Biotrem - Wheat husk dinnerware New Entry: BIOTREM - DINNERWARE MADE FROM WHEAT HUSKS. SO NATURAL YOU CAN HAVE A BITE!

Zambrów, Poland
Katarzyna Ataman
https://www.youtube.com/watch?v=4z8ixgVbPGo
Year Founded:
2012

Organization type:
for profit

Project Stage:
Start-Up

Budget:
$1 million - $5 million

Website:
http://www.biotrem.pl/en

Facebook:
https://www.facebook.com/Biotrem

Eco Products
Green business
Green consumerism
Sustainability

Project Summary

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

BIOTREM is a disruptive idea of using wheat bran (by-product of milling) to produce ecological disposable tableware. Clean production process – no chemicals, no artificial components, no waste generated during production. 100% compostable within 30 days in natural environment.

WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"

What if you could replace all disposable packaging with completely natural and compostable in 30 days alternative?

About Project

Problem: What problem is this project trying to address?
Reducing waste by replacing disposable tableware with fully biodegradable alternative that compost in natural environment in 30 days.

Solution: What is the proposed solution? Please be specific!
There simply is no other product in the world which can be compared to BIOTREM wheathusks tableware in terms of its ecological impact. The production process not only does not generates waste, but also uses organic by-product from milling (wheat husks), so as a result it reduces production waste from milling industry. The resulting product is natural, made from organic material and it is 100% biodegradable &
Jerzy Wysocki, the inventor of Biotrem, first came up with the idea of using wheat husks to create dinnerware when one of his machines in the mill stucked with wheat husks clot. By analysing it he wondered if it would be possible to make usable, steady and repeatable shape from this material. Eventually he created a prototype and begun experimenting for over five years to find perfect formula: how much wheat husks, how much steam, pressure and what temperature should be applied to make perfect product. And he finally made it! Now we can make dinnerware and packaging in almost every shape and size, and we continue to develop new techniques and ideas how to make more use of wheat husks.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Everyone loves going to music festivals - Open'er or Glastonbury. Do you know how the landscape looks like afterwards? Tons and tons of trash: paper, glass, plastic - everywhere. Of course it is fast clean up by authorities, but does all this disappear? No - it goes to landfills, pollutes earth and water supplies. Some of the trash will be missed during cleaning and will stay in the ground for years to come. Now imagine what could happen if a music festival using only our products - natural, compostable tableware. Everything that is collected can be put in a composter and easily turned into natural fertiliser. What is missed will be eaten by wild animals - birds, squirrels, dogs - or it will dissolve in 30 days.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

Currently, one of the biggest problems, affecting almost every country in the world, is waste management. The most troublesome products are manufactured from plastics. The turnover of plastics producers from the European markets in 2013 amounted to about PLN 100 billion. Up to 40% of plastic materials are used for the production of packages, which decompose naturally over 100-1000 years. One of the major problems of the world is to find alternatives to products produced from plastic, in particular in the packaging industry. Having created completely natural disposables, from sustainable, renewable resource (plants), with the fastest compostability in the world (30 days only and in natural environment - not in industrial facility) - we will be able to impact the amount of trash compiled in landfills. We aim at creating affordable alternative to plastic for conscious clients.

Spread Strategies: Moving forward, what are the main strategies for scaling impact?

By the end of 2015 we will have fully operational production hall in Poland gaining the ability to produce and sell 18 million pieces per year in the next 2 years. We want to build distribution in Poland, Germany and UK via entering the following channels: retail, wholesale, cash & carry and HoReCa. In 2016 we will significantly extend portfolio of available shapes. In the next 5-10 years we plan to sell licences for production on other markets worldwide, where wheat production is large and so wheat husks are easily available.

Sustainability

Financial Sustainability Plan: What is this solution’s plan to ensure financial sustainability?

Over 50% of financing we obtained from EU grants that we used to build innovative production hall. The plan for the next 2 years is to build sale internationally, with particular focus on UK, UE, Scandinavia and USA markets. We are in the evaluation process of another EU grant (SME programme) aimed specifically to help us in building international sales. We also started discussing finanancing with investors and we plan to approach the World Bank.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

Due to the nature of the market, the competitiveness should be considered mainly due to the material of which products are manufactured on the market: 1. Plastic tableware, 2. Utensils made of paper and related materials, 3. Tableware made from (ecological) natural materials. Main competitors in the natural segment are Huskware, Vassara, The Wholeleaf. Advantages of Biotrem: 1. stiffness, 2. thermal insulation, 3. proximity to the sources of supply of raw, 4. edibility, 5. lower price, 6. Reduced compostability period of product of approx. 30 days

Team

Founding Story

Jerzy Wysocki - inventor & member of management board, highly experienced Technical Director responsible for R&D, development and optimisation of production technology and overseeing production process Małgorzata Then - CEO responsible for management, vision & strategy for the company. Highly experienced manager with almost 20 years of experience in preparing and leading investment processes and start ups development Krzysztof Gmurkowski - Commercial Director with over 15 years of experience in sales, trade marketing and category management - responsible for sales, including building and managing the network of Biotrem representatives worldwide. Katarzyna Ataman - Marketing Manager with over 15 years of experience, responsible for marketing and communication strategy Izabela Zakrzynska and Karolina Smolinska - sales managers responsible for managing sales channels in Poland and supporting business development Dawid Wroblewski - experienced business analyst responsible for supporting preparations of financial applications (UE grants, credits and investments) Aleksander Luczak - experienced project manager overseeing and managing ongoing projects in total the company hires full time 20 employees and staff members in the office and production hall.
Background

Please confirm how you heard about the Unilever Awards:

We found out about the contest via Google.

Please confirm your role in the initiative (eg Founder/co-Founder) and your organisational title:

Marketing Manager on behalf of the owner.

Which of the 8 UN Global Goals (Sustainable Development Goals) pre-selected for this competition does your solution relate most closely to? [select all that apply]

Responsible Consumption and Production.

Leadership and the Unilever Awards

Please provide examples of any previous entrepreneurial initiatives you have pioneered.

This is the first entrepreneurial initiative both owners made.

Beyond your existing team, who else are you working with to achieve your objectives, eg partners, advisors, mentors?

In order to develop the technology for the project, BIOTREM has gathered academic staff (Professor Mościcki, Professor Żakowska, Professor Legutko, PhD. Ekielski), which is supported by the originator and author of the invention describing the injection process - Jerzy Wysocki, who is related to the processing of bran for 20 years.

We also cooperate closely with VTT (VTT Technical Research Centre of Finland LTD), COBRO (the Polish Packaging Institute), Danish Technology Institute and the Polish Centre of Research and Development.

Source URL: https://www.changemakers.com/globalgoals2015/entries/biotrem-wheat-husk-dinnerware-new-entry