



Brewery Wastes – Strategies for Sustainability 2 (Short Version – Part 2)

(Resource ID: 384)

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This teaching resource is allocated to following University:

UL – University of Limerick

Institution:

University of Limerick

<http://www.sustainicum.at/en/modules/view/384.Brewery-Wastes-Strategies-for-Sustainability-2-Short-Version-Part-2>



Individual work
Group work



11 to 30
students



Up to 3 lecture
units



English, Shqip

The teaching resource outline Brewery Wastes – Strategies for Sustainability (Short Version – Part 1, 2 and 3) describes the draft of a teaching resource consisting of 3 parts, that has been developed to demonstrate the effects that brewery wastes are having on the environment because they are not being disposed of correctly. Students will be introduced to stakeholders and look in depth at how their brewing companies are being run, it will be the job of the students to look at what sustainable strategies can be implemented to improve the disposal of these brewery wastes, and suggest alternative uses for the wastes in order to make the company more sustainable. These teaching resources will incorporate but are not limited to the following methods: • Mental Mapping • Researching •

Sustainability Bingo · Interview with Stakeholders · Fieldwork Visit · Discussion · Presentation The teaching set describes three independent teaching resources, which are designed to be completed one after another (but not necessarily), these include: 1. Mental Map of the Brewery Industry and Wastes and Research on a Brewing Industry 2. Sustainability Bingo during Stakeholder Presentation of their Company and an Interview 3. Fieldwork Visit and a Presentation Brewery Wastes – Strategies for Sustainability (Short Version – Part 1, 2 and 3) is based (and slightly modified) on the Teaching Resource, “Brewery wastes – Strategies for sustainability”. The original teaching resource was split into several parts to introduce new innovative teaching methods into lectures, and encourage the involvement of stakeholders, giving students the opportunity to see the realities of the theory they are learning about in food technology lectures.

Part 2 – Sustainability Bingo during Stakeholder Presentation of their Company and Interview

Using their knowledge of the brewing industry representatives and their companies from part 1, the students will be asked to create a list of 20 keywords they think they will hear during the presentations. As the students hear the keywords, they will mark them off during a game of sustainability bingo. Each student will have their own individual sustainability bingo, as each of them will have done different research and would have emphasised different key words as important. Afterwards, the students will address the keywords that weren't mentioned by the stakeholders (2 representatives – one from each brewing industry) in the presentation and ask them questions as to why those words weren't mentioned in the presentation.

Main Text:

Students are introduced to the sustainable management of brewery wastes. They have the opportunity to discuss sustainability in the food production sector in Albania, particularly in the brewing industry.

The brewing industry represents one of the major sectors of food production in the internal Albanian market. Their production meets a big part of the Albanian consumers' demand for beer. However, the level of beer production in Albania brings about a multitude of interrelated environmental issues, of which most consumers are not aware. The brewing

industry produces both organic and inorganic waste, which currently is not disposed of correctly.

Students will be presented with the management systems traditionally used in the sector for the organic waste disposal (solid and liquid waste), but will also be introduced to the idea of alternative sustainable uses of the brewery wastes. Brewing industry stakeholders will present the waste management system they apply in their own companies so that students will also have the opportunity to interact with the stakeholders asking about practical industrial applications of the strategies.

The students will also be allowed to visit a brewing company and get to shadow the employees, learning about the industry and also having the opportunity to critique the current practices. Students and stakeholders can exchange experiences and the students have the chance to propose new innovative ideas for uses of brewery wastes. Stakeholders may benefit from this information when deciding to apply new sustainable strategies in their own companies.

Teaching Tools & Methods



Case study Written material

Integration of Social Stakeholders

Brewing companies are involved as active partners presenting their own company strategies and students have the opportunity to get in direct contact the employees that experience challenges in implementing the sustainable management of brewery wastes every day. The stakeholders from the businesses profit from the collaboration, as they receive external and innovative perspectives on their activities from the students' recommendations.

Strength

- Active learning experience for students
- Mutual learning for students and business stakeholders
- Stakeholders and students benefit from network building
- Students think about their own responsibility in the context of global

change

Weakness

- Occasional issues of confidentiality.
- Stakeholders must agree to discuss their own business plans and problems with students.
- It is important to work with motivated and well prepared students

Learning Outcomes

- List 20 keywords about the brewing industry
- Participate in sustainability bingo
- Interview the stakeholders

Relevance for Sustainability

- It encourages the sustainable management of wastes in the food industry.
- It gives the students a sense of personal responsibility
- It is directly related to the protection of the environment
- It inspires the students to promote the recycling of wastes

Related Teaching Resources

No specific previous knowledge / related resources required

Preparation Efforts

Medium

Preparation Efforts Description

Arranging for the stakeholders to visit the University

Access

Free

Assessment

N/A

Credit/Certification Description

N/A

Sources and Links

Original Teaching Resource - <http://sustainicum.at/en/modules/view/330>

Funded by

This teaching resource, realised within the project ConSus, has been funded with the support of the TEMPUS of the European Union. The contents reflect the views of the authors, and the European Commission cannot be held responsible for any use which may be made of the information contained therein.