

BMTZ19

# Sustainable packaging and the benefit for our environment

We'd like to introduce you our topic sustainable packaging.

We want to make the theme sustainable packaging more accessible to you, our estimated readers. In our opinion, there should be a possibility to create or develop a method which is 100% bio degradeable. It's an utmost concern to find a way to reduce the plastic waste. Because so much plastic waste is generated every day it harms our environment. Our world and nature as we know until today will no longer exist in the future if we go the same way as we do now. We should take care about our nature and environment. We have no planet B. [1]

Following we will give you an overview about some alternative packaging methods. We concentrated on the sustainable and bio degradeable foil and tried to clarify how the impact on the environment is in contrast to a common plastic foil.

## **Imagination**

#### What if....

As we started with the imagination step it was quite hard. But the more we thought about it the easier it got. We thought about a situation where our project will be heard all over the world and will be supported from so many people. A world without plastic would be the aim. It would be a lot of work to convince people that plastic is really very harmful to our environment. The hardest opponent will be the industry. All the rich industry moguls who benefit from the crude oil industry, packaging industry and who profit from a bad environment. That's frightening. Because this part is an imagination one, we are allowed to win in this case against the whole profiting industry. There would be laws which are forbidding the usage of plastic. In the beginning it wouldn't be very easy for the industries and a lot of people who are accustomed to use it normally. But after a while it would change. New measurements of a research are published which are confirming, that the environment is healing and getting healthier with every day. All the humans are realising, that it was the correct decision to give up the usage of plastic.

### Research

We already informed us about the different packaging methods at the beginning of this project. Because we know some people in the packaging industry, we had the luck to receive good information and the possibilty to visit a company. There we did an interview. In addition to the datasheet and documentation we received we were also allowed to take a short video of the production process of this bio degradeable packaging foil.

Because just one source wasn't enough, we did a research on the internet and collected a lot of new information. We also found a little grocery store in Zurich, which is selling products free of any plastic or packaging materials. Seeing that as a chance for our project, we called them for an appointment to make another video of the store.





[2] turtle with plastic



[3] world in a plastic bag

[1] stork with plastic

## Experience

On the one hand we had the chance to visit one of the biggest companies in the packaging industry in Switzerland. We made an interview with a specialist for renewable packaging of the development department of the company Wipf AG.

On the other hand we discovered a little shop which is selling products without any plastic.

Both of the companies allowed us to make a video of their production or shop.

#### Wipf AG

Wipf AG is member of the environmental organisation myclimate since 2012. The development department of the company is always engaged to find new solutions to protect the environment from too much plastic. They invented Wipf Bio Packaging. Bio Packaging consists 100% of organic raw material. The enacted materials called Cellophan and Polyactide. Cellophane is a tiny, colorless foil made of viscose (Chemiefaser aus Zellulose). Polyactide is lactic acid (Milchsäure). You can print it with all colors without endangering the industrial composting. All the raw materials are EN 13432 certified (proof of compostability). You can buy the packaging as a foil or as a prefabricated bag. You can order the foil and bags in different dimensions. The bio packaging is also useable for lid foils amongst others for coffee capsules (Deckelfolie für Kaffeekapseln). The coffee industry is huge, imagine they would use only bio packaging instead of plastic... The foil protects the filling material like plastic from the sun, water and other influences. The foil has a high aroma-tight (hohe Aromadichte, damit das Aroma in der Verpackung bleibt) and an optimal fat-resistance. The bio packaging is free of metal and the stiffness is like plastic. [2]

#### **Interview**

For which products is the foil usable? « You can use the foil for everything like pharma, food, non food products. You cannot pasteurize and sterilize the foil. Mainly it is used for food products. »

What is important to look for during production? Sensitivities? « You cannot compare it to a plastic foil because the producers have to redefine and redesign the whole process. The sensitivities of the foil is different. This also associated with high costs. »

**Is the foil much more expensive?** « It depends on the quantity and so on but between 50-80% more expensive. »

Which raw material is used? «Celophan and PLA (description in the text above)»

Where do the raw materials come from? «Europe and South America»

Do the machines need more energy for bio packaging? «Not for the production at Wipf AG but some of these plants are planted only for this production and this is also not the best for our environment.»

Do more/less Co2 emissions occur during production? «It is not easy to give an answer to this question. Because it depends on how many layers the foil has. In the end it's nearly same if you calculate all the emissions together.»

What is also impotant to mention when we talk about bio packaging? «The foil is still in development. It is not easy to sell this foil because the costs are much higher. Wipf AG has also other packagings which are also ecologically interesting.»

#### Foifi ZeroWaste Zurich

You can find this cute store in Zurich, circle 5. A place where you can shop food and other articels for living without any plastic. The concept of this shop is that the customers bring their own vessels to fill in the goods. The products are mainly bio and fresh. A normal person in Switzerland fills 70 waste bags of 35 litres per year. We should reduce this number of waste bags and Foifi ZeroWaste offers new options. The bio products are a bit expensive but keep in mind you do something good for the environment. We were absolutely inspired of the whole offer and things one can buy there. [3]

# After the Experience/ Reflection

Our imagination about our project was more or less a romantic one. The thought to have a positive influence on the mindset of people was and is still very optimistic. Because there are living so many people with their own opinions on this earth it is really hard to reach everyone. The other wish to change the laws and industries is a little bit an unrealistic one. There are too many people who have too many rights and profit from the situation nowadays. Nevertheless are there companies who support this green wave with great actions and good ideas. [4]

We were very glad to have connections in this direction so we already had some ideas how to start and realise this project in advance. The research for this topic was not very hard because it is a current theme and the people start to overthink and react more than before.

Because we were organised very well the interview and videos went without any problems.

Unfortunately we were the only team that was interested in the topic sustainable packaging so we had no cooperation with one of the partner schools in Belgium or India.

## **Our Conclusion**

Although one thing didn't work as expected, we are satisfied about our chosen topic. We learned a lot about the packaging industry and the possibilities we have with all the substitutes. There are a lot of possibilities of sustainable packaging methods. Unfortunately this isn't always realiseable and sometimes a question of the costs. Most of the people are used to go to the common grocery store and grew up in a time where plastic waste is normal, so the change which should be done would be huge. However, even a small reduction of plastic or a reusable packaging is already a big step in the right direction. In our case, we are paying more attention to the products in the stores and think twice before we buy something. We are reducing the plastic waste in our private life and try to forward our new knowledge to all the people we know.

#### Thank you for reading!

Your Sustainable Packaging-Team

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## **Sources**

- [1] <u>WWF</u>
- [2] Wipf AG
- [3] Foifi
- [4] Here you will find some companies who support the green wave:
- BioSuisse
- Coop
- Rausch
- Handelgrün
- Biologisch Verpacken

#### List of pictures:

Cover collage: Background, plastic in the sea, fish with plastic bag, turtle with plastic

- [1] Stork with plastic
- [2] Turtle with plastic
- [3] World in a plastic bag

#### Music:

Video 1: <u>Aakash Gandhi</u> Video 2: Copyright free

Other Links: On-Topic posts on dontwastemy.energy:

Made of 200 million years old organics plastics

Plastic Bags only used for 12 minutes