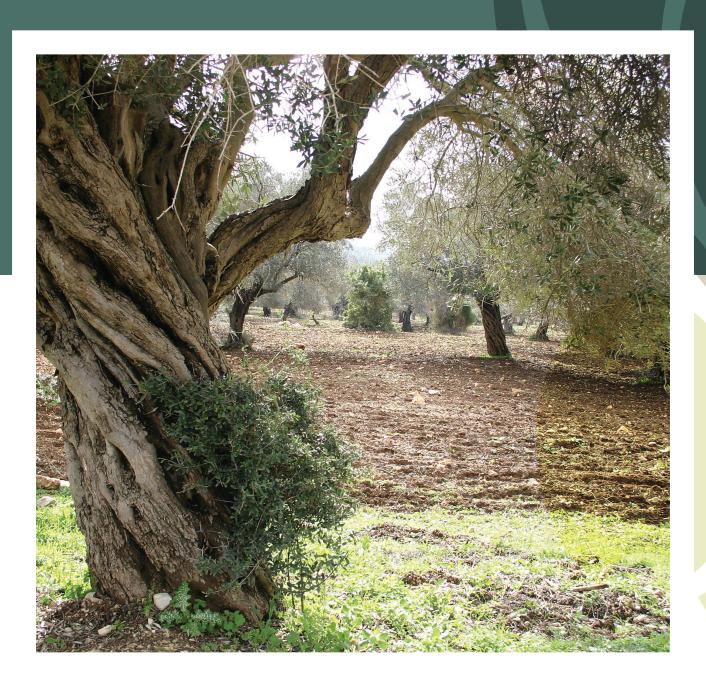
ATRANSITION OPPORTUNITY FOR THE LOCAL ECONOMY:

THE OLIVE SECTOR IN MILAS / MUĞLA / TURKEY



This report has been written by Climate Action Network (CAN) Europe, 350 for Climate Association and Milas City Council with the support of Dr. Ummuhan Gökovalı and Doctor Lecturer Mustafa Terzioğlu.

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Climate Action Network (CAN) Europe, is Europe's leading NGO coalition fighting dangerous climate change. With over 170 member organisations active in 38 European countries, representing over 1.500 NGOs and more than 47million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe. For more information https://caneurope.org/

350 for Climate Association, gets its name because the safe upper limit for the amount of carbon dioxide in the atmosphere should be 350 parts per million (ppm). 350 for Climate advocates that the use of fossil fuels, especially coal, which threatens public health, nature and climate, should be terminated as soon as possible for livable earth. In this context, the institution, which advocates a fair transition from fossil fuels to renewable energy sources, carries out various studies in this direction. For more information: iklimicin350.org

Milas City Council was established in 2009 to solve the problems of Milas with democratic participation at the local level. 110 institutions/organizations are members of the council and carry out their work in the assemblies on women, youth, urban history and memory, urban aesthetics, ecology and environment, traffic safety, historical and cultural heritage.











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SUMMARY AND OVERVIEW

The scope and aim of the study

The Milas county of Muğla is one of the prominent regions in Turkey in terms of olive cultivation and olive oil production. Milas has been home to many people for over five thousand years with its favourable climatic and natural conditions. Olive cultivation and olive oil production have been the primary agricultural activities in the region since the Carian Civilization.

Turkey ratified the Paris Agreement in November 2021, and the President of Turkey has since announced that Turkey aims to have net zero emissions by 2053. In this context, Turkey needs to act and thus needs a trajectory for its transition to a low-carbon economy. The transition to a carbon-neutral economy requires a regional level planning approach as well as a national scale. This study evaluates the economic transition potential of the Milas county of Muğla as an example for an economic transition on a regional scale. In the desk research and field survey, the olive sector emerged as a prominent option for transformation in Milas. The aim of the study is to explore the possibility of developing an olive based local economy in Milas, particularly improving the conditions of Milas olive oil, which received geographical indication (GI) registration from the European Union (EU) in 2020. Employment, tax revenues, added value, investment needs, etc. of olive-based investments were calculated in this context.

This study consists of three parts. In the first part, olive and olive oil production in the world, in the European Union (EU), and in Turkey are analysed. "Tuscany Olive Oils" from Italy, "Sierra de

Segura Olive Oils" from Spain, and "Gemlik Olives" and "South Aegean Olive Oils" from Turkey are examined in detail, as examples. In the second part, the findings from in-depth interviews with the main players in the olive and olive oil sector in the Manisa-Akhisar, Balikesir-Edremit, and Muğla-Milas districts are assessed. In the third part, based on the findings obtained in the previous parts, to what extent Milas olive oil, which has a geographical indication (GI) registration from the EU, and a local economy centred around olives, can create additional economic contributions such as employment, income, export and tax revenue, with a better marketing and GI organisation, and new olive and olive oil soap based products, is calculated. Finally, policy proposals are presented.

Calculations based on the olive sector in Milas

For Milas, there is a significant regional economic loss in that while harvests in the region yield a total of one hundred thousand (100,000) tons of olives annually, 20% of it is exported outside the region as unprocessed olives, without contributing further to the regional economy. There would be more employment opportunities in Milas with the utilisation of the production volume of twenty thousand (20,000) tons of olives, in both olive processing facilities, and olive oil production facilities in the region. In line with this, it is possible to make use of the twenty thousand tons of olives by:

· employing five thousand tons of it in olive processing (with 50 olive processing facili-







- using the rest of the twenty thousand tons in olive oil production (with 15 olive oil facilities),
- using 500 tons of the olive oil, which has been produced, in soap and shampoo production (with 5 soap-shampoo production facilities).

Establishing new olive oil facilities may only be possible in the long term, due to the likelihood of existing oil mill plants operating with idle capacity. The employment impact of the increase in the current capacity utilisation can also be expected to emerge indirectly, and in the long term. It would be possible to directly increase employment in line with olive processing, soap and shampoo, olive pomace, and accommodation facilities to be established in the region. When examined in-depth, the tourism and industry opportunities linked to olive and olive oil have the potential to create employment for 650 people in the short term and 755 in the long term, with new investments. When employment opportunities are evaluated in terms of the quality of the jobs to be created in the long term, it is notable that of the 755 people, 525 are to be employed as unskilled laborers, and 230 as skilled laborers.

Olive processing and soap-shampoo facilities are more suitable for full-time working as opposed to olive oil facilities. Therefore, employment, wage payments, and expenses should be taken into account as full-time, i.e., 12 months. It can be assumed that olive oil facilities operate seasonally, i.e., 6 months. In this context, it is estimated that there would be a total of 31.8 million Turkish Lira in wage payments in the newly established facilities within one year, and spending of these payments would create a multiplier effect of approximately 72.8 million Turkish Lira (the figures are based on wage payments in Turkey in 2021). The wage payments are included in the economic cycle as expenditures by way of a multiplier mechanism. Nowadays, since the marginal propensity to consume in Turkey is 0.75^[1] and the tax burden is calculated as 0.25^[2], the multiplier coefficient in Turkey is calculated as approximately 2.28.)

When the employment rate is analysed in terms of gender, it is notable that the share of female employment is higher than that of male employment, particularly in soap-shampoo, olive processing facilities, and the accommodation businesses. While the share of female employment is one-half on average in olive processing

Type of Facility	Number of Facilities	Number of Employees per Facility	Total Number of employees	Operational Months per Year	Total Wage Payments (per month, Turkish Liras)	Total Wage Payments (per year, Turkish Liras)	Multiplier effect
Olive oil	15	7	105	6	489,777	2,938,662	6,700,149
Olive processing	50	10	500	12	1,931,475	23,177,700	52,845,156
Soap and shampoo	5	16	80	12	285,425	3,425,094	7,809,214
Olive Pomace	3	10	30	6	121,955	731,732	1,668,350
Boutique hotel	2	20	40	12	131,081	1,572,967	3,586,365
Total	75		755		2,959,713	31,846,156	72,609,235

facilities, it is calculated as two-thirds on average in soap-shampoo facilities, and accommodation businesses. The establishment of olive processing and soap-shampoo facilities could create an increase in women's employment, as well as a direct employment increase.

According to the information gained in field visits about the estimated investment costs of olive and olive oil facilities, a small-scale olive oil production facility costs around 6 million TL, a small-scale olive processing facility 2 million TL, and a soap-shampoo facility costs around 10 million TL (the investment costs are calculated based on figures from 2021).

In the scope of the study, obstacles facing the olive sector growth in Milas are investigated and the outcomes are as follows: Findings from the field study in Milas indicate that there are shortcomings when it comes to the care and maintenance of olive trees, and ineffectiveness in the region in achieving its full potential in table olive processing. The number of trees in Milas has still not been identified via a geographical information system. Milas is at the very beginning of its olive cultivation, olive oil, and olive-related production journey in comparison with Akhisar and Edremit. Therefore, Milas has great economic potential when it comes to olive cultivation, olive oil, and olive-related production, which has not been fully realised yet.

The potential added value of the EU geographical indications to olive oil sector

In terms of economic growth, increasing the price and amount of EU GI registered olive oil produced

in Milas to reach international levels, as well as increasing the number of olives used in the current production processes, would be beneficial to the region's economy. In the scope of this study, Toskana Olive Oil has been chosen as an example and the target for Milas GI olive oil is set to be 4% of the total production. If production rates and prices are compatible with the targeted international levels, it is possible to assume that GI registered production could increase to 800 tons and that the price could rise to an average of 75 TL (with respect to prices from 2021). Hence, the value created by GI-registered olive oil may increase from 4.5 million TL to 60 million TL. In addition, this GI-registered olive oil has a high potential for exports by way of international marketing and advertising. At the moment, Milas' export rate of olive oil is very low. That said, its potential could be realised with a well-organised union of producers mainly focusing on GI-registered Milas olive oil, and there is therefore the possibility of gaining a significant export income. This potential could be expanded further by increasing the share of olive oil produced in accordance with the production conditions of the geographical indication registry.

Culinary tourism opportunities based around olives in Milas:

Around the world, olives and olive oil are considered a part of historical and cultural richness, and go beyond being agricultural and manufacturing industrial products, forming a part of tourism activities. For example, many national and international tourism activities are carried out under the name of "olive oil tourism", "olive oil route" in regions such as Italy-Tuscany^[3] and Spain-Sierra de Segura^[4] which are studied in this report. Olive oil

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tourism emerges as a newly developing agritourism activity, which is based on activities related to olive cultivation and includes gastronomy, nature, and cultural elements[5]. Culinary tourism, focused on olives, gives tourists the opportunity to experience the full olive process, from harvesting olives to the sales of olives and related products. Activities include tours to olive groves and involve people in the olive harvest, demonstrating the process of making olive oil, tasting courses, classes where cooking with olive oil is taught, and demonstrations of soap-making from olive oil. In addition, visiting historical olive oil production facilities, and visiting olive and olive oil museums, [6] are also part of olive-based tourism. In recent years, particularly since the pandemic, people have become interested in spending more time in nature. This has created a demand for thematic tourism. This new understanding of tourism, which has come about in this framework, can invigorate the economy of the region by creating new businesses such as B&Bs, sports centres, and restaurants, as well as creating a need for transportation and thus a demand for car rental businesses.

With 27 ancient cities located on its borders, Hecatomnus Mausoleum and Sanctuary (2012) and Medieval City of Beçin (2012) located in the ancient cities of Milas, both of which are on the UNESCO World Heritage tentative list^[7,8], and with its five-hundred-year-old cultural values and lifestyles still alive in the Çomakdağ Kızılağaç neighbourhood, Milas, along with its 120 km long coastline and bays, as well as other important culture and tourism options, has the potential to use the opportunity for tourism activities around olives and olive oil.

Harvest festivals have been held in Milas every year in October since 2014. Tourism activities in the region could be revived by better promoting this festival in other tourism regions of Muğla. During the harvest festivities, daily and/or several-day tours that offer accommodation could be organised from the touristic regions close to Milas, promoting both the geographical and natural beauties of Milas, and the GI registered olive oil. As well as this, thanks to the authentic on-site tourism experience, other businesses (B&Bs, restaurants, souvenir shops)

could be revived. In this way, it would be possible to increase economic contributions as general income and employment would rise.

The Olive Tree Route, which was established in Greece in 1999, was officially recognised by UN-**ESCO** as the International Cultural Route for Intercultural Dialogue and Sustainable Development in 2003, and as the Council of Europe Cultural Route by the Council of Europe in 2005^[9]. Turkey is part of this route, though Turkey needs to determine its own potential olive oil route, and to submit it to the European Commission to certify it, in order for it to be recognized on an international level[10]. In this framework, Milas and its perimeters should be included in this olive route so that Milas could gain recognition on an international level. Olive and olive oil based tourism includes olive oil businesses, sales stores, olive oil museums, tourism businesses, training, workshops, and festivals. The main contributors in the development of olive-based tourism are olive producers, local people, local governments, tourism operators, ministries, and educational institutions [5].

Milas is a region suitable for olive/olive oil tourism for several reasons. Bafa-Kapıkırı could offer olive hiking routes, camping, and photo-safari routes in relation to olive tourism. The Kıyıkışlacık, Kazıklı, Selimiye, Çomakdağ, Kızılağaç, İkiztaş, Ketendere, Kapıkırı, Sakarkaya, and Çukurköy villages are also suitable for establishing hiking routes. In addition, it would be possible to name a hiking route as an "Historic Olive Tree Hiking Route", as there are historic olive trees in Milas.

In this context, there is a need for a plan for Milas that will reveal the steps of a regional transformation that primarily focuses on olive and olive oil tourism. This plan should be prepared holistically whereby different sectors such as tourism, industry, and agriculture complement and feed each other, and in a way that includes Milas' citizens.

A comparison regarding the subsidies given to the coal plants in Milas

If seventy new small-scale facilities based around olives and olive products (olive oil, soap) were to be established in Milas, it is calculated this





would have a total cost of around 240 million TL. The employment potential of this investment would be 685 jobs. In 2021, the amount of public subsidies given to the Yeniköy and Kemerköy Thermal Power Plants, which are in operation in Milas, was 260 million TL, solely in terms of capacity mechanism subsidies. By transferring only one year of the capacity mechanism subsidy provided to the thermal power plants in Milas to the olive industry, almost all small-scale investments could be made within a year. This new investment in the olive industry could make it possible for a large portion of workers in the Milas coal mining industry (around 800 people) to transfer to new jobs within the olive industry.

This study is a preliminary work that shows a regional transition, compatible with Turkey's 2053 net zero emission target, is possible and feasible, by displaying the potential of the olive sector alone in Milas. By planning cross-sector local investments that would create new employment opportunities in tourism and renewable energy sectors, it appears possible and feasible to shift those employed in the coal industry in Milas (about 1800-2000 people) to work in other industries. It is of utmost importance for a just transition to a climate-neutral economy that new employment opportunities support the wellbeing of the local population, prioritise unroot-

ing of poverty, and are nature-friendly.

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[2] Ministry of Development (2018). 11th Development Plan, Growth Oriented Taxation, Ankara.

[3] For more detail: https://www.visittuscany.com/en/theme/wine-and-olive-oil-roads/, and https://www.arttrav.com/tuscany/olive-oil-tours-in-tuscany/, 10.08.2021.

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[6] See https://www.internationaloliveoil.org/olive-world/ olive-museums-routes/, for olive oil museums around the world, 10.08.2021. 26th of November is proclaimed as World Olive Tree Day.

[7] https://mugla.ktb.gov.tr/TR-158975/gecici-listede-olanlar.html, 08.10.2021.

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