

Business Model Case Study 3: Olive kernels

Soldebre in Catalonia, Spain

Introduction

Soldebre is a cooperative that was founded in 1995 by merging three cooperatives active in the agricultural- and food processing sectors of citrus, nuts and olives as well as supplying farmers with fertilisers, crop protection products, fuel and services including credit, insurance and advice. The SME has ca. 1400 members and employs 40 permanent members of staff. In general, the company strives for economies of scale to enable low price value propositions, whilst maintaining product quality. Aiming for growth through consolidating market positions in Catalonia and Europe and expansion into new markets, they are already leading the olive oil market in Catalonia. Owning a mill with multiple processing and packaging lines, 420 tonnes of olives can be processed each day. Harvests vary from 10,000 up to 18,000 tonnes annually, resulting in 1,500-4,000 tonnes of olive oil. About 75% of the harvested weight are wastes and by-products such as leaves, soil, stones and kernels; all of which have recycling and recovery routes in place. The olive kernels are crushed and used within the processing facilities and are also sold to animal farms to generate heat.

Circular business model canvas

Soldebre's business model creates multiple types of value from olive kernels. By using the kernels as biofuel, resource efficiency is increased and carbon benefits are realised, whilst lowering the fuel costs for the olive mill and secure an additional revenue stream from sales of biofuel to animal farms.

Drivers and barriers

The global olive oil market is highly competitive. Additionally, the sector is faced with various environmental challenges. It is important for the long-term resilience of the sector to become more resource efficient and create increasingly circular supply chains, opening new commercially attractive pathways through diversification of business models such as with the creation of value from wastes and by-products as demonstrated here.







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Circular business model canvas: Soldebre, Olive kernels				
Key partnerships Growers of olives who are members of the cooperative, with an interest to create as much value from their produce as possible. Government, providing regulation and incentives in direct collaboration with the olive sector to improve its long-term prospects. Logistics companies to transport the olive oil.	Activities to create, distribute, sell and recover values Processing olives into olive oil, package it, and sales to wholesalers, distributors and restaurants. Processing of wastes and by- products, incl. drying and crushing of kernels used on-site and distributed to animal farms.	Value added proposition, e.g. economic, technical, social and /or environmental value of product or service Olive kernels are used at Soldebre's facilities and sold as fuel to generate heat in animal farms. This has a number of benefits for the customer, such as: Reducing fuel costs with low price alternative. Environmental benefits through usage of low-carbon fuel.	Types of customer relationshipsCustomers from animal farms collectthe biofuel from the olive mills whenthey need it. At the mill they getpersonal assistance to buy theproduct.asCommunication, distribution,sales and other channels used to	<u>Customer</u> <u>segments</u> Internal usage at Soldebre's food processing facilities. Animal farms.
	Physical, financial, human and/or intellectual <u>assets</u> needed to create, distribute, sell and recover values Olive mill. Membership database.		reach customers Soldebre sells the biofuel directly through their own channels. Customers bring their own means of transport to collect the biofuel for use at their animal farm.	
Types of costs to create, distribute, sell, and recover value (e.g., financial, social and environmental costs)Type requiThe cooperative has a cost-driven business model focused on achieving economies of scale; the business model for using olive kernels for energy supports further cost reductions and increases diversification widening the scope of the model. Additional costs to offer the olive kernels as biofuel are negligible; fixed and variable costs are associated with the production of olive oil and processing of olive pomace oil.Type requi			Des of <u>benefits</u> for your business and the mechanisms Juired to capture them st reduction for Soldebre's processing facilities. Insaction revenues from sales of olive kernels. reased resource efficiency and carbon reductions through use waste product.	
Costs and benefits created and shared in the wider circular supply chain This is a short supply chain from olive growers, to the cooperative and the animal farms using the olive kernels. The realised supply chain offers the opportunity to avoid other types of costs and problems. With the use of olive kernels as a low-carbon biofuel, environmental impacts are reduced such as achieving a reduction in carbon emissions by using less fossil fuels; Moreover, additional revenues are generated for the cooperatives and their members, creating a more steady income for olive growers which strengthens the local economy. The supply chain could possibly be further extended by using the ashes from combustion of the olive kernels in soil				

Context: Wider costs of- and benefits to the economy, society and/or environment

The olive sector has faced environmental challenges in terms of changing weather patterns, plagues and soil degradation. Increasingly strict environmental regulations are driving change and the sector is supported through government lending support and tax reliefs. Moreover, competition outside Catalonia and Europe has increased. Aside from these pressures, demand for sustainable fuels is growing. Cost reduction and diversification of products support the resilience of this sector and the livelihoods of rural communities.

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conditioners, to feed new growth cycles of olives or other crops.