

HUT & STIEL



Mushrooms from coffee grounds - Circular economy in the heart of Vienna

Hut & Stiel is a Vienna-based company that produces edible mushrooms using recycled coffee grounds, thereby implementing an innovative model of urban circular economy. The company utilizes local side streams from the gastronomy sector to produce high-quality food in a resource-efficient and regional way.



Relevant Resources in the Loop

- **COFFEE GROUNDS** - collection and use as a nutrient substrate for mushroom cultivation (main substrate)
- **EDIBLE MUSHROOMS** - (e.g., oyster & king oyster mushrooms, shiitake) as high-quality food output
 - Further processing into fresh and value-added products marketed regionally
- Return of the used **MUSHROOM SUBSTRATE** to the natural cycle through composting as fertilizer



Methods & Approaches of Circular Economy

Hut & Stiel collects coffee grounds from Viennese coffee houses, gastronomy businesses and other sources and uses them as a nutrient substrate for cultivating edible mushrooms. Production takes place at the Kleine Stadtfarm, allowing existing infrastructure to be used efficiently. The harvested mushrooms are marketed regionally as fresh products or, in the event of a surplus, processed into long-lasting food products. In addition, Hut & Stiel offers mushroom grow kits for home use, enabling decentralized mushroom production using recycled resources. The used substrate is then composted and returned to the natural cycle as fertilizer.

Impact & Mehrwert

Hut & Stiel demonstrates how organic side streams can be transformed into high-quality food products. This creates a sustainable model of urban agriculture that connects local production and consumption. At the same time, fresh regional mushroom products are made available, alternatives to meat consumption are promoted, and awareness of and demand for climate-friendly diets are strengthened.



Ecological Benefits

- Utilization of coffee grounds as a biogenic side stream
- Resource-efficient food production on a small footprint
- Reduced CO₂ emissions through local production
- Return of residual substrate as compost & fertilizer
- Strengthening regional, circular food systems



Social Benefits

- Cooperation with local gastronomy & businesses
- Raising awareness for circular economy & sustainable nutrition
- Knowledge transfer through workshops & educational activities
- Promotion of regional, transparent food production
- Strengthening sustainable consumption practices



Economic Benefits

- Value creation from locally available side streams (coffee grounds)
- Low raw material costs through the use of existing resources & regional marketing with short supply chains
- Diversified product portfolio with additional revenue streams
- Innovative business model in the circular bioeconomy