project will have positive **impact into financial savings** by reuse of recycled material, which would end-up on landfills or in incinerators and will contribute significantly to the **reduction of the carbon footprint** compared to the production of virgin materials or incineration emission.

Along with positive economic and social impact, we see the **benefit achieving** new legislative standards and ecological obligations of municipalities and governments in field of disposal and recycling of waste.

Strategic Framework

Taking into account the compliance with the principles of the circular economy and the need to meet the newly established **European and global goals for the circular economy** reducing materials and water waste, a drastic reduction of landfilling together with reducing the total production of municipal waste is necessary, while increasing material and energy re-utilization of this type of waste.

The **key approach** for meeting the above-mentioned goals is found in increasing capacities of material and energy re-utilization of waste facilities.

Our document presents a **solution** that reflects the needs of large urban agglomerations, but also of smaller regions - in particular, the solution responds to new legislation in waste management and the **negative trend** of increasing costs of disposal and landfilling of waste worldwide.

We **target** with a strategic concept **framework** that would in the long term **reduce the costs** of waste management with such a circular solution and **support to direct** cities and regions to meet their goals of the circular economy arising from the current legislation and the goals set for solutions of waste management.

Based on **long-term experience** in this area in the Czech Republic and abroad, the GSCE concept presents an innovative project solution, applicable across the Globe, both for large cities and for small municipalities.

Concept GSCE

Project Goal

The **main goal** of the project is to build global networks of **Regional Processing Centers (RPCs)** within the circular economy, which will significantly enhance the rate of local recycling, to contribute to the creation of new jobs and will develop reachable end markets for the material re-use out of municipal waste.

Main benefits of developing **Local regional or and Global Processing Centers (R&GPCs)**:

- The purpose of the project is not only to build a center for comprehensive waste utilization, but to significantly improve living conditions within region, to enable the creation of new jobs in the local community
- Create an environment for the cooperation of companies dealing with the processing and use of various wastes as input raw materials for further applications, like in the civil construction industry for social and senior housing, agricultural industry, water retention in the landscape and or water subsequent storage and use
- Maintain acceptable waste disposal costs for the citizens and communities of the given city or region, and reduce waste collection costs
- To reduce the financial burden on cities and regions, reduce landfilling and save nature and resources

Innovations

For the GSCE concept, the optimal location is carefully selected for each new project.

The **key is cooperation of public and private** entities in the given region, where it is necessary to solve the issues of waste management - especially considering recommendations on most efficient location to concentrate the collection, sorting and processing of local municipal waste.

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Developing network of projects of comprehensive waste utilization centers in areas where it is necessary to solve the situation with waste, the subsequent expansion of this GSCE concept to other regions will very fundamentally support the creation of jobs, the acceleration of the transition to a circular economy within specific country, and this project will help prevent the depopulation of the region and the generation of waste, increase the recycling infrastructure, limit the waste of secondary raw materials, increase the content of recycled materials in products and increase raw material security in the region.

This concept should thus become one of the core parts of the National Recovery Plan and be applied in all regions of LATAM, Africa and the entire European Union.

The goal of the project is not only to treat nature in a **sustainable way**, but also to generate savings for the public budget. Guarantee the viability and competitiveness of the entire region and the creation of new jobs.

The goal of GSCE concepts is to **view the waste as resources** and become a unique circular project through the creation of global recycling activities.

