

ENGLISH

Biofabrik Technologies Ltd - At a glance

Foundation:	In 2011 in Dresden
Head Office:	Dresden (Rossendorf)
Management:	Owner-managed company Oliver Riedel (CEO, founder)
Philosophy:	<p>Biofabrik: Founded, to improve the world.</p> <p>Considering a continually growing world population and finite resources, the world population is facing huge challenges which require unconventional solutions. BIOFABRIK develops revolutionary technologies and disruptive solution approaches to solve social challenges and critical environmental problems globally and sustainably.</p>
Staffing:	<p>approx. 25 permanent employees in three locations (State: June 2018)</p> <p>The interdisciplinary team is composed by employees from the areas biology, chemistry, engineering, business-development, marketing and distribution.</p>
Mission:	<p>The group of Biofabrik develops and markets technologies for the sustainable mastery of energy, nutrition and waste problems all over the world. Hereby, BIOFABRIK wants to reduce the overexploitation of fossil resources and thus counts on the development of profitable business models.</p> <p>The team works carbon and energy neutral and reinvests his earnings in the further improvement and dissemination of the existing, as well as in the research for new technologies which correspond to those principles.</p>
Vision:	<p>During the coming years and decades, a permanently growing number of Biofabrik's are expected to produce and distribute those sustainable input materials, such as green platform chemicals or fuels made of waste, wherever they are used, worldwide. A completely developed technology and business model will be multiplied depending on the marketability and the resources concentrated on the new social problems.</p>

Company structure: The group of the Biofabrik currently consists of the following four business areas:

- Biofabrik White Refinery® - Waste to Energy
- Biofabrik Green Refinery® - Biorefinery
- 8Venture® - All nutrients in a sustainable drink
- Blattwerk - Sustainable fertilizer made of biological resources

Range of products

Biofabrik White Refinery®

ENERGY AND FUEL MADE OF WASTE MATERIALS

Decentralised substantial and energetic utilization of problematic waste streams for generating electricity and heat made of fuel, produced from plastic or oily waste. Contrary to big industrial plants, the contact pyrolysis of the BIOFABRIK can be operated right where the waste occurs - in companies, cities and communities worldwide.

Products:

- WASTX Oil - Oil Waste to Energy
- WASTX Plastic - Plastic Waste to Energy
- WASTX PlasticOil - both plants combined
- WASTX Systems - decentralized complete solution including sorting, compact refineries, recycling and burning for waste materials from sea, land and rivers

Biofabrik Green Refinery®

HEALTHY NUTRITION FOR 10 BILLION PEOPLE

BIOFABRIK gains herbal nutrients, among them sustainable amino acids of renewable resources, aiming to solve the majority of the world's nutritional problems. With pasture and field grass the biorefinery exploits a new resource for the food, fertilizer, animal feed, cosmetic and pharma industry. The project is supported by Eco Innovation Programme of the European Union.

Products:

- Biorefinery - Nutrients and proteins made of pasture grass
- Amineon: sustainable amino acids for the nutrition industry

8Venture®

8Venture Ultrafood is a product which guarantees a natural nutrition with a 100% coverage of the daily requirement of all necessary nutrients and simultaneously spares the global resources.

Ultrafood is an unique combination of the world's best superfoods, covers the daily requirement of all vitamins, minerals, proteins and fibres in only one drink and hereby is 100% biological, unadulterated and vegan.

Products:

- Ultrafood - dietary supplement
- 8Venture Food Programme

Blattwerk®

100% BIOLOGIC AND VEGAN FERTILIZER FOR GARDEN AND INDOOR PLANTS

In a special process, Blattwerk is made of pasture grass. Contrary to mineral fertilizer, generated from fossil resources with tremendous effort, it consists of 100% renewable resources.

Product:

- Blattwerk - plant fertilizer

Target groups:

BIOFABRIK addresses many different target groups with its products. Whilst the disposal and energy solutions of the Biofabrik White Refinery® rather address official administrations, cities and communes, as well as companies, the products of the Biofabrik Green Refinery® and 8Venture are more appealing for consumers.

Research & Development:

The BIOFABRIK sees itself as a Think Tank which develops solutions and products, going from the idea culminating in the serial maturity, in-house and also transforms them into profitable and simultaneously carbon neutral business models.

Hereby, only essential key technologies are developed in-house which is taken care of consistently. All secondary technologies and tasks are outsourced to the service providers for the manufacturing, marketing, controlling and other, directly after the final completion.

Milestones:

Since the founding of the BIOFABRIK group in 2011, the business has changed continuously, until it became an important research and development hub for biotechnologies.

2018

With the WASTX Oil there first exists a comprehensive system to holistically and sustainably process the waste oils from any origin, under one roof. Inexpensive, highly automated, easy to operate and instantly ready for use.

WASTX Plastic passes the functionality test in permanent operation and successfully processes marine plastic waste and oil, for the first time worldwide. The serial production is already starting in 2018.

2017

The Biofabrik, American investors, as well as partners from Guadeloupe have merged, aiming to free the biggest island of the French Antilles from the plastic waste. Through the Biofabrik White Refinery, urgently needed energy is produced for the group of islands.

2016

After five years of development time, the prototype of the White Refinery, the first automatic compact refinery of the world, runs by itself and supplies oil made from plastic waste.

The packaging business SchurStarSystems invested in the Biofabrik White Refinery. In the future, the plant is planned to transform the production residues of the main factory into energy and followingly, operate worldwide after a successful testing phase.

The cooperation represents a major step in the fight against plastic waste.

Launch of Blattwerk, an entirely new, completely organic and vegan liquid fertilizer which is produced from pasture grass in a worldwide unique process in the biorefinery.

The EU permits the biorefinery of the Biofabrik Green Refinery to receive more than two million euros of subsidies.

2015

Further development of the White Refinery's batch reactors.

Long-term tests and continuous operation of the batch reactor. It certainly produces oil made from plastic successfully, but instead of the batch method, it was aimed to develop a continuously running reactor system and a significantly smaller size of the plant - with the same throughput. R&D measures were made to enable a continuous filling.

Cooperation with the packaging business SchurStarSystems

Cooperation of Blattwerk with Lebanese fertilizer company

Collaboration with the University Linz, launch of the Green Refinery

The business segment Green Refinery in Blizevedly / Czech Republic gains herbal reusable materials, such as sustainable proteins from renewable resources, aiming to point out ways to a world free from factory farming. The technology concept of the green biorefinery uses the raw material grass to generate lactic acid, amino acids, sugar or minerals. Hereby, the biorefinery develops new biobased base chemicals and energy sources from unused biomass for food, animal feed, fertilizer, cosmetic and pharmaceutical industry.

2014:

Expansion of the technological team of the BIOFABRIK through the takeover of personnel of a robotic company which was in liquidation. The Biofabrik thereby wins a whole string of experts from the area automation technology.

2013:

BIOFABRIK assumes control to transfer the technology of the biorefinery into a serial condition, open up first locations and develop the business model and marketable products.

The polymerisation technology of plastic wastes is advanced in laboratory and technical center scale, fundamental mechanisms are analysed and practicable technical solutions developed.

2012:

Start of the development of an own technology which can transform the plastic waste into energy: BIOFABRIK White Refinery. In the meantime, the business belongs to 100 percent to the BIOFABRIK again.

2011:

Founding of the BIOFABRIK on the 11.11.11 at 11.11 o'clock by Oliver Riedel. In a interdisciplinary team of enthusiasts from engineering, IT, biology and other sciences, he works out sustainable solutions for the big problems for the society and markets them as profitable business models.

A partner reached out to the BIOFABRIK and wants to generate oil from plastic. Therefore, a joint venture was formed.

2010:

Since the selling of Lebensmittel.de, Oliver Riedel has concentrated on developing diverse ideas to find solutions for central social problems. That way, he wants to process grass to a plastic material which is compostable and breaks itself down.

Start of the cooperation with the Johannes Kepler University in Linz which operates a demonstration plant of the biorefinery which, for instance, can produce plastic material made from grass. Ever since, the Biofabrik Green Refinery Ltd works on the global commercialization of the technologies.

2009:

Predecessor of the BIOFABRIK was the Victeos Group, an investment company for green investments and factoring which was found by Oliver Riedel in 2009.