

## Retort for the production of barbecue charcoal and biochar from local waste wood



### Olis coal

*Barbecue charcoal often reaches consumers via long transportation routes and from dubious sources. Locally produced charcoal from scrap sawmill or landscape wood would be much more ecological. A small retort with a capacity of 1m<sup>3</sup> of wood and complete exclusion of oxygen can be used to convert local wood into high-quality charcoal. For this purpose, wood cuttings from a local sawmill or poor quality hardwood are manually fed into the retort and converted into coal of the highest quality over 4 - 8 hours. This can generate additional income on a forestry operation or a part-time farm and also reduce the burden on the environment. The waste heat can be used via a heat exchanger to heat living space or for drying processes, e.g. in the timber industry.*

In 2018, Oliver Reinhard, a young forest science student, discovered that most barbecue charcoal bought in Switzerland comes from faraway countries such as Poland or Namibia.

The sources are often obscure and the quality inferior, meaning that a lot of smoke and harmful exhaust gases are produced during combustion.

Oliver has solved the problem by producing his own charcoal from waste from a neighboring sawmill and using a retort with complete exclusion of oxygen.

This locally produced barbecue charcoal sells well to sustainability-conscious customers and barbecue professionals.

## DETAILS

---

### ORIGIN OF WOOD

Industry

### TYPE OF WOOD

Recycled or waste wood

### KIND OF WOOD CONCERNED

Residual and waste wood

### IMPACT ON ENVIRONMENT & BIODIVERSITY

Reduces overexploitation in forests abroad.

Reduces transportation.

Avoids harmful exhaust gases.

### INCOME EFFECT

higher margin

### EXPLOITATION POTENTIAL

--

### HUB

Central-West Hub

### ECONOMIC IMPACT

Added value for the local wood value chain

### SPECIFIC KNOWLEDGE NEEDED

### MOBILIZATION POTENTIAL

> 20'000 m<sup>3</sup> for Switzerland

### SUSTAINABILITY POTENTIAL - VALUE

Very Positive

### EASE OF IMPLEMENTATION

Retort must be purchased. Coal production is simple.

### EASE OF IMPLEMENTATION - EVALUATION

Medium

### KEY PREREQUISITES

--

### TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

Workshop 2: business idea creation (T2.2)

### JOB EFFECT

Generates local employment

### COSTS OF IMPLEMENTATION ( EURO - € )

30000

none

## MORE DETAILS

---

### CHALLENGE ADDRESSED

6.- Grow the forest-based bioeconomy through circular use and value-added products

### KEYWORDS

Charcoal upcycling retort

### COUNTRY OF ORIGIN

Switzerland

### DOMAIN

Products, markets, trade  
Forest-based bio/circular economy

### DIGITAL SOLUTION

No

### SCALE OF APPLICATION

Regional/sub-national

### TYPE OF SOLUTION

Circular, bio-based products

### INNOVATION

Yes

### START AND END YEAR

2023 - 2025

## CONTACT DATA

---

### OWNER OR AUTHOR

Olis Kohle

Oliver Reinhard

hoi@olis-kohle.ch

<https://oliskohle.ch/de/home>

### REPORTER

BFH-HAFL

Thür

[peter.thuer@bfh.ch](mailto:peter.thuer@bfh.ch)

## REFERENCES AND RESOURCES

---

### MAIN WEBSITE

<https://oliskohle.ch/en/home>

### PROJECT WEBSITE

<https://oliskohle.ch/en/pages/ueber-uns>

### PROJECT REFERENCE

Barbecue charcoal and biochar

### RESOURCES

--

LOGO OF BEST PRACTICE

LOGO OF MAIN ORGANIZATION



PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

POST DATE

3 Jan 2024



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

