

#### KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW



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#### FOREWORD TO THE VLR PROGRESS REPORT

KARATAY



HEREBY, WE BELIEVE THAT WE HAVE DONE OUR PART AS KARATAY MUNICIPALITY IN REFLECTING 17 GLOBAL SUSTAINABILITY GOALS AT THE LOCAL LEVEL AND THAT WE HAVE DONE IMPORTANT WORK IN THIS CONTEXT. WE ADOPT AN APPROACH TO CONTRIBUTE THESE GOALS WITH OUR EVERY STEP AND SERVICE AND EVEN EXCEED THESE GOALS IN MANY SERVICES. The 2030 Agenda for Sustainable Development, agreed upon by world leaders at the United Nations (UN) Sustainable Development Summit in 2015, was adopted with the signatures of 193 countries. The 2030 Agenda, which recognizes the elimination of poverty as a part of sustainable development and combines combating climate change with economic and social development, is a continuation of the Millennium Development Goals, implemented in 2000, and was prepared as an agenda that further advances these goals.

The 2030 Agenda aims to involve all societies in reducing poverty and increasing prosperity worldwide, protecting cultural values, and preventing social and environmental damage.

As Karatay Municipality, we, being aware of the importance of working in line with the United Nations Development Goals, started a restructuring. After forming our project team, we have made the necessary arrangements in the administrative structure in order to achieve sustainable development goals, and we continue to do so. As Karatay Municipality, our mission includes the following statements: "a city that has completed its urban transformation and has become a centre of attraction with its historical and cultural texture ... " and our vision includes the following statement " ... within the framework of a service approach of heartfelt municipality that is sensitive to the environment and cultural texture ... ". Standing behind our mission and vision and getting our strength from the ancient tradition of the past, we pay the utmost attention to protecting the environment that we borrow from the future. For a more livable and sustainable ecology, we have undertaken numerous projects to clean water, safely dispose of liquid and solid wastes and recycle wastes, and we continue to do so in the coming years. We attach particular importance to Zero Waste, which is an important part of these targets. In this regard, we held a "Zero Waste Collection Competition" in our schools. We put recycling bins inside our municipality service building; we created "Waste Collection Centres" at certain points in our district. Our teams did not leave any house, workplace, school or public institution unreached in our district. While drawing attention to Zero Waste with all these exemplary works, we have

succeeded in creating a serious awareness in our society and we proceed on our way with the same energy.

We also have important works in order to create a green environment all over Karatay. With Turkiye's largest Karatay Lavender Garden, Mevlana Rose Garden, dozens of new green belts, and large and small neighborhood park projects, we endeavor to entrust a different Karatay to our young generations who are our future. We have established two solar power plants and beyond that, we are also equipping the new market areas we have brought to our district with solar energy panels. In this way, we both protect our world and meet our energy with natural methods.

We also carry out many activities in the field of Social Municipality. For example, we touch our people with many projects in cooperation with our governorship, district governorship and municipalities. We can now meet the hot meals of 2,500 citizens in need daily and up to 10 thousand in emergencies due to the new soup kitchen building we have brought to Karatay. Similarly, we continue to be with our fellow citizens in the "Compassion Houses" of Karatay Municipality.

Education is one of the most important issues for us, therefore we make significant investments in education. We have brought 6 educational facilities to our neighborhoods in need of schools only in the last four years and the construction of two schools is ongoing.

Hereby, we believe that we have done our part as Karatay Municipality in reflecting 17 global sustainability goals at the local level and that we have done important work in this context. We adopt an approach to contribute these goals with our every step and service and even exceed these goals in many services.

Within the scope of the Karatay Voluntary Local Review, we consider the 2030 vision and agenda of the cities extremely important. I would like to take this opportunity to thank all our stakeholders who contributed to the Karatay Sustainability Report, which we prepared on a voluntary basis and excitedly.





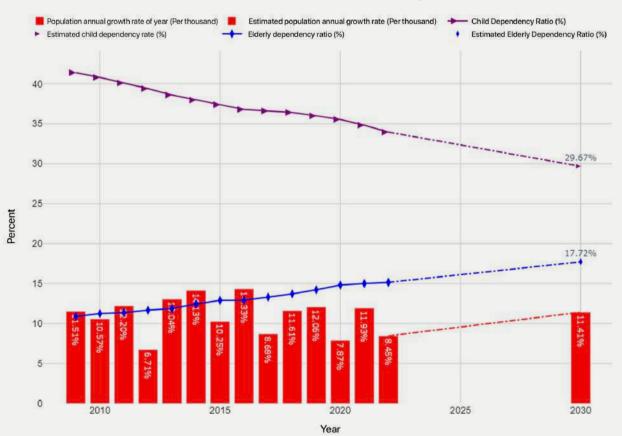
#### **ABOUT KARATAY**

Karatay is one of the central districts of beautiful Konya and was established by law numbered 3399 dd. 20/06/1987 and the decision that was published in the Official Gazette numbered 19500. It started its actual operations in 1989. The name Karatay comes from Celalettin Karatay, one of the famous Anatolian Seljuk state viziers. The word Karatay is a Turkish word that means "strong, powerful companion". Celalettin Karatay rose in the palace and won the great respect of the people due to his long-term duty as atabeg after his Gulamhane (Ghulam School) education. He had got many works built throughout the country, especially the Karatay Madrasa in the Konya City Center. Karatay, the center of historical knowledge since ancient times, has become one of the most important settlements where artifacts from the Anatolian Seljuk, Principalities, and Ottoman Empire periods existed together.

The Metropolitan Municipality Law was enacted with the Local Administrations Law No. 6360, and the neighborhood structures of the districts changed. Accordingly, the number of neighborhoods in Karatay District has become 80 due to the town municipalities and villages that were closed in accordance with the law and turned into neighborhoods. The district's surface area is 2,746,440,000 m<sup>2</sup>, and its altitude is 1,016 meters.



Karatay is located between 38°15' and 37°37' Northern latitudes and 32°27' and 33°22' Eastern longitudes. Karatay District, which has a very large land area, has a population of 370,927 people as of 2022, and it is the district with the fastest population growth in Konya City, with a population annual growth rate of 23.87 per thousand (0%). While the age dependency rate is around 15%, it is estimated to be around 18% in 2030. Nevertheless, while the age dependency rate for children will be 34% by the end of 2022, it is seen that it has decreased to 29% in the forecast analysis. Although the district's population growth rate is quite high, the increase in the total age dependency ratio indicates that the elderly population will increase and the child population will decrease (Graph 1).



#### **Population Growth Rate and Dependency Rates**

Graph.1 Karatay district population annual growth rate, children and total age dependency rates (%)

Karatay is located to the east of Konya city center and is approximately 10 kilometers from the city center. The north of the district is surrounded by the Konya Plain. The southern parts are a mountainous region extending to the Beyşehir Mountains. Salt Lake is located in the east of the district. Karatay District is one of the driest districts of Konya city and generally has a steppe climate. It is hot and dry in the summer and cold and snowy in winter. Karatay District is located in the east of Konya city center and borders many districts of Konya. The neighboring districts of

Karatay are as follows:

- Meram District in the north
- Selçuklu District in the West
- Ereğli District in the south
- Akşehir District in the east

Salt Lake is also located on the eastern border of Karatay, and the district borders Afyonkarahisar and Ankara Provinces.

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### <u>KARATAY</u> <u>THE CITY OF RUMİ</u>

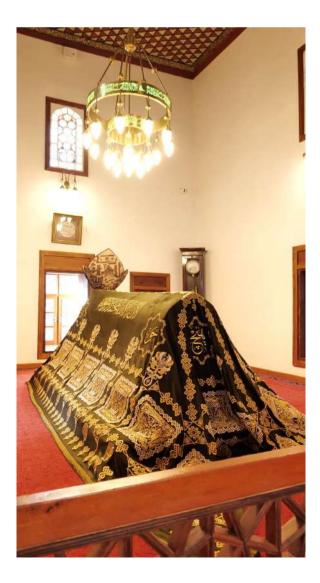
The Mevlana (Rumi) Tomb and Museum are located in the Karatay district of Konya. The museum, which hosts millions of Rumi lovers every year, is considered as the most visited museum in Turkey. Official data states that about 3.5 million people visit Karatay annually on this occasion. Karatay holds the distinction of being an important center with its day-to-day increasing tourism potential.

Mevlana Celaleddin Rumi's real name is actually Muhammed Celaleddin. Mevlana and Rumi are both names given to him later. The name "Mevlana", which holds the definition of "our Master", was given to him during his younger ages in Konya. This name, which has become a symbol, has been used by those who appreciated Mevlana after Shams Tabrizi and Sultan Veled. The name "Rumi", on the other hand, means Anatolia. Mevlana is known as Rumi due to the fact that he lived in Konya, which was a province of the so-called Diyar-I Rum country located in Anatolia in past centuries, for a long time and due to the fact that he spent most of his life there. However, Mevlana's birthplace is Belh, which was a great Turkish cultural center in present-day Afghanistan. He was born on September 30th, 1207.

Eflaki, the famous scholar of religion and astronomy, stated in his mention about the writing and completion of the Masnavi, also known as one of the most influential works of Sufism, commonly called "the Quran in Persian", that: "Mevlana consistently sung the Masnavi whenever he sat, bathed or moved in serenity and excitement, calmly in motion with the charm of Çelebi Hüsameddin, the sultan of noble people. "Mevlana would sometimes even continue from evening until dawn" according to Eflaki. "Çelebi Hüsameddin would simultaneously write it and read it all aloud to Mevlana after having written it down. When the volume was completed, Çelebi Hüsameddin would review the couplets and make the necessary corrections and read them again." The Masnavi, was carefully written between 1259-1261 and was completely finished between 1264-1268.

# KARAATAY the city that brought Shams Tabrizi and Mevlana Celaleddin Rumi together





Shams Tabrizi was born in 1186 in Tabriz. His name is Mohammed. He was mostly known by the names Shamseddin, Shamsul-hak ve'ddîn, Shams and Shams Tabrizi.

The Shams Tabrizi Tomb and Masjid, located in a large park in the east of the Konya Alaeddin Hill, are adjacent to each other. The tomb was designed in a classical Seljuk cupola type. It is covered with a lead roof, which was covered later, and there is a large sarcophagus under the dome, which is considered to be the body of Shams Tabrizi. The Shams Tabrizi Tomb and Masjid, which has an enormous important place in the intellectual life of Mevlana Rumi, is one of the most visited places in Konya.



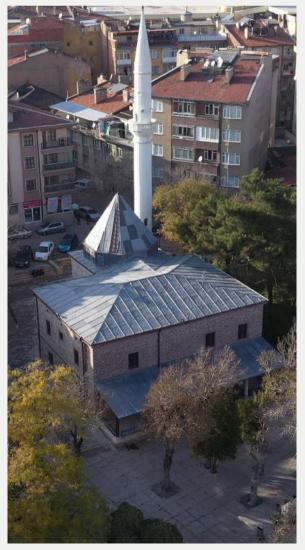
Shams, who attracted attention with his talent in the education of spiritual sciences at a young age and became a follower of Ebubekir Sellaf from Tabriz after his education in religious sciences, tried to get inspiration from various of spiritual sheikhs he had heard of, and therefore traveled around the land. Since he traveled a lot, he was called "Vagabond Shamseddin, Flying Shams" while the sect and spiritual verity sages in Tabriz named him as "Kamil-i Tabrizi".

It is believed that after Shams Tabrizi prayed to be "introduced to his saint" he was told to "become a fellow of a saint" in his dream. However, in a different dream, he was told that his saint was in Anatolia but that it was too early to meet him. Therefore, it is said that Shams went to Anatolia after this dream, where he later would meet Mevlana.

After settling in Konya with his family, Mevlana Celaleddin Rumi decided on visiting Aleppo and Damascus to complete his spiritual education. He was about thirty years at that time.

One day, while passing the crowded bazaar of Damascus, a completely unusual dressed person all suddenly says: "Oh securer of the universe, let me kiss your hands" and then all of a sudden clings to Celaleddin Rumi's hands and starts kissing them passionately. This mysterious person later on got lost in the crowd. Celaleddin Rumi turned extremely surprised by this sudden event and got astonished about what happened.

Years later, Mevlana Celaleddin Rumi came across this mysterious person, he had seen before, when he was having a talk with his students in Konya. This person turned out to be Shams Tabrizi, who later also joined to Rumi's conversation with his students.









# <u>KARATAY</u> <u>THE INHERITOR OF</u> <u>GREAT HISTORY</u>

Karatay comes into prominence with many historical buildings within its borders. Important artifacts from the Anatolian Seljuk State and the Ottoman Empire eras continue to exist to a large extent and invite their visitors to a historical journey in Karatay.

#### SELIMIYE MOSQUE (SULTAN SELIM MOSQUE)



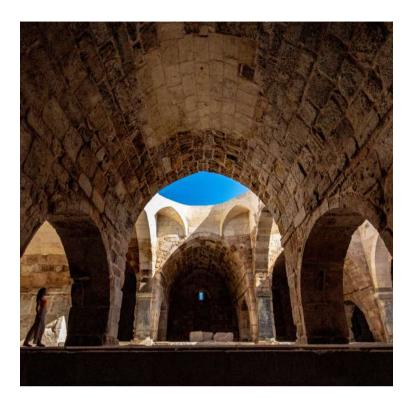




The Selimiye Mosque is located next to the Mevlana Museum. Its construction started in 1558 during the Governorship period of Sultan Selim and was completed in 1567. Selimiye, is one of the most beautiful examples of classical Ottoman architecture that can be seen in Konya. It resembles the Fatih Mosque in Istanbul in terms of the architecture. The space covered with a central dome was enlarged from one side with a half-dome structure. The seven-domed narthex and the interior of the mosque, which has two <u>minarets, are</u> decorated with hand-drawn artwork.

#### ŞERAFEDDIN MOSQUE

Şerafeddin Mosque was built by Sheikh Şerafeddin in the 12th century. The mosque, which got destroyed over time, was first repaired by Karamanoğlu Ibrahim Bey in 1444, and then rebuilt by Mehmed Çavuşoğlu Memi Bey in 1636. The body of the mosque is covered with a large dome made of cut stones. The main dome, which is held by ten beams, is supported by a half dome in the south. The interior of the mosque is decorated with calligraphy samples and hand-drawn embroidery. Besides, the marble-inlaid pulpit and altar are exemplary artworks. The minaret of the mosque, which also has a seven-domed narthex, was added later. The Sheikh Serafeddin Tomb, located on the south of the mosque was destroyed at the beginning of the 20th century. However, the Regional Directorate of Foundation rebuilt it in 2010.





#### OBRUK INN AND LAKE

KARATAY

Obruk Inn, which is located nearby the Konya-Aksaray Highway in Karatay dates back to the 13th century. The Kızören Sinkhole, which consists of a depression with a diameter of 180 meters and a depth of 145 meters can be examined next to the historical Obruk Inn which was built during the Seljuk Era. The mentioned lake met the water needs of habitants of Obruk Inn back in history.

Kızören Pothole, which is visited by thousands of local and foreign tourists annually, was registered as a "Special Area for Conversation" in 2019 after presidential decisions. Karatay Municipality is working on restoration projects of Obruk Inn to create tourism potential.

The Kızören Lake (Kızören Sinkhole) formed with a karstic formation is located within the borders of Karatay district and has a diameter of 228 meters and a depth of 171 meters, which makes it the biggest pothole in Turkey. The water depth is 145 meters.



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#### **KARATAY MADRASA**

Karatay Madrasa, which is nowadays used as the Konya Tile Works Museum, was built by Emir Celaleddin Karatay during the reign of Seljuk Sultan Izzeddin Keykavus II. in 1251. The interior of the madrasah is covered with mosaics and plate tiles.

Inscriptions about the construction of the madrasa can be seen on the entrance door, which is considered as a masterpiece of Seljuk stonework, and several verses and hadiths from the Holy Quran are embroidered on other surfaces. Celaleddin Karatay's tomb is located in the southwestern unit inside Karatay Madrasa.

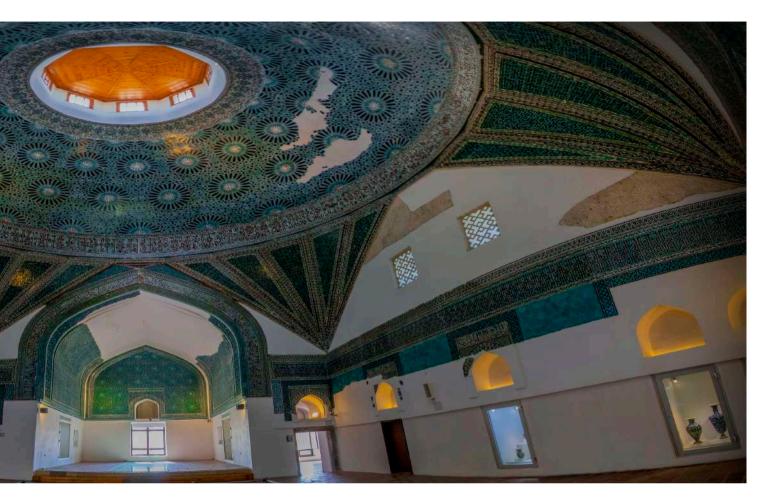
The courtyard of the madrasa, intended to be used for religious classes and exegetics was built of "Sille Stones", the dome and vaults of bricks while the entrance was made of white marble from the east.

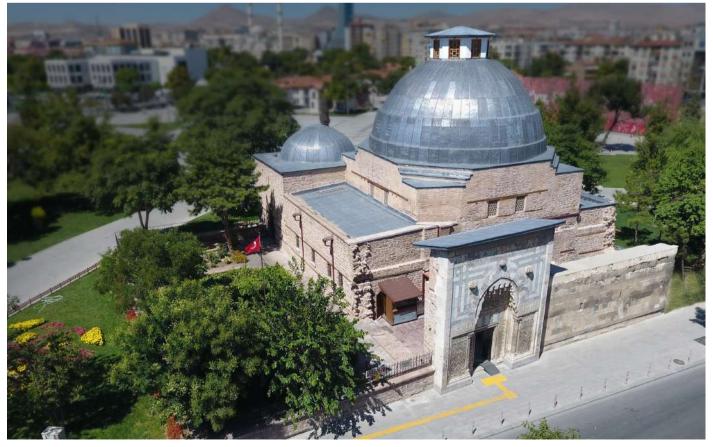














# AZİZİYE MOSQUE

The Aziziye Mosque is a typical Ottoman artifact and was built in the name of Pertevniyal Valide Sultan, the mother of Ottoman Sultan Abdülaziz. The mosque, which was built with cut stones known as Gödene, is one of the most beautiful examples of late Ottoman architecture.

The three-domed narthex of the mosque was built in Turkish Baroque style. Its windows are larger than its doors, its columns were made of marble. Aziziye Mosque has two minarets with pedestals and fountains covered with a spacious dome. These details draw the attention of almost everyone! The presence of five entrances on both sidewalls of the mosque is unique in Turkish architecture.

Both minarets present a different appearance when compared to regular Turkish minarets due to their proportions and balconies.

Aziziye Mosque is on walking distance to the Mevlana Tomb and Museum which is considered as one of the most visited three museums in Turkey.

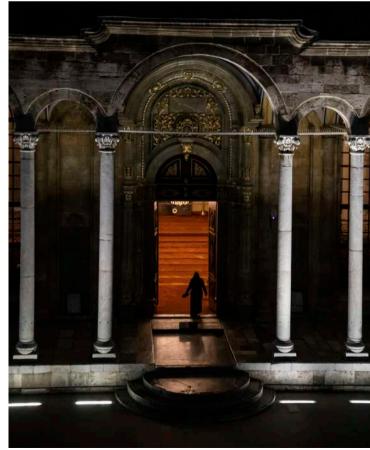


















# <u>KARATAY</u> <u>THE CITY OF</u> <u>MUSEUMS</u>

All museums in Karatay attract great attention of both local and foreign visitors. Our museums, in which many historical findings and relics are exhibited, continue to host their guests who want to see the traces of history today.



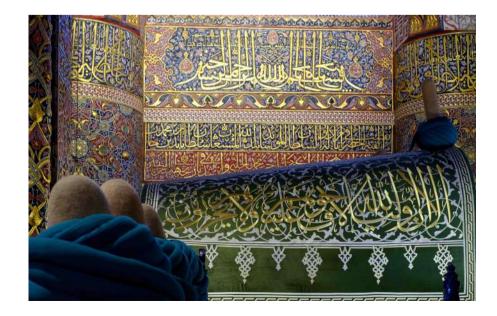


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#### MEVLANA MUSEUM

A huge rose yard belonging to Alaeddin Keykubat, outside the fortification walls was donated to Mevlana Rumi's father Bahaeddin Veled. He later got buried here. Later on, a whirling lodge, masjid, dervish lodges and a beautiful courtyard were built which together formed a spiritual complex. This complex became a museum in 1926. Visitors, have the opportunity to see artifacts such as manuscripts, plates, oil lamps and musical instruments of Rumi and his followers.







#### THE KONYA TILE ARTIFACTS MUSEUM

The Karatay Madrasa, which possesses an important place in tile artifacts dating back to the Anatolian Seljuk period, was opened to its visitors in 1955. Tiles and ceramics belonging to the Seljuk, Principalities and Ottoman periods, especially "Kubad-Âbâd Palace" tiles, plaster ornaments, cabinets, tile plates and oil lamps are exhibited within the Konya Tile Artifacts Museum.

#### PANORAMA KONYA MUSEUM

**⊳ KARATAY** 

The Panorama Konya Museum is crowned with wax sculptures and oil paintings, which allow visitors to gain knowledge about Mevlana and Mevleviyeh and even gives them the chance of imagining about the life of Rumi. Those who want to take a panoramic view of Konya can visit our exemplary museum. The commercial life of Konya on the Silk and Spice Road and the arrival of the Seljuk Sultan Keyhüsrev II. are shown in the museum. Additionally, the art, culture, commercial life, and architecture of Konya in the 13th century are exhibited in the Panorama Museum.







#### THE "KOYUNOĞLU" MUSEUM AND LIBRARY

The "Koyunoğlu Museum and Library" form a huge collection with the "Historical Konya House Museum and Library." Archaeological findings, coins, calligraphy works, a natural history section, thematic exhibitions belonging to Anatolian Civilizations, ethnographic artifacts, carpets, rugs, and rosary collections are exhibited in the museum. Moreover, the Koyunoğlu Library offers visitors a huge collection of of 35,000 volumes, mainly manuscripts. The museum is open to visitors every day of the week except Sunday.



#### THE INDEPENDENCE WAR MARTYRS' MONUMENT MUSEUM

The Independence War Martyrs' Monument Museum gives visitors the chance of having a closer look on the Gallipoli War, Konya's situation after the war in 1915, a better understanding about how people prepared for the Independence War, and how people in Konya and surrounding villages lived preand-post war.

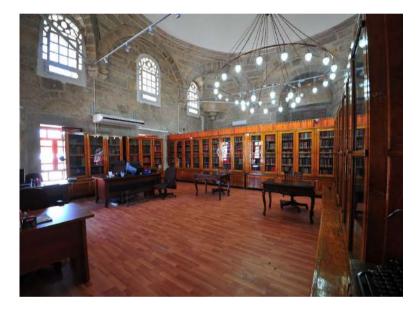






### THE "YUSUF AĞA" MANUSCRIPT LIBRARY

The "Yusuf Ağa" Manuscript Library, provides our community with rare manuscripts and printed works including old letters is an extremely important library where much scientific research have been carried out. Yusuf Ağa had this library built when he was the consultant of the imperial mint while Sultan Selim the 3rd's mother, Mihrişah Sultan was the chamberlain. As it is understood from the six inscriptions on the outer and inner sides, the building was built on 17 January. This library serves under the Regional Directorate of Manuscripts. There are more than 3 thousand manuscripts and more than 8 thousand printed works in the library. All of the manuscripts have been transferred to digital media and made available to researchers.





#### THE "OLYMPICS AND FAIR PLAY MUSEUM"

The Olympics and Fair Play Museum is the first fair-play museum in Turkey. Photographs of national athletes who won medals and fair-play awards in the Olympics in wrestling, weightlifting, archery, judo, and athletics are exhibited, as well as their success stories.









# <u>KARATAY</u> <u>THE BRIDGE BETWEEN</u> <u>TRADITIONAL</u> <u>TOUCH AND SPIRIT</u>

Karatay is a unique center where our traditional texture is preserved in addition to its modern and planned development. It is possible to see buildings from many centuries ago in almost every street of Karatay which give us the chance of wandering through the paths of history. KARATAY



#### THE HISTORICAL MENGÜÇ AVENUE

The Historical Mengüç Avenue which underwent restoration as part of projects conducted in 2011 to preserve historical urbanization around the Mevlana Museum, has become one of the frequented locations of the city.





#### THE HISTORICAL MAHMUT DEDE AVENUE

Mahmutdede Avenue, which is located in Karatay Akçeşme District, consists of registered historical buildings that have been through many years, structures that reflect the characteristics of traditional Konya architecture as well as new structures. There are three fountains and one mosque on the street. Two of the fountains are located at both ends of the street, while one is adjacent to the wall of the newly built school. As a result of projects, architectural elements have been persevered with the traditional street texture.









# <u>KARATAY</u> <u>THE GLAZED CENTER</u> <u>OF ANCIENT AGES</u>

Savatra, one of the most significant archaeological excavations in the Central Anatolia region, is rapidly progressing to become a new center with its rare theater, mounds, and evidence shedding light on Anatolian history."



#### SAVATRA ANCIENT CITY

Savatra Ancient City, located in the Yağlıbayat District of Karatay, appears as an old settlement that plays an important role in historical processes. Savatra Ancient City has been inhabited since prehistoric times and was used as the main transit location during the Roman and Byzantine Periods as can be understood from the mound. Strabon, the antiquity author, stated that trade convoys passed through Savatra. They also met their water needs from Savatra, which Strabon believes to be the place where the deepest water wells of the world were located.

Savatra is considered as an important border line settlement established on the outskirts of Bozdağ as an important border line between the Lykaonia and Galatia regions.

The fact that the city has a Hellenic settlement structure is an uncommon feature in the region. The scarcity of other settlements in Central Anatolia with such a Greek urban texture makes Savatra an unique and valuable city. The existence of the theater structure, the presence of inscriptions showing the existence of the city council which actually prove that Savatra was governed by a democratic management form, and the fact that it is located on the route connecting Greek colonies, especially Via Sebaste, are some of the main features that distinguish Savatra from other cities.





#### **BONCUKLU MOUND**

Boncuklu Mound is located in the southeast of Konya, approximately 40 kilometers from the city center, and 13 kilometers from the 27th kilometer of the Konya-Adana highway. Boncuklu Mound got its name due to the findings of villagers, such as historical beads that glisten in the sun after spring rains.

Boncuklu Mound is one of the oldest village settlements in the world. The mound, which has mud-brick houses dating back to 8500 years, is an archaeological site where traces of 10500 years ago were identified during a period known as the Neolithic or new stone age.

Studies carried out in Boncuklu Mound provide evidence that agriculture went to Europe from Anatolia. In this respect, Boncuklu Mound provides important contributions to illuminating the past of world agriculture.

Considering this, the National Geographic Turkey Magazine featured Boncuklu Mound on its cover in its August 2019 issue.













# <u>KARATAY</u> <u>HOST OF THEMED</u> <u>AMUSEMENT PARKS</u>

Karatay, with its Lavender and Rose Garden, is forging new paths in both Konya and Turkish tourism, and it continues to draw large crowds to its colossal theme parks with its traditional events.

#### KARATAY LAVENDER GARDENS

The Karatay Lavender Garden was realized by Karatay Municipality in order to increase alternative agricultural products, which can be used in the oil production sector as well as in the medicine and cosmetics sector. Moreover, beekeeping with all the fragrant flowers and evaluating the landscape is also possible at the Karatay Lavender Gardens. Karatay Municipality aims to turn its Lavender Gardens into a tourism attraction.





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# KARATAY MEVLANA ROSE PARK

Established on a 13,700-square-meter area by the Karatay Municipality, the Karatay Mevlana Rose Park captivates its visitors with various roses and a colorful atmosphere. Situated along the Lavender Gardens route, the Rose Park, due to its location, has become a new destination for Konya tourism. In the upcoming periods, the area, which will also produce rose-based products, will hold a very special value for Konya.





## THE "KARATAY CITY PARK"

The Karatay City Park, which was built by Karatay Municipality and is the largest in Konya, occupies an area of 343,300 m<sup>2</sup>. The amusement park offers its visitors the opportunity to rest and have fun at the same time with its 12.500 m<sup>2</sup> selfcleaning biological pond, which offers a visual feast with its lotus flowers, 418 sitting areas and, 46 barbecue sports.



### THE KARATAY CARAVAN PARK

The Karatay Caravan Park, which is considered as a reflection of Karatay's strong tourism and sightseeing route features, is located at the south entrance of the City Park . Karatay Municipality offers guests free wi-fi, hot water, WC's, fresh water, and electricity.



Naratay





The park, realized in the Ulubatlı Hasan Neighborhood of Karatay Municipality in 2021 Covers an area of 8940 m2.

Along with cafeterias, simulation centers, watchtowers, walking paths, crossings and intersections, tunnel, overpass, traffic training paths, bicycle training track, mini car parking area, green areas, and resting areas are located in the traffic education park. The "Şehit Mustafa Koçoğlu Park" is right next to the Karatay Traffic Education Park, one of the newest environmental parks brought to Konya by Karatay Municipality



### THE KARATAY ADALET (JUSTICE) PARK

The Karatay Adalet (Justice) Park is located right next to Karatay University and is considered as one of the most important social areas of our region due to its large trees, walking paths, sports fields, recreation areas, swimming pools and café that are spread over an area of 100 thousand m2.







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### THE KARATAY OLYMPICS PARK

The Karatay Olympics Park was built by Karatay Municipality on an area of 160 thousand square meters in the Taşra Karaaslan Üzümcü district. There are basketball, volleyball, and mini football fields. Besides, bicycle and jogging tracks and gymnastic equipment is provided in the park. 4,500 trees were planted on the opening day of the park. There is also a horse farm in the park where visitors have the chance to pet horses. Besides, the "Olympic and Fair Play Museum" is located within the park.

### THE KARAASLAN PICNIC PARK

The Karaaslan Picnic Park consists of 454 picnic gardens equipped with barbecues, sitting areas, a sink, and social reinforcement areas such as fitness and children's playgrounds and prayer halls.

Karatay Municipality offers a wide range of services to its community on an area of 97.500 m<sup>2</sup> in the Karaaslan Picnic Park since 2018.





# COMMUNITY GARDENS

1001 gardens were built in Karatay and offered to citizens periodically as a result of projects conducted by Karatay Municipality. Thanks to the community gardens, our citizens can grow their own vegetables and fruits while they can enjoy their time and rest their souls far away from the crowd.

Karatay Municipality's Community Gardens are supervised with security forces, camera and warning systems. Besides, sports areas are also provided for visitors.

### **KARATAY ZOO**

The Karatay Zoo is close to the Karatay City Park. It is the only zoo in Konya. The Zoo also serves as a care, treatment, and rehabilitation center for animals. More than 500 animals of over 80 species live in the zoo.

KARATAY







### THE ISMIL TULIP FIELDS

Over 100 tulip species are grown every year in the tulip fields located in the Ismil district of Karatay. An annual average of 50 million tulips are exported globally, mostly to European countries. Thousands of people visit the region to witness the beautiful tulip fields during harvesting months in April and May.

# BOZDAĞ NATIONAL PARK

An area of 59,296 hectares in Karatay was registered as a Wildlife Development Area in 1967 in order to protect the wild sheep living on arid and soft-lined hills where the steppe and forest can be seen.

Anatolian wild sheep, which are in danger of extinction, are produced in an area of 3515 hectares surrounded by wire cages. Herewith, the development of this endemic species is ensured in other areas throughout the country.









# <u>KARATAY</u> <u>A NEW CENTER</u> <u>IN EDUCATION,</u> <u>INDUSTRY, HEALTH</u> <u>AGRICULTURE</u> <u>AND LIVESTOCK</u>

Karatay is developing day by day and hosts new initiatives and investments in various field from education to industry, from health to agriculture and livestock production power.





# KTO KARATAY UNIVERSITY

KTO Karatay University, named after the Karatay Madrasa, which was built by the Seljuks in 1251 and is the first Foundation Higher Education Institution in Anatolia, and the Konya Chamber of Commerce, one of the most rooted chambers of commerce in Turkey, accepted its first students in the 2010-2011 academic year and had its first graduates in June 2013.

KTO Karatay University, which provides education services to approximately 9,000 students with 6 faculties, 3 colleges, 3 vocational schools and 1 institute, has a total area of 530,020 m2. According to the Foundation Higher Education Institutions 2020 Evaluation Report, KTO Karatay University is the 7th biggest among 72 other private higher education institutions in terms of occupied area.



### THE KONYA KARATAY "CITY" HOSPITAL

Konya City Hospital, which was built as a health base serving Konya and its surroundings, has a closed area of 421 thousand 566 square meters and has a capacity of 2 thousand 923 indoor and 188 outdoor parking lots.

The hospital, which has uninterrupted energy with its trigeneration system, has a helipad to use air ambulances. Konya City Hospital has a total of 1250 beds, 256

intensive care, 108 emergency and 30 dialysis beds. The hospital, which has 380 outpatient clinics and 49 operating units, has 73 control units, 442 single-bed and 272 twin-bed units, as well as 8 suites.

The hospital was opened by President Mr. Recep Tayyip Erdoğan in 2020.

### POWERFUL AND ORGANIZED INDUSTRIAL ZONES

There are 46 industrial sites within the borders of Karatay. New ones are added to this number every year. The number of registered workplaces in these industrial estates has exceeded 8 thousand. Karatay is one of the important industrial centers of our country, which increases its production volume, increases export, and creates employment.



## SOLAR POWER PLANTS

AND

LIVESTOCK

Karatay Municipality meets the annual electricity need of all its facilities from Solar Power Plants, established at 2 separate locations within the borders of the district.

Total 2,578 mWh of energy is produced annually from the Solar Power Plants in Tatlicak and Saraçoğlu neighborhoods with an installed power of 1,300 kW



The amount of cultivated land in Karatay is approximately 1,853,320,00 decares. This figure corresponds to 7.65% of the cultivated land in Konya.

#### **AGRICULTURE** The prominent agricultural products in production can be counted as wheat, sunflower, barley, alfalfa, vetch, sugar beet, corn, potato, tomato squash, carrot bean, apple cherry and almond.

Karatay is an important sheep production center in terms of livestock. The number of sheep and goats in the district is around 183 thousand. Sheep species constitute a large part of this figure. The number of cattle is around 80,000







# <u>KARATAY</u> <u>FAVORITE CENTER</u> <u>OF THERMAL</u> <u>TOURISM</u>

Karatay Thermal Holiday Village, which was completed and put into service by Karatay Municipality in 2020, has gained great momentum in a short time. The facility hosted over 100 thousand guests from 34 countries in a short time and made the Ismil region one of the favorite centers of thermal tourism.



# KARATAY THERMAL RESORT

The Karatay Thermal Resort is 30 minutes away from the city center of Konya and was established on a huge area of 110 thousand square meters. The facility has become one of the most important accommodation bases on the tourism route between Cappadocia and Antalya.

Our facility, which stands out with its healing water, modern structure, stylish restaurant, delicious food, comfort, thermal bathrooms, children's and adult playgrounds, health clubs with spacious pools, and friendly staff, has set a record which is hard to break in our city in terms of the occupancy rate it has achieved since the openings day.

Karatay Thermal Resort consists of 7 blocks and 112 rooms with a bed capacity of 280.

Karatay Thermal Resort offers its visitors with a wide range of facilities such as foam and massage rooms, restaurants, cafeterias, markets, green areas, track walking paths, electric vehicles, praying halls, football, volleyball and basketball courts throughout the facility, social facilities, men's and women's pools, sauna and steam room, Turkish bath and fitness centers.



















The importance of local governments to follow the international agenda that Turkey closely follows has emerged within the framework of the close cooperation with the Union of Municipalities of Turkey (UMT). In this context, Karatay Municipality started to follow the international agenda closely by becoming a member of the United Cities and Local Governments Middle East and West Asia Section (UCLG-MEWA).

The Volunteer National Review (Turkey's Sustainable Development

Goals 2nd VNR 2019), prepared by Turkey in 2019, was examined. Subsequently, it was decided that the first Voluntary Local Review (VLR) in the region should be prepared by Karatay Municipality as soon as possible.

In this context, the Training Program for the Monitoring of Sustainable Development Goals (SDGs), hosted by Karatay Municipality, was held on 8-9 April 2021 in order to benefit from the experience of UCLG-MEWA.









The importance of localizing sustainable development goals was emphasized during training-days held in April 2021. Efforts were made to align local studies, projects, and activities with sustainable development goals. Practice was carried out to improve the decision-making processes regarding the topics of projects through the evaluation of sample projects within the framework of sustainable development targets.

It is of great importance that the VLR process takes place with the participation of both internal and external stakeholders. The adoption of the process by the stakeholders was ensured through activities such as trainings, interviews, and coordination meetings. The adoption of the topic by Mayor Mr. Hasan Kılca's, increases the motivation of the team. We are proud to present the VLR process, which we consider as one of the first steps to realize our vision of being a center of attraction with our historical and cultural textures within the framework of sustainable development goals.





### **BEGINNING AND PROGRESS OF THE VLR PROCESS**

Country leaders, who came together at the United Nations Sustainable Development Summit held in New York on September 25, 2015, adopted the "Sustainable Development Goals" consisting of 17 goals and 169 targets, to eradicate poverty in all its dimensions and ensure the common welfare of humanity by 2030. These goals are the continuation of the Millennium Development Goals adopted by the United Nations at the Millennium Summit in 2000. The desire to continue the momentum and experience gained in the implementation process of the Millennium Development Goals lies behind bringing these goals back to the world agenda in a more comprehensive manner under the name of Sustainable Development Goals.

In particular, the phrase "making cities and human settlements inclusive, safe, resilient and sustainable" stated in the 11th goal is a reflection of the active role of local governments in this process. However, it would be off the mark to evaluate local governments only based on this purpose. Indeed, all goals are directly or indirectly related to the daily activities of local governments and impose responsibilities on local governments.

Within the scope of this process, which closely concerns local governments, many countries have started to carry out projects to ensure the adoption of the Sustainable Development Goals by local governments. It is expected to contribute to the localization of the objectives of these short and long-term projects. For example, on a global scale, the working group called "Task Force of Local and Regional Governments" of the United Cities and Local Governments World Organization (UCLG), of which the Union of Municipalities of Turkey is a member, undertakes the task of building a bridge between the UN (United Nations) and local governments, while it contributes to their adoption by the local governments of our country as well as being the direct implementer of these goals through the work of the Union of Municipalities of Turkey.

In this context, Karatay Municipality began to follow the international agenda closely by becoming a member of the United Cities and Local Governments Middle East and West Asia Regional Organization (UCLG-MEWA). Thus, it was concluded that the first Voluntary Local Review in the region should be prepared for Karatay as soon as possible. In this context, the Training Program for the Monitoring of Sustainable Development Goals (SDGs), hosted by Karatay Municipality, was held on 8-9 April 2021 in order to benefit from the experience of UCLG-MEWA. While the importance of sustainable development in education was emphasized, it was underlined how local studies should be linked to sustainable development goals. Information on the subject was provided to all participants by the UCLG-MEWA management. Mayor Hasan KILCA adopted the issue and stated that they decided to become a local pioneer in sustainable development. All municipal employees and external stakeholders on the subject accelerated their work with high motivation and determination. Efforts have been exerted with all their might to realize the vision of being a center of attraction with its historical and cultural texture within the framework of sustainable development goals. As a result of the training provided, they matched each activity of the municipality with sustainable development goals and paved the way for the rapid preparation of the VLR report. The VLR, which was praised by UCLG, was prepared by bringing together the collected data, analyses, and activities carried out by the municipality.

The VLR report, which has become the most significant indicator representing Karatay Municipality on international platforms, is the most important report that shows all the activities carried out by the municipality within the framework of sustainable development goals and makes them heard by the masses.

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This work has been prepared as a progress report for the previously prepared VLR report. When the VLR report was prepared in 2021, data until the end of 2020 was generally used. Approximately all of 2020 and part of 2021 passed with the COVID-19 pandemic, which caused difficult days both administratively and in terms of difficulties in service delivery. Karatay, who followed a very successful chart despite such a period, has tried to fulfill its sustainable development goals to a large extent. It has entered an intensive work process during the two years that have passed since that period and with the recovery from the pandemic days. It has started to implement brand new projects in areas such as green areas, ecological environment, zero waste, and digitalization. Therefore, it is needed to prepare and add a progress report to the VLR report. In this report, we tried to explain which SDGs we have progressed and what we have done as Karatay Municipality in the period after our VLR report was prepared. When we look at the projects, studies, and activities carried out, we see that we have made excellent progress in almost all subjects. Despite limited resources, many activities carried out under the concept of sustainability are an indication of being able to safely entrust our city to the next generations. We showed maximum effort to ensure the best implementation of sustainability indicators both within our structure and for our people. The activities carried out are not just a service we provide for our followers, but because we understand the importance of this issue and think about the future. The Progress Report progresses under the headings of global goals for sustainable development. Under a total of 17 general headings, what has been done during the last two years has been trying to be explained with graphs, forecast analysis, and visuals of the outputs. In the forecast analyses, the regression method, appropriate to the structure of the data, was used. Forecast results are visualized with graphs. Since a sufficient number of observational data is required for such analyses, graphs and forecast analysis were not used for each indicator. This situation is due to the lack of data collection subjects. Since the general data collection task in our country lies with TURKSTAT (Turkish Statistical Institute) and district-scale data is not sufficient, some of the data is collected with our own means. However, they do not meet the official data status.

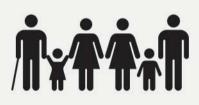
If we, the Karatay Municipality, take a look at the progress in SDG headings, it can be seen that very successful works have been carried out, especially to eradicate poverty and create a sustainable and healthy environment. The high population growth rate in our city is an indicator of the interest in this region. Karatay is regaining its former glory when it was the capital of the Anatolian Seljuks. However, while the population and construction are rapidly increasing, unplanned urbanization should never be allowed and the education, health, energy, and green area needs of new settlements should be met first. It is observed that a high level of success has been achieved in drinking water and the collection and recycling of wastewater and solid waste. Developments in the field of health and the increase in the number of health institutions in Karatay lead to healthier generations. This is regarded as the decrease in maternal and infant mortality rates. The increase in agricultural areas brings with it an increase in the value of produced agricultural and animal products. Energy consumption is increasing, but it is seen that new, clean, and renewable energy sources are additionally included in the system. Gender inequality in education has ended, and female managers in management are increasing. It seems that the cleaning, infrastructure, security, and transportation problems of the Karatay people have been largely solved.

The preparation stages of the VLR report enabled us to gain experience in this regard and revealed which data should be monitored regularly for future periods. In this way, the establishment of organizational memory and organizational experience will enable faster and more detailed preparation of VLR reports in the coming years. We, the Karatay Municipality, will prioritize SDG topics in our future projects. We will ensure to match all activities we do, especially in digitalization studies, according to SDG headings. We will continue our efforts to be a pioneer in our own class and region in this regard.

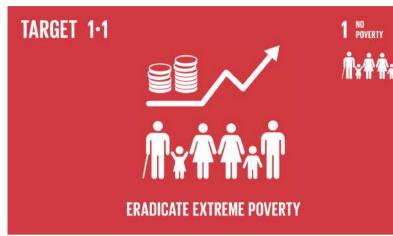


KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# **No Poverty**







### **SDG-1** TO END POVERTY IN ALL ITS FORMS EVERYWHERE

1.1 By 2030, ERADICATE EXTREME POVERTY for all people everywhere, currently measured as people living on less than \$1.25 a day

In the Karatay district, there is no person within or below the extreme poverty line. The minimum wage set for employees has increased by around 70% in the last year and has increased to approximately 11 times the poverty line.

One of the reasons not to have people living below the poverty line in Karatay district is that the municipality provides social assistance to families in need. Social assistance is not provided in kind, but cards are given to those in need and they purchase whatever products they want, such as food and clothing. One of the most important goals is to completely eradicate poverty in our city. A large portion of the district income is used to eradicate poverty, and the goal of reaching larger masses is achieved through social support practices. As of the first year-end of 2021, 40,019 people and as of 2022, 39,043 people were provided social assistance. The amount of aid provided exceeded TRY 20 million. In addition, 39,043 families receive permanent social assistance. Thus, there is no one living below the poverty line in our city.













### **SDG-1** TO END POVERTY IN ALL ITS FORMS EVERYWHERE

1.2 By 2030, reduce at least by half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions

While previous projects carry on, new projects are constantly being carried out to eradicate all types of poverty in the Karatay District. Efforts are being carefully carried out to eradicate poverty among men, women, and children of all ages. Especially, the high rate of population growth in our district and the addition of approximately 10,000 new people to the population of our city in the last few years reveal the importance of the studies to be performed on this subject.

While the rate of the working population at risk of poverty was measured as 76.71% in 2010, it has continuously declined over the years. During the preparation period of the VLR report, the gradually declining value decreased to 54.86% and fell below 50% by 2022, as stated in the report.





Our municipality works and develops projects to deliver social assistance to people in need. However, it is also aware that poverty cannot be reduced with social assistance. Instead of this, studies are carried out in cooperation with stakeholder institutions to eradicate all forms of poverty by encouraging people to participate in social life and supporting each other in society.

The primary focus of these efforts is the development of work environments for people. Thus, people's incomes will increase, and thus poverty will be eradicated through employment studies.





### **SDG-1** TO END POVERTY IN ALL ITS FORMS EVERYWHERE

1.3. By 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance.

All citizens of Turkey have equal rights in legal terms such as access to economic resources and basic services, ownership and control over land and other forms of property, and equal rights in matters regarding financial resources, including inheritance, natural resources, new technologies, and microfinance.

Additionally, The Small and Medium Industry Development Organization (KOSGEB), which is among our stakeholder institutions, puts extra effort into supporting women entrepreneurs.



Social assistance rates are kept high in case applicants are women. Also, it is envisaged to support women more through social projects and a variety of activities that support the participation of women in employment carried out by the KOP (Konya Plain Project) Regional Development Administration. "The Vocational Development and Adjustment Project" and "Wicker Handicrafts Production Project", carried out in cooperation with KOP are the most comprehensive examples of the previously mentioned projects









TARGET 1-5
1 MOVENT

Image: State of the st

### **SDG-1** TO END POVERTY IN ALL ITS FORMS EVERYWHERE

1.5. By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters After the earthquake, called the "Disaster of the Century", which occurred in February 2023 and covered 11 provinces, the prefabricated accommodation center where earthquake victims could stay was quickly completed and put into use. Karatay Sustainability Report 2023 | 65











KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# **Zero Hunger**



### TARGET 2-1

**UNIVERSAL ACCESS TO SAFE AND NUTRITIOUS FOOD** 

2 ZERO HUNGER

### **SDG -2** TO END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious, and sufficient food all year round.



Karatay Municipality's Soup Kitchen provides hot meals to citizens in need. Three or four types of meals are cooked and prepared twice a day in a way to meet the nutritional needs of human beings in accordance with hygiene rules. Meals prepared at Karatay Municipality Soup Kitchen are delivered to hundreds of families in need 365 days a year.





Within the scope of the works conducted by the Social Support Services Directorate of Karatay Municipality, assistance was provided to 325 citizens with no income and in financial distress in 2020, while 104 families as of 2021, 193 families as of 2022, and 193 families as of 2023. In the first five months, food distribution and food assistance were provided to 104 families as of 2021, 193 families as of 2022, and a total of 297 families in the first five months of 2023. As a consequence, it was ensured that the vulnerable ones of and around our society had access to safe, nutritious, and adequate food.

Karatay Municipality also distributes food packages to families in need. Families without health insurance and in need of help are identified by the Social Services Directorate, and food packages are delivered free of charge to these families after the necessary controls are completed.





### **SDG -2** TO END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

2.2 By 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons

The Karatay Community Health Center organizes various activities for expectant mothers and children with the contribution of Karatay Municipality. With these activities, it is aimed to raise social awareness on the contributions of breast milk to the dental development of babies in their first 6 months, the importance of nutrition for children in developmental age, and the nutrition of expectant mothers.

2,000 people daily benefit from affordable Gluten-Free Bread services of Karatay Municipality of which the Research and Development studies were completed in 2019 under the title of "service and solution to all segments of the society." It is seen that as of 2022, 5000 gluten-free breads will be produced daily. Actually, upon request by some private companies, 10,000 gluten-free breads can be produced daily.

**KARATAY** 

More people are provided with access to affordable glutenfree food by cooperating with many cities in Konya such as Seydişehir, Meram, and Selçuklu districts and Antalya, Sivas, Çorum, Bursa, Elazığ, Samsun, Niğde, Aksaray, Karaman, Afyon and Mersin provinces.

Karatay Halk Ekmek Bread Factories, which produces 200,000 normal breads daily and 150,000 gluten-free breads monthly in two separate factories, increases its product diversity in this field and offers foods such as glutenfree bagels, cookies, and cakes to the public at sales points on certain days of the week. Today, there are a total of 22 bread sales kiosks in Karatay district.

All people's safe and affordable gluten-free product needs, especially celiac patients, are met.

In addition, a very large business center project has been completed by Karatay Municipality in the Ismil neighborhood. An important part of the project is the bread production facility. The facility, which consists of a bakery, fermentation, dough preparation unit, offices, and kitchen within Ismil Bakery, has a construction area of 267 square meters. The current investment value of our bakery, including its open car park, is 2.400.000 TRY. Thus, job opportunities will be created for the people of the region, and the bakery food needs of the Ismil thermal center, which is an important tourism region, will be met. As it is known, in our city, where efforts are made to meet all the needs of families in need, it is aimed to eliminate all malnutrition problems of the people, especially those in need of bread and other bakery products.







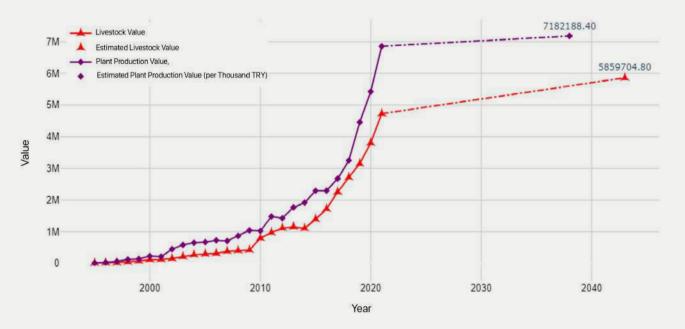


### **SDG -2** TO END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

2.3. By 2030, doubling the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists, and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment

According to official data, Konya is among Turkey's leading provinces in animal husbandry. The "Pasture Sheep Breeding Project" falls under this title. Official data state that Konya possesses an important place in livestock raising in Turkey. With this project, we aim to increase the number of sheep-breeding and lower the number of cattle-breeding due to the extremely high amount of water usage of cattle since there is a lack of water in Konya. Correspondingly, a variety of studies aiming at pasture improvement, the forming of a small cattle breeding facility, and the popularizing of sheep and goat breeding are carried out in cooperation with Konya Metropolitan Municipality, Selçuk University, and the Provincial and District Directorate of Agriculture.

Our district is one of the regions with the most agricultural areas in Konya city. Our district has a very suitable structure for ovine breeding. Pasture improvement works and exemplary facilities established have yielded beneficial results, and the number of small cattle in our city has reached 1.5 million by 2022. It is observed that the number of cattle will reach 280,000 by 2022. The value of all livestock in our district has reached 4.8 billion TRY by the end of 2021. According to the forecast analyses, it is expected that the animal production value of the city will increase up to 8 billion TRY. On the other hand, the plant production value of our city is 7 billion TRY as of 2021, and it is predicted to be 8 billion TRY according to 2030 estimates (Graph 2). As can be seen in the prepared correlogram graph, there is also a positive correlation between plant and animal production values, but a negative correlation between production values and amounts and the cultivated agricultural area (Graph 3).



#### Change Graph of Live Animals and Crop Production Values (thousand TRY) by Years

#### Graph.2 Karatay district's plant and animal production values (per Thousand TRY)

						1.0
Total cultivated agricultural area (hectar)	1	-0.77	-0.59	-0.6	-0.63	0.8
Production amount of grains and other plant products (ton)	-0.77	1	0.91	0.9	0.92	0.6 0.4
Greenhouse vegetable and fruit production amount(ton)	-0.59	0.91	1	0.9	0.9	0.2 0.0
Plant production value (per Thousand TRY)	-0.6	0.9	0.9	1	0.99	-0.2
Livestock value (per Thousand TRY)	-0.63	0.92	0.9	0.99	1	-0.6
	Total cultivated agricultural area (hectar)	Production amount of grains and other plant products (ton)	Greenhouse vegetable and fruit production amount (ton)	Plant production value (per Thousand TRY)	Livestock value (per Thousand TRY)	

Graph.3 Correlogram of the relationship between the amount and values of plant and animal production of Karatay district and the cultivated agricultural area



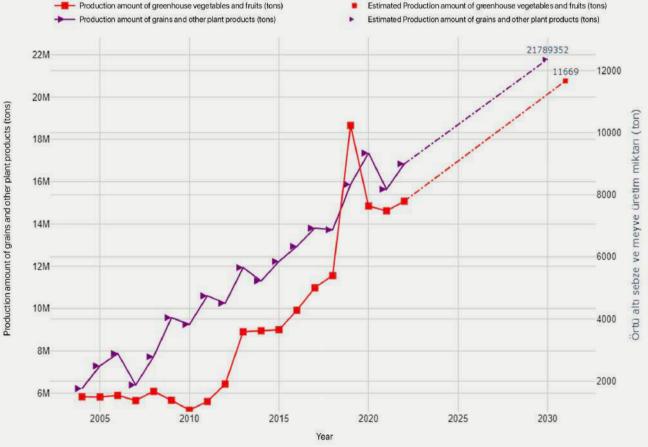
### **SDG -2** TO END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

2.4. By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

As in the whole world, agricultural areas in our country continue to decrease as the day goes on. Therefore, more qualified use of agricultural areas is of great importance. The surface area of our district is quite large and most of the land is used for agricultural purposes. Therefore, our district has a very important role for the agricultural wealth of our country. Primarily, industrial plants are produced (such as wheat and other grains, sunflower, corn, sugar beet, etc.), serious production figures are achieved in vegetable and fruit growing. In addition to these, activities of greenhouse agriculture continue to increase. Although the utilised agricultural area decreased in 2017, it has started to reincrease since 2019. As of 2022, it has reached 1.79 million decares of utilized agricultural area. It is seen that the annual value of the herbal products produced has reached 7 billion TRY as of 2021. According to the forecast analysis, it is calculated that it will reach 8 billion TRY after 2030.



It is attached importance to the development of greenhouse agricultural areas, which have a significant place in agricultural activities. The Karatay district has sufficient sunlight in terms of climate where the best quality products of greenhouse cultivation can be obtained. However, greenhouse agricultural activities of our farmers have still not reached the expected level because of the extremely cold days observed due to the continental climate. The amount of greenhouse agricultural area, which has increased rapidly with the support and studies carried out since 2018, has reached 70 decares by 2022. With the increase in greenhouse agricultural areas, the amount of greenhouse vegetable and fruit production is estimated to reach 12 thousand tons by 2030 (Graph 4).



#### Production of Konya Karatay Agricultural Products

Graph.4 Karatay district's herbal product and greenhouse vegetable/fruit production amounts (tons



KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Good Health and Well-Being





## **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

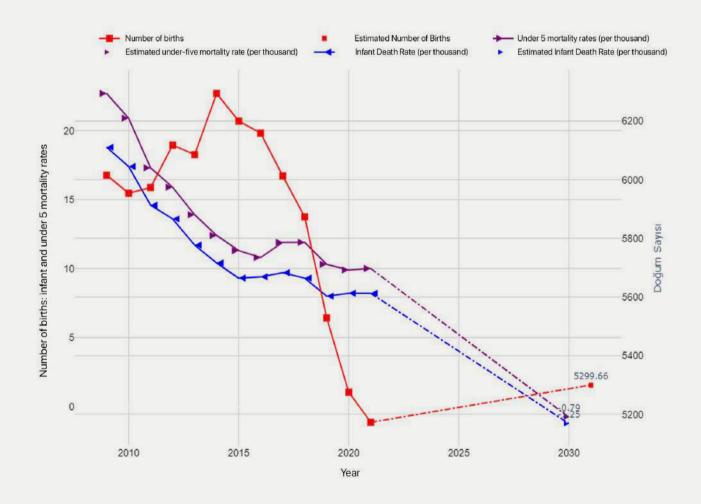
3.1. By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

One of the health indicators is the rate of maternal and infant mortality. There is a rapid decline in maternal mortality rates.

The maternal mortality rate per 100,000 live births declined from 16.7% to 11.4% over a ten-year period. Our main target is to reduce maternal mortality rates to zero. Karatay Municipality cooperates with relevant institutions for important primary healthcare investments in its district. Additionally, improving the city's health infrastructure by constructing health facilities in Karatay Municipality where needed contributes to both reducing maternal mortality rates and reducing the mortality rates of children under five years of age. When the data of Karatay district is analyzed, while the infant mortality rate is around 0.8% and the under-five mortality rate is around 10% in 2020, it is estimated that both mortality rates will decrease to 0.3% after 2030 in the projections made. However, although it is seen that the number of births will decrease until 2020, the forecast analysis predicts that it will increase, albeit at a low rate, until 2030 and reach around 6000 annually (Graph 5).

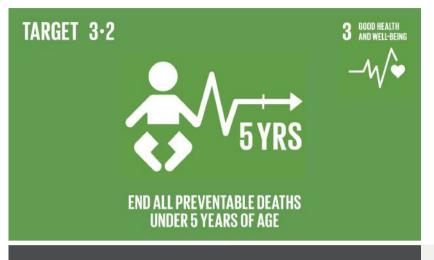


#### Number of births: infant and under 5 mortality rates



Graph.5.Number of births, infant and under-five mortality rates of Karatay district





## **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

3.2 Termination of infant and child deaths under the age of five that are preventable by 2030

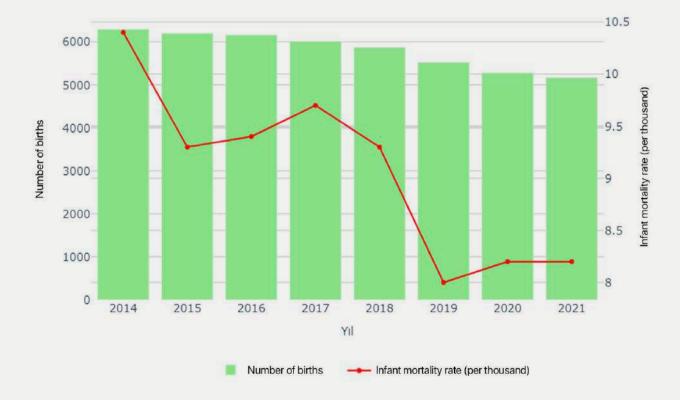
In addition, the infant mortality rate, which is one of the other important indicators, has decreased to 8.2 per thousand by 2022, and the under-5 mortality rate has decreased to 10 per thousand. These values are very similar to the values observed in developed countries.

Our target is to zero out these mortality rates, that occur due to poor living conditions, to zero excluding comorbid diseases. The Konya "City Hospital" in Karatay is an important investment in this regard. Thus, activities carried out by Konya "City" Hospital, which is considered as an important health investment, are of great importance. Konya City Hospital, which has the highest capacity hospital in the province, produces solutions for the health problems of our city. Although there is a low decrease in the number of births, the rapid decrease in the infant mortality rate shows that both in-hospital and living area mortality rates have decreased significantly (Graph 6).





Number of births, infant mortality rate



Graph 6. Number of births and infant mortality rate in Karatay district



### **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

3.3 By 2030 end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, WA-TER-BORNE DISEASES, and other communicable diseases

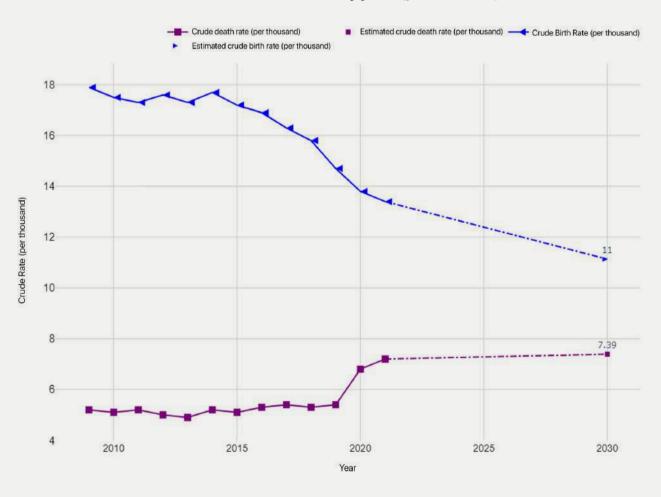
Karatay Municipality was entitled to receive the "TSE COVID-19 Safe Service Certificate" after accomplishing the Hygiene, Infection Prevention and Control Certification Program conditions of the Turkish Standards Institute (TSE).

Teams formed by the Directorate of Environmental Protection and Control of Karatay Municipality intensified their disinfection works, carried out throughout the year, due to the COVID-19 virus. Commonly used materials and areas of students such as desks, tables, window handles, dining halls, canteens, corridors, toilets, and many other places were disinfected by our disinfection team as part of the disinfection activities held in all schools in Karatay.

Moreover, Karatay Municipality stood by the tradesmen during the anticovid process. Karatay Municipality officials visited tradesmen at their workplaces and informed them about the process through brochures. Besides, masks and disinfectants were given to these tradesmen. In the context of the above-mentioned activities carried out, 9 thousand liters of disinfectant, 310 disinfectant stands, and 105 thousand masks have been distributed so far. On the other hand, disinfectant materials and masks were delivered to the headmen of 80 neighborhoods in our region. Additionally, Karatay Municipality continues to supply its employees with free masks on a monthly basis. However, as the COVID-19 disease has decreased since 2021 and disappeared completely in 2022, mask and disinfectant services have automatically been suspended. However, in the town hall, these features are effectively protected.

While the mortality rate in our city did not show a significant

increase or decrease until 2019, it has increased by 2% since this year due to the COVID-19 pandemic. However, as of 2022, the increase in the mortality rate has been replaced by a decrease, and the mortality rate returning to normal will be 7.3% in 2030, according to the forecast analysis. However, the decreasing trend in the birth rate continues. Although Karatay is the district with the highest population growth rate in Konya, the crude birth rate has decreased to around 1.35% by the end of 2022. It is predicted that the crude birth rate will decrease to 1.1% by 2030 (Graph 7).



#### Crude death and birth rates by years (per thousand)

KARATAY

Graph.7 Crude birth and mortality rates of Karatay district (%)



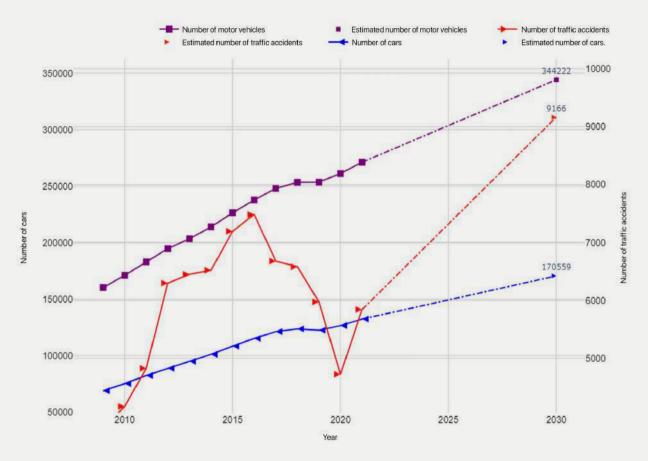
### **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

As in all our cities, the number of motor vehicles increases with the increasing population. As of 2022, there are 275,000 motor vehicles and around 130,000 automobiles in our city, and in the forecast analysis, it is calculated that the number of automobiles in our city will increase to 180 thousand and the number of motor vehicles will increase to 345,000 in 2030. The number of accidents, which decreased from 2015 to 2020, increased after 2020 and increased to approximately 6000 by 2022. Although the number of accidents is predicted to increase in forecast analysis, the rate of fatal accidents compared to the total number of accidents is lower than our country's average (Graph 8).

Karatay Municipality used 150,000 tons of hot asphalt in 2019 and 200 thousand tons of hot asphalt in 2020 throughout the city, and the road infrastructure of streets and avenues was improved, thus directly contributing to the target of reducing the number of deaths and injuries from road traffic accidents. As of 2022, a total of 180,000 tons of hot asphalt has been applied in 69 of the city's 80 neighborhoods. It is estimated that approximately 150,000 tons of hot asphalt will be used by the end of 2023 (Graph 9).





#### Number of vehicles and accidents by years

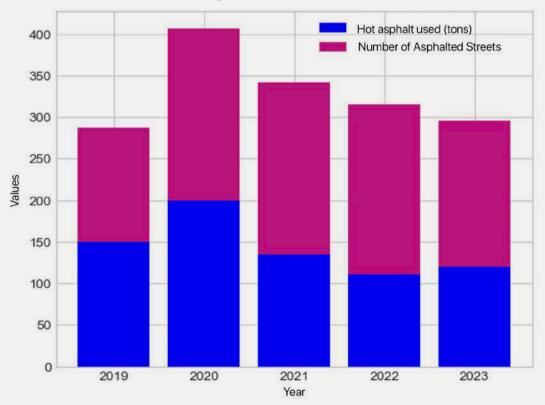
Graph.8 Number of motor vehicles and traffic accidents in Karatay district







Hot asphalt paving works are carried out both in the center and in cities far from the center. In 2019 and 2020, a total surface coating of 485,000 m<sup>2</sup> was carried out on the inland access roads and connection crossing of the neighborhoods. Thanks to surface coatings, 115 streets, avenues, connection roads, and roads in various areas were renewed and the transportation infrastructure was strengthened. As a result of the latest infrastructure works since 2020, the surface coating amount has been calculated as 460,000 m<sup>2</sup>.



#### Hot asphalt usage and number of asphalted streets)

Graph.9 Hot asphalt usage and number of asphalted streets in Karatay district

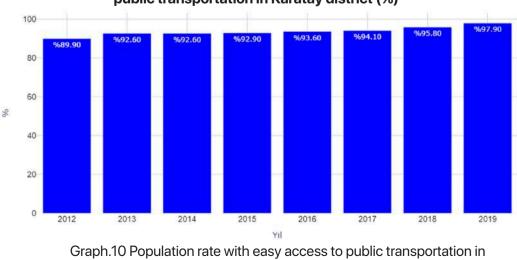






A total of 260,000 square meters of cobblestone pavement work was carried out in 2019 and 2020. However, interlocking paving stone covering works have been accelerated in the last two years and this value has been exceeded considerably, and over 1 million m<sup>2</sup> of paving stone covering has been carried out in approximately 70 neighborhoods. A total of 150,000 meters of curb construction was carried out in 2019 and 2020. Curbstone paving works have been increased and a total of 253 thousand m of curbstone paving has been completed by 2022. The Traffic Education Park in Ulubatlı Hasan District, which was specified in the previous plan, has been completely finished, and the park, established on an area of 9,000 m<sup>2</sup>, has become a very important education and entertainment center for the people of the city with its children's playgrounds, green areas, simulation center, a tunnel, crossroads, and crossovers. As of 2022, it is intended to improve traffic awareness by providing training to 6800 students within the scope of educational values in the Traffic Education Park.

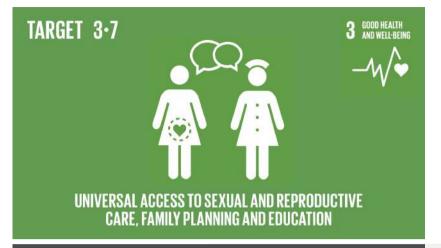
The project, conducted by spending approximately 10 million TRY in today's values, will contribute to reducing deaths and injuries caused by traffic accidents by instilling traffic awareness in our children and young people. One of the methods of reducing traffic accidents is to encourage public transportation. Therefore, public transportation should be used more frequently and efficiently. Public transportation service is the one provided by the metropolitan municipality and serves most of our city population. As of the end of 2021, approximately 98% of the city population was provided with public transportation services (Graph 10).



## Population rate with easy access to public transportation in Karatay district (%)

Graph.10 Population rate with easy access to public transportation in Karatay district (%)





## **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

3.7. By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

> One of the priorities of the Karatay people is to live a physically and mentally healthy life. Therefore, many projects have been put into practice, and most of them have been completed in the last two years. One of the priorities of a healthy life is family health centers, which are healthcare organizations that people can immediately access. The importance of going to primary healthcare organizations before going to secondary and tertiary hospitals is known. For this reason, it is vital for family health centers that are easier to access to become widespread and, if possible, to be located in central locations for many neighborhoods. We, the Karatay Municipality, have ensured the construction of modern family health centers in partnership with Provincial or District Health Directorates, and new projects are continuing. Family health centers in Selimsultan, Karakulak, Sedirler, and Nakipoğlu neighborhoods are approximately 80% completed. Along with family health centers, community health centers monitor and inform people about their sexual life, reproductive health, pregnancy health, and newborn health. Family health seminars, which the public can attend free of charge, have also been organized and continue to be organized in the city of Karatay.

Seminars regarding several topics such as marriage preparation, family planning, and healthy communication, etc., are organized with the contributions of experts in these fields. Herewith, it is aimed to ensure universal access to sexual and reproductive healthcare and information and education regarding this topic.









## **SDG -3** TO ENSURE HEALTHY LIVES AND PRO-MOTE WELL-BEING FOR ALL AT ALL AGES

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Collection bins for agricultural packaging and plastic waste were placed at 38 different spots in rural neighborhoods with the cooperation of Karatay Municipality and the Ministry of Industry KOP Regional Development Administration.

Education on the storage of packaging and agricultural plastic waste containing hazardous chemicals was given to people engaged in agriculture. Thereby, it is ensured that agricultural packaging wastes are disposed of without any water, soil, and air pollution.







The canal is an open one that reaches Salt Lake (Tuz Lake) at a distance of 120 km and carries mostly domestic and some industrial wastewater. Canal wastewater is vital in terms of being discharged into Salt Lake at certain times of the year. The canal reaches its minimum flow rate in October and 0.3 million m<sup>3</sup>/month of water is evacuated to the lake. 11 million m<sup>2</sup> of water is transported to the lake through the canal, which contains the highest level of water in March. The longest section of the drainage canal belongs to the city of Karatay. As a result of the analysis carried out with the reclamation project, the compound concentrations of Trichloroethylene, Tetrachloroethylene, Dichloromethane, and Chloroform were found to be below the measurement limits. Additionally, the report prepared as a result of the studies carried out in cooperation with the Mevlana Development Agency, Konya Provincial Directorate of Environment, Urbanization and Climate Change, and Karatay Municipality to investigate the environmental pollution risks arising from the Konya city center evacuation canal was shared with the relevant institutions and the necessary precautions were taken. In this way, it will contribute to the global goal of reducing deaths that may result from air, water, and soil pollution caused by hazardous chemicals.





KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Quality Education





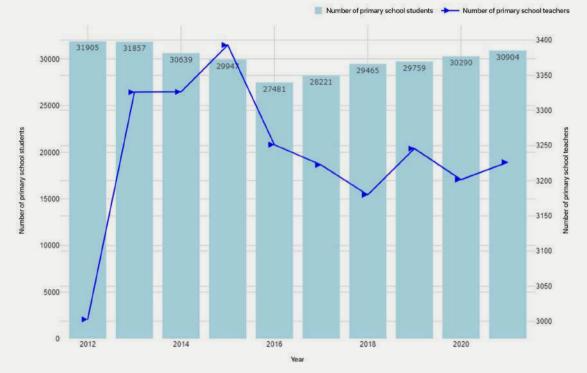


**SDG -4** ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.1 By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes Gender Ratios in Education

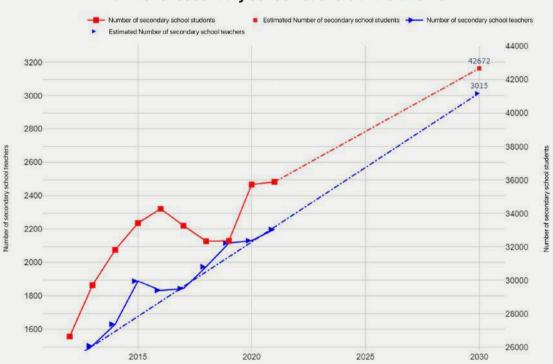
Our district has many primary and secondary schools. As of 2021, 31,000 primary school students have been studying in these schools. The number of teachers providing education in primary schools is around 3250. After the February 6 earthquake, which struck our country, many earthquake victims came to our district and many primary school students started to receive education in these schools. Therefore, it is considered that the numbers given by the Ministry of Education will increase as of 2023 (Graph 11). It has been reported that the number of teachers teaching in the secondary schools of our city is 2200 and the number of students studying is 36000. According to the forecast analyses, it is predicted that the number of teachers will exceed 3000 and the number of students will exceed 42.000 in 2030 (Graph 12).

Our district attaches great importance to gender equality. The gender ratios of students in education are approximately equal to each other. While the gender ratio for the 2021/22 academic year in primary education is 100%, it is calculated as 98.51% in secondary education. Primary education is compulsory. Although female gender ratios decrease slightly in secondary education, education rates are approaching each other in all education. Karatay Municipality has been giving school bags and stationery supplies as gifts to all students starting the first grade since 2019. The school bag includes a lunchbox, a pencil holder, 12 dry paints, 12 crayons, exercise pens, a black pencil, a red pencil, a transparent file, an abacus, a counting stick, a counting bean, an eraser, a sharpener and coloring book. Education is free, and educational books are also provided free of charge by the state.



#### Number of primary school teachers and students

Graph.11 Number of primary school teachers and students in Karatay district



#### Number of secondary school teachers and students

Graph.12 Number of secondary school teachers and students in Karatay district



Karatay

We, Karatay Municipality, together with our District Directorate of National Education, carry out special studies for students preparing for high school. A total of 8,000 high school entrance exam preparation books were delivered to 2,000 students who were successful in the trial exam held in all high schools in Karatay in 2019. Stationery aid provided only to students starting the first grade of primary school has reached 1.5 million TRY by the end of 2022. The number of books distributed by our municipality as of the end of 2022 was also 401,154. Bilim-Çocuk, Meraklı Minik, and Bilim-Teknik magazines were distributed in primary, secondary, and high schools to popularize scientific studies and raise awareness among students. Chess tournaments, robotic coding workshops, and football tournaments were organized between schools, and all expenses were covered by our municipality. A total of 12,000 TYT (Basic Proficiency Test) and AYT (Field Proficiency Test) exam Planning Books were distributed to high school students in preparation for university entrance exams.

15,000 students attended the book set and film screening titled "Tarih Yazan Çocuklar Karatay'da", an event organized to both develop historical awareness among students and promote our city.

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¶> **KARATAY** 



Our municipality places importance not only on formal education but also on non-formal education. By distributing the "Ramazan Heybesi Programı" to 17,000 students during Ramadan, an effort was made to increase students' interest in Ramadan month. A total of 1620 students were trained in 14 different branches within the scope of the summer courses project. A football tournament was also organized among students receiving religious education in mosques and other Quran courses, both to make the education received more interesting and to develop the awareness of friendship among the students.

Male and female students were allowed to participate in these studies free of charge. In this way, important steps have been taken towards measuring the quality of efficient learning outcomes.



# KARATAY'DA ÖĞRENCİ OLMAK BİR BAŞKA



## TARGET 4.2

EQUAL ACCESS TO QUALITY PRE-PRIMARY EDUCATION

QUALITY

## SDG -4 ENSURE INCLUS

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

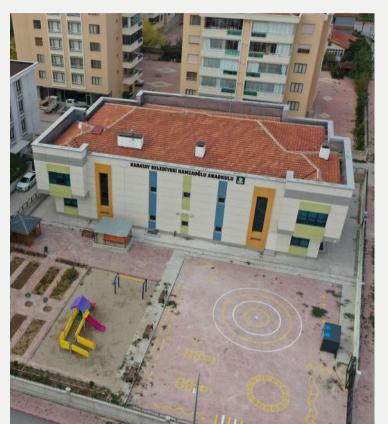
4.2. By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

Schooling rates in our city are quite high for every education level. The schooling rate is 91.6% at the kindergarten level, 94.6% for primary education, and 88.8% for secondary education as of the 2021/2022 academic year. The number of kindergarten students has exceeded 10 thousand, the number of primary school students has exceeded 40 thousand and the number of secondary education students has exceeded 37 thousand in our city. Approximately 4,000 teachers work in more than 3,000 classrooms in all formal education institutions.

The construction of two new kindergartens consisting of eight classrooms each was started by Karatay Municipality, and Köprübaşı Mevlana and Hamzaoğlu kindergartens were completed in 2020.

New kindergarten construction projects are performed in cooperation with the Karatay District National Education Directorate in the neighborhoods where there is a need to overcome infrastructure deficiencies to provide equal access to qualified preschool education.

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## SDG-4

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

Trial exams were held in all high schools in the Karatay district in cooperation with the District Directorate of National Education. A total of 8,000 high school entrance exam preparation books were delivered to 2,000 students who succeeded in these exams held at all high schools in our district. Besides, we have conducted online tests for 5,472 eighth-grade students during the COVID-19 pandemic in 2020. Vocational and Technical education is attached great importance. Because of semi-skilled staff and many industrial sites in our district, vocational training must be highly qualified to meet the need for technical staff. Approximately 1,200 teachers provide education to 15,000 vocational and technical students in more than 500 classrooms in our city.







#### TARGET 4.4





## INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS

#### **SDG -4** ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE

QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.4. By 2030, increase by x% the number of youth and adults who have relevant skills, including Technical And Vocational Skills, for employment, decent jobs, and entrepreneurship







Young people need to be directed to science and their perspectives on technical problems should be improved in order to increase the number of young and adult individuals with the necessary technical, vocational, and other relevant competencies for employment, decent work areas, and entrepreneurship. Within this framework, the "TÜBITAK (Scientific and Technological Research Council of Turkey) Popular Science Publications Library" was established in 146 schools in Karatay. A total of 16,916 books were delivered to our community so as to develop students' sense of curiosity and research and increase their scientific knowledge. Our municipality has also implemented projects under various headings for a total of 28 schools in 2021 and 2022, and in addition to the newly built schools, garden arrangements, gyms, and grass astroturf fields have been made for the schools. Thus, students were enabled to live their childhood in more beautiful landscape environments and by doing sports to become healthier individuals.





# SDG-4

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.5. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.

> Projects focused on the construction of schools and school enrollment of refugee children are carried out in cooperation with the District Immigration Authority to achieve the goal of eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations. There is not any obstacle for other vulnerable groups in the requests for access to education due to legislative regulations, and social and cultural reasons. Special precautions are taken to allow students with disabilities to be admitted both in education and in exams.











# SDG-4

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.7 By 2030 ensure all learners acquire the knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development

Karatay Municipality puts great emphasis on protecting its society's cultural values, strengthening the economic structure, and developing awareness of citizenship, especially in specific disadvantaged neighborhoods.

In this context, Karatay Municipality applied to the KOPSOGEP assistance program in Tatlicak Neighbourhood in cooperation with the KOP Regional Development Administration and Turkish Employment Agency so as to both raise citizenship consciousness amongst locals and to revive the production of wicker baskets, which has sunk into oblivion. As a result of various social assistance projects conducted by Karatay Municipalities, citizens had the chance to earn an income. Besides, the region was sociologically purified from negative situations



With this social work, our citizens earn income and an important step is taken to rid the region of its disadvantaged situation.

Within the scope of the project carried out within the Karatay District Governorship Social Assistance and Solidarity Foundation, it is aimed at disadvantaged groups to earn income through handicraft products.

Cultural trips are organized by the Karatay Municipality's Directorate of Cultural Affairs to ensure that all students acquire the knowledge and skills required for sustainable development by adopting cultural diversity and the contribution of culture to sustainable development.











# SDG-4

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

4.a.Build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, nonviolent, inclusive, and effective learning environments for all

> Disabled access ramps have been built in official institutions and schools in Karatay. Especially in schools, ramps, elevators, or platforms have been built so that disabled individuals can easily enter school buildings and classrooms.

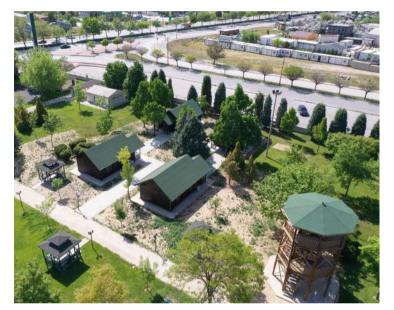
The Science and Art Center was completed by Karatay Municipality in cooperation with the Karatay District Directorate of National Education and put into service for all students. The importance placed on education and science is one of the highest priority areas for Karatay Municipality. From kindergarten to high school, from science centers to adults' mansions, projects are continuously being developed to increase the education and cultural knowledge of the entire population. The Science and Art Center consists of places where children and young people who stand out with their talents and skills will receive education within the framework of a specific program. Even though all of the established workshops of Karatay Science and Art Center did not start training at full capacity, it represented our city at TEKNOFEST with its Underwater Unmanned Robot Team. Young people successfully made the cut in the region with the unmanned underwater vehicle they produced.



Karatay Municipality finished the constructions of the Doğuş Education Center, Hamzaoğlu Primary School, and the "Sezai Karakoç" Imam Hatip Primary School in coordination with the District Directorate of National Education.

The constructions of Doğuş Education Center, Hamzaoğlu Primary School, Keçeciler Primary School, Nakipoğlu Primary School, Karatay Municipality Sezai Karakoç İmam Hatip Secondary School, Kızören High School and Zübeyde Hanım Vocational and Technical Anatolian High School have finished. Thanks to the Karatay Nature School Project established in Karatay City Park, children studying in primary schools in the city can also learn in an applied way about agriculture and the environment, as well as natural life, and much information that they can use in their daily lives and schools. This project is a pioneer one in its field, and in the school, which consists of four separate classrooms and workshops, children receive both theoretical and practical training in agriculture and environment-related planting and planting areas, archaeology, science and art, and craft workshops on wood.





There are also works being carried out to improve religious education opportunities in Karatay district. Projects have been implemented and completed in the last two years to increase the number of Quran Courses, which are educational institutions designated especially for children and young people to receive training for being hafiz (memorized Quran) and religious sciences. A total of five Quran courses have been built in our district, and these are courses built for Divanlar, Köprübaşı, Yarma, Acıdort and Fetih neighborhoods. More than five hundred young people in total receive education in these courses.



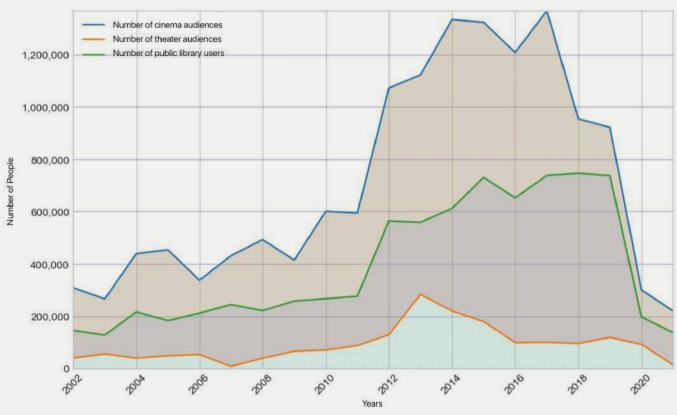
Projects for the construction of new schools as well as the improvement of current schools were accelerated as a result of the agreements made with the District Directorate of National Education. As of 2022, a total of 21 primary and secondary schools have had artificial turf built and completed, allowing students to do sports in higher-quality environments.







In all educational institutions, efforts have been exerted to create qualified spaces, and the needs of the disabled and other disadvantaged groups have been considered in the design of the spaces. There has been a significant decline in the number of participants in cultural activities in our city. In this case, the influence of the COVID-19 pandemic is remarkable. However, after the pandemic, there has been an increase in the number of moviegoers and people/ students using public libraries. There is no state theater in our district, but only some private theater performances take place. Therefore, there is no significant increase or decrease in the number of people watching theater (Graph 13).



#### Number of participation in cultural activities

Graph.13 Number of participation in cultural activities in Karatay district



KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Gender Equality

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### **SDG -5** ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.1 End all forms of discrimination against all women and girls everywhere

There is no discrimination against women and girls in Karatay district. Sensitivity towards the protection, education, and training of women and girls continues in society.

It is observed that, unfortunately, the legal regulations implemented to further empower women and better protect girls do not produce the desired results in many countries. In many Eastern societies, women have been appreciated for thousands of years, and religious and cultural changes generally strengthen this value rather than eliminate it. With a series of laws enacted in our country since 1930, Women were first given the right to participate in municipal elections, then to become headmen in villages, and to be elected to councils of elders, but their rights to elect and be elected as deputies were recognized with the amendment made to the Constitution and Election Law on December 5, 1934. This situation is an indicator of the importance attached to women in our country.

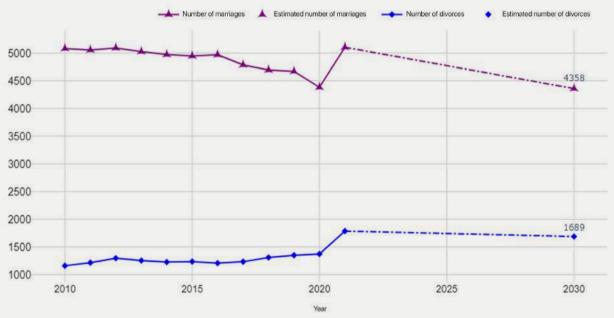
Karatay Municipality cooperates with non-governmental organizations and public institutions operating in the social and cultural field and carries out many projects and activities aimed at women's participation in employment. In this context, efforts are put to hold the social balance of Karatay sustainable by emphasizing the importance of family and the values of the genders separately.





The Karatay City Council organized "Healthy Communication Happy Family School" seminars under the leadership of Karatay Municipality and in cooperation with the Enderun Education Foundation in order to understand and protect the concept of family, considered as the cornerstone of our society, and to explain the importance of this concept to future generations. With these seminars, discrimination against women and girls was re-evaluated and our duty to contribute to the protection of society and family was reminded once again.

An increase in both crude marriage and crude divorce rates was observed between 2020 and 2022. However, in the forecast analyses, it is predicted that the marriage rate will decrease to 0.6% in 2030, while the crude divorce rate will not change significantly and will remain around 0.2% (Graph 14 and Graph 15).

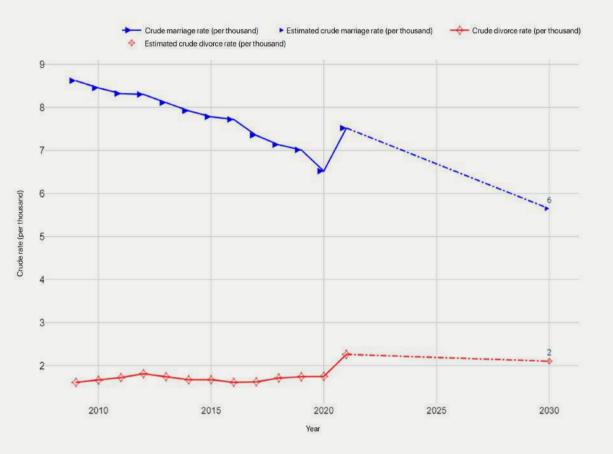


#### Number of Marriages and Divorces by Years

Graph.14 Number of marriages and divorces in Karatay district

Karatay Municipality attaches great importance to youth. Considering our youth as our future, projects are being developed to implement the priorities of young people being physically and mentally healthy, educating themselves, and increasing their equipment. One of the most important ones is the establishment of Youth Centers. In these centers, all kinds of problems of young people are dealt with, especially young girls are provided with the opportunity to express themselves, acquire a profession, and receive psychological support, and they are provided guidance and counseling regarding both business and family life. It can be seen from the feedback given that the information and guidance provided by experts in their fields is very advantageous.

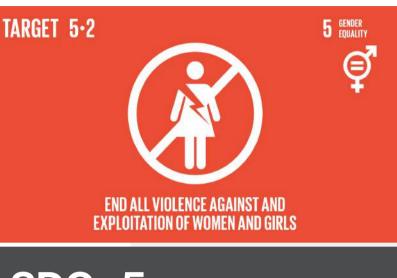




#### Crude marriage and divorce rates by Years (per thousand)

Graph. 15 Crude marriage and divorce rates of Karatay district





### **SDG -5** ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.2 Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation

The abuse against women and girls in public and private spheres and any attack on the freedom of religion and conscience are left behind with new regulations.

In the current legal regulations, the trade of women's own bodies, sexual abuse, or any other kind of abuse is considered within the scope of crimes based on complaint. Relevant necessary legal regulations and improvements in amendments are considered at the national level.

Efforts should be realized more and more in order to strengthen the traditional structure in Karatay to eliminate all forms of violence against women and girls, including women trafficking, sexual and any other kind of abuse, and, herewith, set an example for other parts of the society. It is of great importance to organize seminars to strengthen social cooperation in order to consolidate the family ties of young people, encourage marriage, and solve the financial problems of young people who cannot get married due to financial difficulties. However, society being strongly against all kinds of platforms that encourage abuse in order to eliminate all kinds of abuse on its own won't be enough to solve this problem. Result-oriented activities should be carried out with the awareness that each individual forming the society has both personal and social responsibilities, to strengthen the family and to eliminate all forms of abuse. This issue is too urgent and important to be dealt with by simply reacting.





5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation

There are no issues such as child marriage or forced marriage at an early age in the Karatay district, and such initiatives are not supported by our municipality. Wedding ceremonies are carried out by the Metropolitan Municipality. Such early marriages are absolutely not officially allowed. In addition, seminars and activities to raise public awareness are carried out by the Provincial Directorate of Family, Labor, and Social Services on issues such as child marriage and forced marriage at an early age.



### **SDG -5** ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure, and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate

Practices to be carried out to share the sense of family responsibility within the household are related to the cultural structure. There are only regulations regarding the support of working women in the current legislation. These regulations allow maternity leave, breastfeeding leave, nursery arrangements for childcare, provision of childcare facilities, etc.

The municipality places importance on children, young people, and the elderly, and various socialization and interaction spaces are built for them. As of 2023, 22 retirement mansions for senior citizens have been built in Karatay District. In these places, retired people have the opportunity to socialize. In addition, retired people, have the opportunity to chat with free tea services, and have the chance to see new places with organized intracity and intercity tours. Regular health checks of retirees are carried out in the mansions.







In the center built for young people, young people can easily access educational, sports, and cultural opportunities. In the center, there are Fairy Tale Workshop, Photography Workshop, Marbling Calligraphy Workshop, Cafeteria, Music Workshop, Media Workshop, E-Sports Playstation Room, Foreign Language Workshop, Library, Silent Library, Audio Library, Sports Hall/Gym, Trainer's Room and City Council Administrative Office. In addition, there are training and sports halls, study halls, and conference halls.



Karatay Municipality hosted the "Karatay Environment and Children's Festival" at the beginning of the summer season of 2023, where colorful and entertaining activities took place. During the two-day festival, children participating in the following festivals had two unforgettable days and on two separate stages to be set up at the festival, there were; "Recycling Workshop with the Recyclator and Brother Lemi Abi", "Song Tales", "Meddah Show", "Karacan Children's Theater", Bubble Show", "Zero Waste Theater with Sister Asli ", "Zero Waste Workshop with Barış Kent", Niloya Musical", "Kukuli Musical", "Elif's Dreams Musical" and "Super Wings Musical", and similar workshops. The workshops in the established tents are as follows: "Atikball", "Flying Balloon Workshop", "Basket Wattling Workshop", "Marbling Workshop", "Face Painting Workshop" and so on. In addition, universities, institutions, and NGOs also took part in the event, and participants were informed.



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TARGET 5-5
5 EDDEL

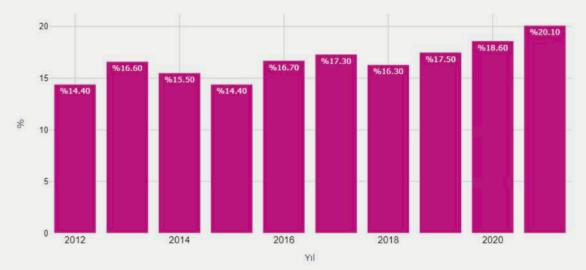
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## ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life

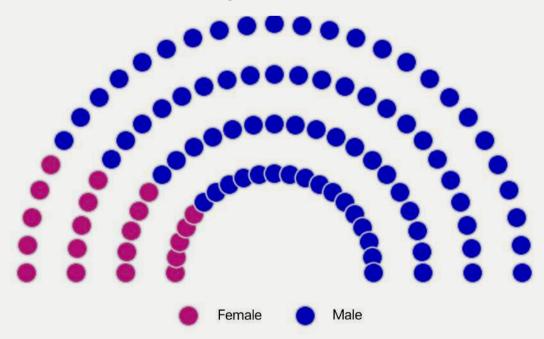
Conducted practices aiming to share the sense of family responsibility within the household are related to the cultural structure. There are only regulations regarding the support of working women in the current legislation. These regulations allow maternity leave, breastfeeding leave, nursery arrangements for childcare, provision of childcare facilities, etc. Women participate with men in business life in equal proportion. Especially in the public sector, the number of women employees exceeds men. Chiefly, the proportion of women in managerial positions has been increasing steadily in recent years (Graph 16).

Effective participation and equal opportunities for women at all levels of decision-making in political, economic, and public life is constitutionally possible. Women actively participate in areas such as civil society movements, municipality councils, and city councils in Karatay. This issue is attached particular importance and efforts are being exerted to increase the rate of female personnel in the municipal administration and its employees. The majority of municipal works consist of works that require heavy labor such as irrigation, sewerage, agricultural works, parks, and gardening works. Therefore, the male workforce predominates. However, the female workforce is rapidly increasing in administrative, cleaning, cafeteria, and technical jobs. In recent years, the female workforce rate has increased to 8% across all municipal employees and up to 23% in administrative jobs only (Graph 17).



#### Karatay Ratio of Women Managers in Local Government by Years (%)

Graph.16 Female Manager Rate in Local Government by Years (%)



Ratio of Women Managers in Local Government in 2022 (%)

Graph.17 Female Manager Rate in Local Government in 2022 (%)





### **SDG -5** ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws life

> The inheritance rights of women in Turkey are observed and protected with the 8049 numbered Turkish Civil Code. There is no law or culture that hinders women from owning and controlling their property. Grants that support entrepreneurship are given in a higher amount than normal by The Small and Medium Industry Development Organization (KOSGEB) so as to increase access of women to economic resources







## SDG-5

ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels



Karatay Municipality conducts various works in order to observe gender equality in its community. The municipality has 67 women employees at the moment. In addition, we have 5 female members in our municipal council. This can be considered as an indication of the importance we attach to our women in business life.

Moreover, women play a great role in agricultural activities fulfilled in Karatay.

Additionally, official data from the Directorate of Social Support Services of Karatay Municipality shows that 90% of the citizens who apply for social assistance consist of women. In the projects we continue to conduct, maximum attention to the professional development of women is ensured and opportunities enabling them to establish their own businesses are created. Women in Karatay have gained professional skills as a result of projects supporting wicker and basket arts carried out in cooperation with the Ministry of Industry and Technology and the KOP Regional Development Administration.



KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

## Clean Water and Sanitation





### **SDG -6** ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

Drinking water in Karatay is provided by Konya Metropolitan Municipality's General Directorate of KOSKİ (Konya Water and Wastewater Administration). With an application that can be considered as only in the world, started in 1989, spring waters brought from the Dutlu, Çayırbağı, Mukbil, Beypinarı, and Kırankaya springs, located 15 to 20 km away from the city center, are connected to the entire city center with a separate network line and are offered to the public for free through 1001 freshwater fountains. 280 of these fountains are located in Karatay.

Apart from mains water, Karatay Municipality uses 2 combined water vehicles to directly deliver drinkable fresh water to rural areas. It is ensured that combined water tankers provide high-quality fresh water to regional suburbs where the water network does not reach. Karatay Municipality supplies its suburbs, where freshwater does not reach from the above-mentioned resources. A total of 68 freshwater tanks were installed in these suburbs of Karatay District. Through these tanks, free fresh water is delivered to the public on 7/24 system.

14 freshwater tanks were added in Karatay at the request of citizens in its district between 2016 and 2019. Herewith, the number of freshwater tanks in Karatay increased to 68 in total.

Spring water from the Blue Tunnel flows from the taps in Karatay district within the scope of the project, which is one of the biggest investments in terms of financial and physical features among Turkey's drinking water treatment plant projects and meets Konya's 50-year water needs. With the Blue Tunnel project, which was put into operation in June 2018, the need for a clean, safe, and uninterrupted supply of drinking, utility, and industrial water is met. The water supplied to the network is purified in accordance with the Ministry of

Health's Regulation on Water for Human Consumption, the World Health Organization's EU Standards, and TS 266 Turkish Standards. As of 2022, 120 million m<sup>3</sup> of water has been produced and made available to the city.

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In addition to the daily distribution of fresh water from 280 freshwater fountains located in the center of Karatay. It is predicted that the increase in fresh water may turn into an unsustainable structure in the coming years and thus, the need for economical and sustainable solutions for drinkable fresh water has emerged in rural areas.

Only 1% of the water on Earth is freshwater, and only a small portion of it is drinkable. Karatay District knows that and carries out extremely meticulous work to protect and sustainably consume freshwater resources in the district, which is already an arid region. Each day, projects related to both agricultural irrigation and healthy drinkable water are carried out to ensure access people of to safe water. It was necessary to build a bridge over the previously built T3 irrigation canal for its sustainability in terms of hygiene and protection. For this purpose, a project was built, the bridge construction was completed, and the passage of vehicles began to be made safer and healthier.







## SDG -6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.2 By 2030, achieve access to adequate and equitable SAN-ITATION and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

This target is not directly related to Karatay. However, Turkey's cultural and social culture does not allow open defecation in public areas. Besides, there is no lack of physical infrastructure that would necessitate the need for this. Konya puts great emphasis on this matter in all its regions. Additionally, the Zoning Bylaws published in Article 5 (25) of the 3 July 2017 dated, 30113 numbered Official Gazette of the Republic of Turkey states that "Any building intended to be lived in must consist of at least one living room, one bedroom, one kitchen or cooking area, one bathroom or washroom and one toilet.".

Moreover, the "Rules for realizing the urban environment, any official/public building, facility or area being accessible for special and elders of our community" are strongly defined in the Bylaws of Konya Metropolitan Municipality. Accordingly, there are provisions regarding the allocation of one out of every 10 toilets for the disabled and the construction of special toilets for (disabled) men and women. In addition to all these legal obligations, there are ablution places and toilets in almost all mosquemasjid outbuildings, and free public WC service is provided in crowded public places. The mentioned public toilets are periodically cleaned by Karatay Municipality.

Public women's and men's toilets and disabled toilet services are offered in the required areas of the large parks and gardens built by Karatay Municipality. There are separate toilet facilities for disabled men and women. Wastewater management and treatment are carried out by Konya Metropolitan Municipality. 120 million m<sup>3</sup> of drinking water was consumed in Konya city as of the end of 2021. Approximately 70 million m<sup>3</sup> of this water is treated in Konya Wastewater Treatment facilities and reused as purple tap water. Purification capacity activities continue with this situation, which means the recovery of 60% of the consumed water. The largest wastewater treatment facility in our country is located in Konya, with a daily water treatment capacity of 366 thousand m<sup>3</sup> treated wastewater is used both for irrigation of green areas and agricultural areas. The proportion of the population receiving treated wastewater services has reached 75% (Graph 18).

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In the recent period, a project was prepared and funds were allocated for the Çayır Mosque shadirvan (fountains) and WCs in addition to the previous works, and the construction work was completed. Karatay Municipality shows the necessary sensitivity to provide healthy and hygienic environments for the people to fulfill their religious requirements.



### TARGET 6-3



CLEAN WATER

### IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE

### **SDG -6** ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse by x% [to be decided] globally

A zero-waste project is implemented to reduce pollution with the support of the Union of Municipalities of Turkey. Waste cages have been placed in suitable places for the storage of pesticide packages, and the collected waste is disposed of appropriately. Several events are organized in cooperation with the city council targeting the decrease of waste and raising recycling awareness.

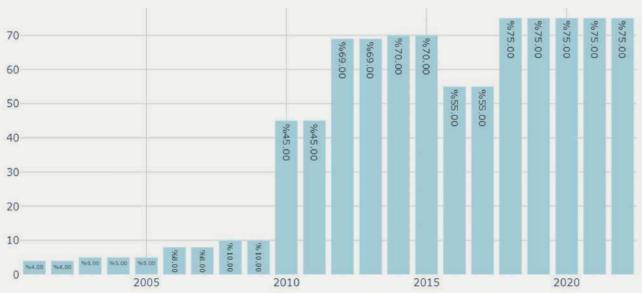
Waste collection centers called "Zero Point of Waste" were established at five different points of the city with the recycling and zero waste projects initiated. Thus, Karatay Municipality, which has collected hundreds of kilos of recyclable waste and contributed to the recycling and economy with these wastes, could be able to spread this awareness to all segments of society with its practices encouraging citizens to Zero Waste. Waste can be brought to the Waste Collection Center, which attracts great attention from citizens and is the "Zero Point of Waste", where seven different types of recyclable waste are brought, including glass, paper-cardboard, plastic, battery, metal, electronic waste, and oil waste, six days a week except Sundays. Citizens who bring the waste are given various gifts of 34 different types according to the points collected per kilo. With the project in question, 4235 citizens have brought 406.5 tons of recyclable waste to the center. To date, 3,534 gifts have been given to citizens who brought the waste.

In addition, a waste collection competition called "One Waste Changes a Lot" was held between primary



schools, and approximately 60 tons of waste was collected by a total of 3225 students from 42 primary schools. Thus, awareness of a clean environment was established in primary school students. The "Be a Zero Waste Volunteer" project has been launched on the municipality website and it is aimed to raise awareness among the public about preventing waste, using resources more efficiently, reviewing the causes of waste generation and preventing waste generation, and collecting waste back at its source.

Karatay Municipality organized the "KOP Clean Air, Zero Waste, Recycling Library" project in cooperation with the KOP Development Administration, and information and awareness activities were carried out for kindergarten students. The importance of clean air, energy, and pollution was explained through experiments, hand skills, games, coloring books, bags, pencils, erasers, crayons, drawing books, notepads, and posters were distributed to the students.



The ratio of the municipality population served by a wastewater treatment plant to the total municipality population.

Graph.18 Population rate provided with wastewater treatment plant service (%)



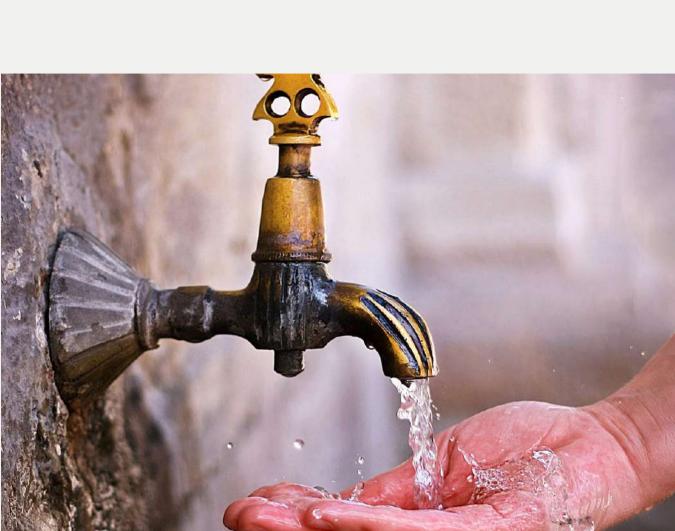


# SDG -6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.4 By 2030, substantially increase water use efficiency across all sectors, and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity



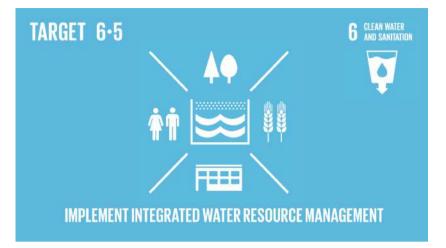


A shortage of drinking water is not the matter in Karatay. However, the most economical approach to the increasing need for the supply and logistics of irrigation water, which occurred as a result of global climate change and drought, can be realized through savings.

Precipitation and groundwater, which eventually may increase/ decrease accordingly, form the main water resources of Karatay.

It is aimed to use surface water in order to secure drinking water with the contributions of the "Blue Tunnel Project".





## SDG-6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.5 By 2030 implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

The "Blue Tunnel Project" has been carried out for the management of integrated water resources. Transferring 100 million m<sup>3</sup> of water annually and irrigating 3200 hectares of land is targeted within the project.

Another project that focuses on implementing integrated water resources management at all levels is the "Karatay Irrigation Project". The mentioned project aims to concrete soil canals (4.5 km) between the "Kısık Plateau" and "Tavşan Bridge" and the "Alemdar Regulator" and "Ereğli Asphalt" (23.6 km), where loss and leakage in irrigation canals are considered the highest. With an annual water saving of 70 million m<sup>3</sup>, an added value of approximately 160 million TRY a year will directly contribute to the national economy. The mentioned project was signed and completed in 2022.

Various institutions, including the Konya Metropolitan Municipality General Directorate of KOSKI, the Fourth Regional Directorate of State Hydraulic Works, the KOP Project Regional Development Administration, Irrigation Unions, the Provincial and District Directorates of the Ministry of Agriculture and Forestry operate for the management of water resources. To ensure cooperation and coordination between the mentioned institutions is of great importance. As a district municipality, Karatay Municipality works in cooperation with other institutions for the population in its area of responsibility.







# SDG -6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.6 By 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes

Karatay Municipality is working on eventually declaring natural geological formation areas which contain various sinkholes in its region as an "UNESCO Geopark"

Studies on the popularizing of groundwater surveys and the use of smart well meters are carried out in cooperation with the KOP Regional Development Administration, Directorate of State Hydraulic Works, and Governorship in order to prevent uncontrolled use of groundwater.

The "Konya Closed Basin Groundwater Potency and Future Investigation Project" was put into practice after protocol cooperation between the Fourth Regional Directorate of State Hydraulic Works and KOP Regional Development Administration as a means to monitor and, sustainably manage groundwater, considered highly important for agriculture in Konya. It aims to modernize 122 groundwater monitoring stations located in the Konya Closed Basin and Upper Sakarya Sub-Basin, and instantly monitor groundwater levels with online systems by installing automatic level measurement systems targeted with the mentioned project. After amendments in the "Planned Areas Development Regulation" of the Ministry of Environment, Urbanization, and Climate Change, activities that target the popularization and reinforcement of rainwater harvesting system has started with rainwater storage in large housing complexes. Herewith, it became obligatory to install rainwater storage systems in new buildings to ensure that rainwater is collected in indoor tanks instead of on housetops. Consequently, contribution to aquatic resources is ensured. In this way, the protection of resources will be supported by reducing the burden on the aquatic ecosystem.

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### **SDG -6** ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

6.b Support and strengthen the participation of local communities in improving water and sanitation management

> Especially, periodic cleaning services of fresh water tanks are conducted in the direction of activities that assure participation of local communities in the development of water and sanitation management. Locals and neighborhood headmen contribute to post-cleaning services. Relevant departments of our municipality provide direct services in cases of reported problems that may occur, apart from periodic cleaning and maintenance of water tanks. The fact that we are able to predict the decrease in weather temperatures contributes to the planning of water distribution. Accordingly, water is not distributed through pipes but by water tanks in extreme weather conditions in order to protect the installations of the warehouses. Thus, damage caused by bad weather conditions is prevented and improvements in water and sanitation management are ensured.







KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Affordable and Clean Energy





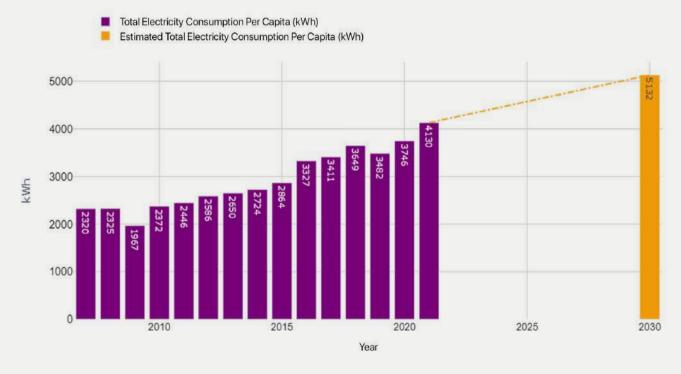
### **SDG -7** ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE, AND MODERN ENERGY FOR ALL

7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services.

We have no neighborhood that does not have access to energy. All households in our city have access to electricity. Additionally, electricity consumption per capita is also increasing. In this technological era, the energy needs of all individuals are increasing. This situation requires the creation of new energy sources. While total electricity consumption per capita was 3746 kWh in 2020, it increased to 4130 kWh a year later. In the forecast analysis, it is predicted that the electricity needed per person will be 5132 kWh in 2030 (Graph 19). Geothermal housing and greenhouse heating are planned within the scope of the project, carried out in cooperation with the World Bank, which enables access to affordable, reliable, and modern renewable heat energy in Ismil District, Karatay. The number of beneficiaries varies depending on the flow rate and the geothermal temperature that can be reached. It is planned to heat 1000 houses with this Project.







#### Electricity consumption per capita in Karatay district (kWh)

Graph.19 Electricity consumption per capita in Karatay district (kWh)







**INCREASE GLOBAL PERCENTAGE OF RENEWABLE ENERGY** 

**SDG -7** ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE, AND MODERN ENERGY FOR ALL

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Karatay Municipality has two Solar Power Plants built in Saraçoğlu and Yeni Güneş neighborhoods, producing a total of 1,300 kW of power. With these power plants, the energy equivalent to the annual electricity needs of all the municipality's facilities is met by the sun. 2,578 MWh of energy is produced from solar power plants every year. In the past year 2022, the production of 0.6 MWh increased to a total of 3000 MWh throughout the year.





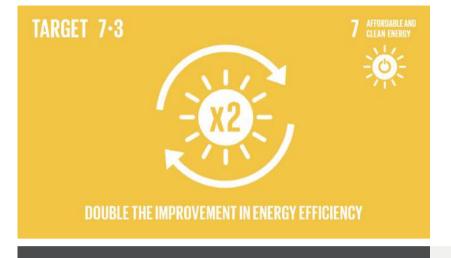












**SDG -7** ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE, AND MODERN ENERGY FOR ALL

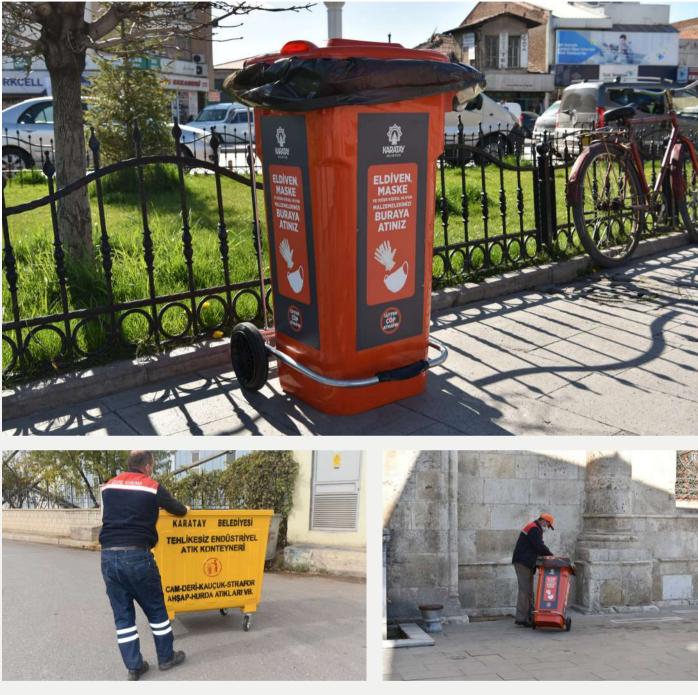
7.3 By 2030, double the global rate of improvement in energy efficiency

Relevant personnel of our city participated in the program organized in Ankara within the scope of the YEVDES Energy Project, where 800 local government personnel were trained.

As a result of the training, it was emphasized that public institutions with a closed area of 10,000 m<sup>2</sup> or an energy consumption of 250 TOE (Tons of Oil Equivalent) should have an Energy Manager and conduct an energy audit every seven years. Within the framework of energy audits, improvements in the energy bill can be easily made within the framework of the legislation regarding the financing of renewable energy.

As part of an energy efficiency project launched in 2021, galvanized garbage containers were removed with the transition to a 3 and 5 m<sup>3</sup> plastic underground container system. Thus, instead of smaller galvanized containers placed more closely/tightly, larger volume plastic garbage containers were placed less loosely and garbage collection points were reduced in a planned way. This has resulted in fewer stop-and-go garbage trucks, as well as the use of fewer garbage trucks. According to the expenditures and calculations made at the end of the studies, an average of 70,000 liters of diesel fuel was saved annually in vehicle fuel.







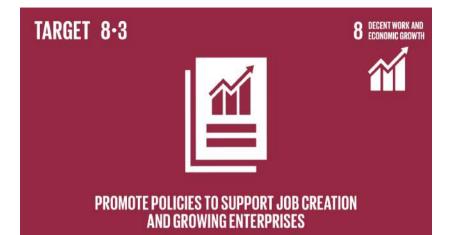


KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# **Decent Work and Economic Growth**







## SDG-8

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services

> Development-oriented policies are carried out and productive activities, decent job creation, entrepreneurship, creativity, and innovation are of great importance in Karatay District.

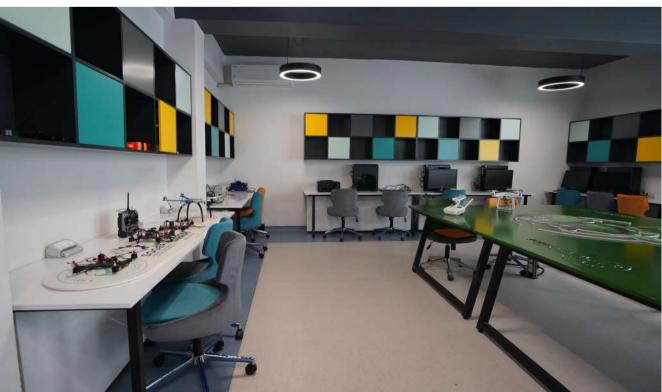
> Especially, projects that target to facilitate the participation of disadvantaged groups of our community in employment are carried out to reduce youth unemployment, to develop qualified and productive human capital in areas suitable for the needs of the province and region, to develop professional knowledge and skills, to support entrepreneurship in disadvantaged groups.

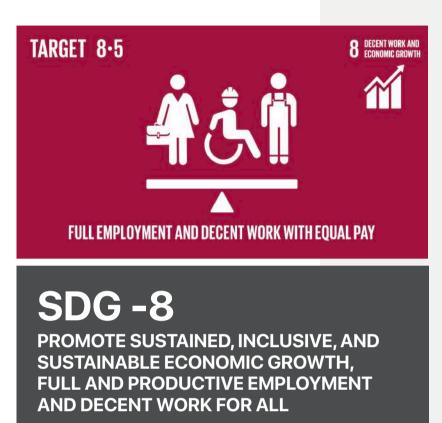
> Our Municipality applied to the "Social Development Program" of Mevlana Development Agency (MEVKA) of the Ministry of Industry and Technology with the "RoboKaratay Project" and received project support of 2,558,774 TRY. With the project, workshops were established to provide





training on Graphic Design, Web Design, Augmented Reality Applications, Drone Pilot Training, Games and Animation, Artificial Intelligence, Video Montage, and 3D Design. Construction machine simulation was acquired. A "book café" was created and coding training, Arduino application training, unmanned aerial vehicles training, construction equipment simulation application training, and robot arm application training were provided. Thus, young people in the project schools are better prepared for the technology of the future.





8.5 By 2030 achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

In the investments and practices carried out by Karatay Municipality, plans are made to facilitate the access of all women and men, including young people and the disabled, to employment and jobs in order to achieve the aim of ensuring that all women and men, including young people and the disabled, have access to full and productive employment and decent job in Karatay District,

The "Karatay Youth Project", consisting of a budget of 650,000 Turkish Lira, was presented within the context of the "Youth Friendly Cities Project Competition" organized by the Union of Municipalities of Turkey. Within the scope of the project, it aims to provide professional development and employment for young people living in Karatay city, to ensure that young people in the disadvantaged group living in Karatay receive a quality education, and to carry out cultural, artistic, and sports activities for young people in the disadvantaged group living in Karatay city.

One of the primary goals of Karatay Municipality is for the people to overcome poverty, become employed, and earn their income. Therefore, it tends to provide people with jobs rather than providing social assistance for a certain period. Projects related to this have gained momentum

in the last two years. Therefore, two trade centers started to be built with very large project costs, and one of them has been completed and the other is more than 50% completed. Ismail Trade Center has become the attraction point of the thermal center, which is the shining star of tourism. In the center, 30 independent workplaces and a car park with all peripheral equipment have been built. The workplaces areas are different from each other and the total cost is over 7 million TRY. With this center, workplaces have been created for many craftsmen, and it has become a source of employment for many people, including its owners, employees, and their families.

The second largest business center, Kızören Sinkhole, was built within the scope of the tourism attraction center project. With the project cost approaching 10 million TRY, along with the restoration of Obruk Inn, workplaces are being built around it. When the project is completed, many people will be employed by the restaurants and many workplaces that will be opened.

KARATAY

Various workplaces are being built in various parks (90 pieces with different concepts and areas), which have been completed and whose projects are still ongoing, both for the ecological environment and sustainability concerns, and for the purpose of allowing the public to live in clean and healthy green environments, in order to maintain the economic structure and create a business environment. Some of them are operated by Karatay Municipality, and in large part, the businesses are operated by private entrepreneurs. Thus, employment opportunities are provided for many young and middle-aged men and women.





### TARGET 8-6

8 DECENT WORK AND ECONOMIC GROWTH



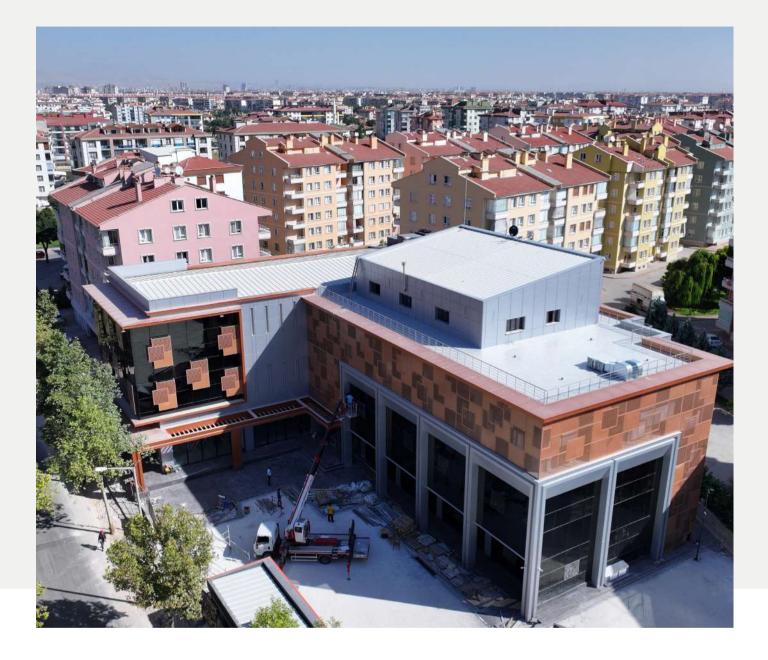
PROMOTE YOUTH EMPLOYMENT, EDUCATION AND TRAINING

# SDG -8

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

8.6. By 2020 substantially reduce the proportion of youth not in employment, education, or training

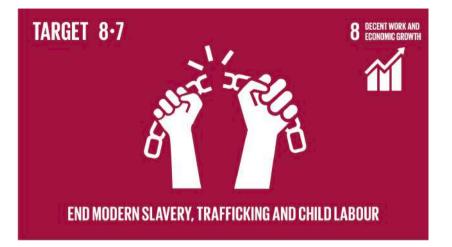




Karatay Municipality places great emphasis on reducing the proportion of unemployed or uneducated teenagers in its district. The "Karatay Youth Business Incubator" (Incubation Center) project was prepared by Karatay Municipality in order to contribute to the development of the effectiveness of community-based economic expectations of young people who do not receive education and are unemployed and to increase their well-being and resilience.

The "Karatay Youth Business Incubation Center" will be created as part of the Project and it is aimed to implement both daily life and professional skills development programs through individual and group psychological counseling activities so as to strengthen the coping mechanism of young entrepreneurs and increase their own flexibility. Karatay Municipality will provide the physical facility of the Project within the scope of the Youth Center. However, the legal status of the Youth Business Incubator will be founded under the Karatay Youth Center. Relevant local authorities and educational bodies will be responsible for the incubator's local, community-based implementation mechanism.





## SDG -8

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

8.7 Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labor, eradicate forced labor, and by 2025 end child labor in all its forms including recruitment and use of child soldiers.

Our country has sufficient legislation to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor, including the recruitment and use of children as soldiers. Forced labor was prohibited by the 18th Article of the Constitution of the Republic of Turkey which states that "No one can be forced to work, and forced labor, namely, drudgery, is prohibited.

In addition, the 50th Article of the Constitution of the Republic of Turkey states that "No one shall be required to perform work unsuited to his/her age, sex, and capacity. Minors, women, and physically and mentally disabled persons shall enjoy special protection with regard to working conditions. All workers have the right to rest and leisure."

Article 50 of the Constitution of the Republic of Turkey also states: "No one can be employed in jobs that do not suit his age, gender, and strength. Minors, women, and those with physical and mental disabilities are specially protected in terms of working conditions." provision is included.

Those who are of primary school age but do not attend compulsory primary education institutions are prohibited from working, paid or unpaid, in any public or private workplace, or in any other place that requires work in any way, by the Primary Education Law and Education Act.





## SDG-8

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, particularly women migrants, and those in precarious employment Karatay Municipality submitted granted projects to various institutions and organizations that provide funds. For instance, the "Professional Development and Adaptation Project" was carried out by UNHCR in coordination with the Ministry of Family and Social Policies.

In this context, our municipality applied to different funding institutions/organizations, and some projects received grants. For example, the "Professional Development and Adaptation Project" is carried out by UNHCR in coordination with the Ministry of Family and Social Policies. We implemented the "Professional Development and Adaptation Project" consisting of a budget of 230,000 TRY and carried out in cooperation with the KOP Regional Development Administration to promote local and cultural handicraft arts and products.

With the project titled "Straw and Basket Art is Reviving in Tatlicak" with a budget of 156,000 TRY, carried out by Karatay Municipality in cooperation with KOP, 20 female and 20 male citizens in the disadvantaged group were taught wicker and basket art by Public Education Center instructors. At the end of the training, it is aimed for the trainees to acquire this art as a profession and to contribute to the family economy by selling the wickerwork and baskets produced. The project is another application aimed at creating a safe working environment for the disadvantaged segment.

We realized the "Wicker and Basket Reviving Project in Tatlıcak", which consists of a budget of 156,000 TRY, within the framework of the before-mentioned project and we hereby created employment opportunities for 20 women and men through courses given by educators from the District Public Education Center. At the end of the education, it is aimed for the trainees to acquire this art as a profession and contribute to the family economy by selling the wickerwork and baskets produced. The project is another application aimed at creating a safe working environment for the disadvantaged segment.

Furthermore, legal audit activities are carried out to improve working conditions in the Karatay District.





## SDG-8

PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

8.9. By 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and product

Several activities are carried out in Karatay city to support sustainable tourism that creates employment and promotes local culture and products.

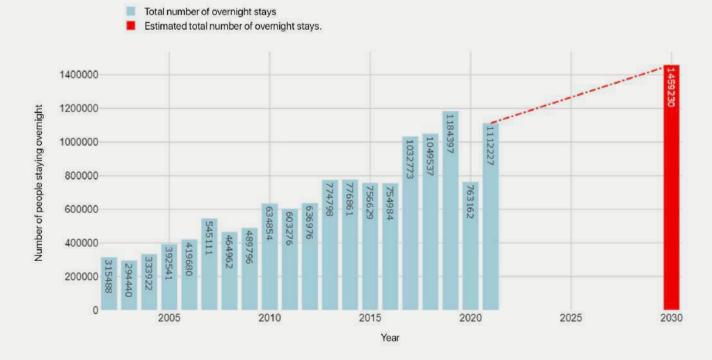
As mentioned under the "9.22 Increasing the Efficiency of Festivals and Events in Tourism" titled topic that falls under subject Nr. 9 "Policies to be Implemented to Achieve the Goals of the Konya Tourism Master Plan (2020-2025)", participation in related plans as a stakeholder is ensured at the point of creating policies regarding the subject.

In this context, it is thought that Konya needs a sub-organizational unit for "Event Management", and it is seen appropriate that this unit will operate under DYO (Destination Management Organization), recommended to be formed. Besides, provincial events of the above-mentioned have to be in cooperation with local governments and in a way that supports the participation of locals in decision-making processes. The unit in question prepares lists regarding the events throughout the province, in cooperation with local governments and in a way that supports the participation of the types of events and the place where they will be held, classifying the event themes and spreading the events evenly within the calendar in a way that supports local

culture and products, supporting the events and "they should have duties such as analyzing the outcomes of the activities and planning new activities accordingly."

Studies are carried out under the leadership of Konya Metropolitan Municipality within the framework of this plan provision. It is envisaged that event management will be carried out from a common center with the participation of local institutions, providing many benefits such as preventing overlapping of events, ensuring balanced distribution throughout the year, and effective and efficient use of corporate resources.

Our city is a center of attraction for many local and foreign tourists. Hz. Mevlana Tomb, Şems-i Tebrizi Mosque, Alaattin Hill and Mosque, and various madrasahs (formerly schools) are the most important historical beauties of our city that attract tourists. For this reason, the number of local and foreign tourists is increasing with each passing day. The number of tourists staying overnight was low in 2020 due to the COVID-19 pandemic. However, more than one million overnight stays were made in the following years. While there were 1,113,000 overnight stays in 2021, it is predicted to be more than 1.5 million in 2030. It is estimated that the total number of incoming tourists is 3 times higher than the number of overnight tourists (Graph 20).



#### Total number of overnight stays by years

Graph.20 Total number of overnight stays in Karatay district

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Employment opportunities are created and cultural values are revealed at the Savatra Excavation supported by Karatay Municipality and Konya Metropolitan Municipality.



Sustainability is considered the highest priority within the activities carried out to reveal the archaeological potential of the district and the "Bozdağ Wildlife Development Area Welcoming Center" Project. The realization of the "Bozdağ Wildlife Development Area Welcoming Center" will contribute to the development of sustainable tourism

Sustainability first shapes the activities in the Bozdağ Wildlife Development Area Welcoming Center projects through the activities carried out to reveal the archaeological potential of the district.

The realization of the "Bozdağ Wildlife Development Area Welcoming Center" will contribute to the development of sustainable tourism. It is aimed to bring Obruk Inn, which was mentioned before and whose restoration support was provided by Karatay Municipality, to tourism and the project work has come to an end.















Sustainability is prioritized in choosing tourism functions in the conservation-use balance of restored historical places.



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# Industry, Innovation and Infrastructure



### TARGET 9-1

### **SDG -9** BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

DEVELOP SUSTAINABLE, RESILIENT AND INCLUSIVE INFRASTRUCTURES

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all

The constructions of roads, sidewalks social and cultural facilities, and infrastructure for fresh drinking water, health and irrigation are realized within the scope of the target of developing quality, reliable, sustainable and resilient infrastructures, including regional and transborder infrastructures, to support economic development and human well-being, with a focus on affordable and equitable access for all.

The asphalt of roads in Karatay is maintained periodically. The amount of repaired asphalt has increased from 90 thousand square meters to 120 thousand 1202 in recent years. Similarly, asphalt sidewalk works increased from 500 thousand square meters to 660 thousand square meters. Besides, concrete asphalt works have increased from 520 thousand square meters to 570 thousand square meters.

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Additionally, pavement and refuge construction works have tripled in the last three years.

Pavement works have increased from 60 thousand m2 in 2018 to 180 thousand m2 in 2020.







## SDG-9

BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

9.3 Increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets

Significant areas of three main industrial sites located in the center of Konya fall within the borders of Karatay. It is ensured that small-scale industrial enterprises within the borders of Karatay have access to financial services, including affordable credit and their integration into value chain markets in cooperation with the Konya Chamber of Commerce (KTO) that, especially supports the mentioned enterprises with the import and export of goods and puts great emphasis on increasing their potential. Additionally, credit options easily accessible to companies located in small industrial facilities are offered.







BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

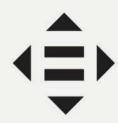
9.C Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

Karatay Municipality offers free wireless-internet services in its public building and thermal holiday resort within the context of providing cost-effective internet access so as to increase access to information and communication technologies. In addition, projects regarding free wireless-internet service in public parks and touristic spots are underway. Karatay Municipality organizes a variety of events. Citizens are provided with free wireless-internet services during these events.



KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# **Reduced Inequalities**





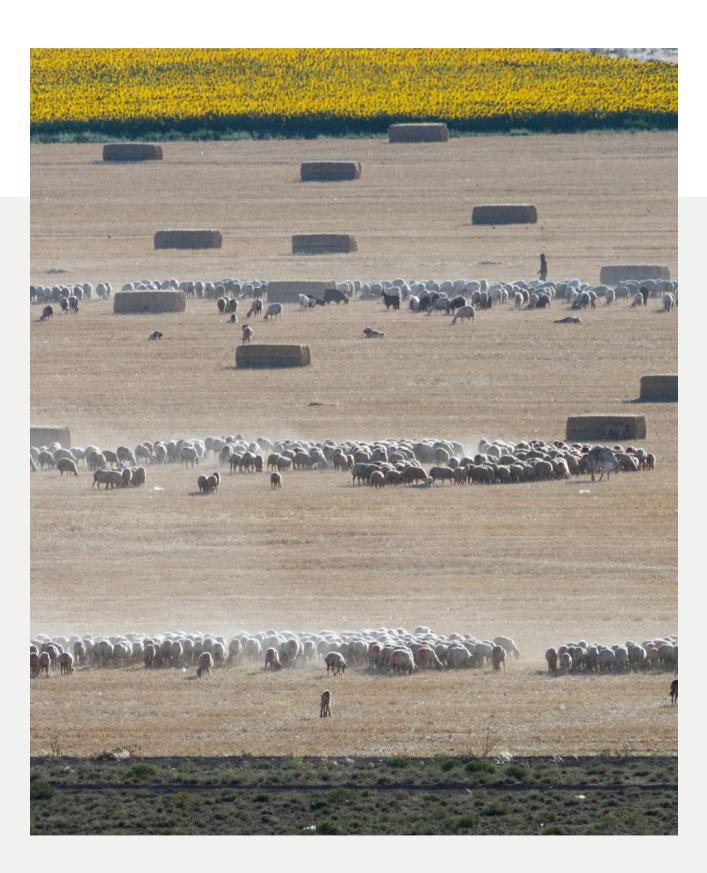


### **SDG -10** REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

Various projects are implemented to increase income. It is aimed to establish an exemplary sheep breeding facility in the region targeting the development of agriculture and animal breeding and to ensure the sustainability of income growth of low-income citizens.

Karatay Municipality conducts the above-mentioned project in cooperation with Konya Metropolitan Municipality and Selçuk University.







## **SDG -10** REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

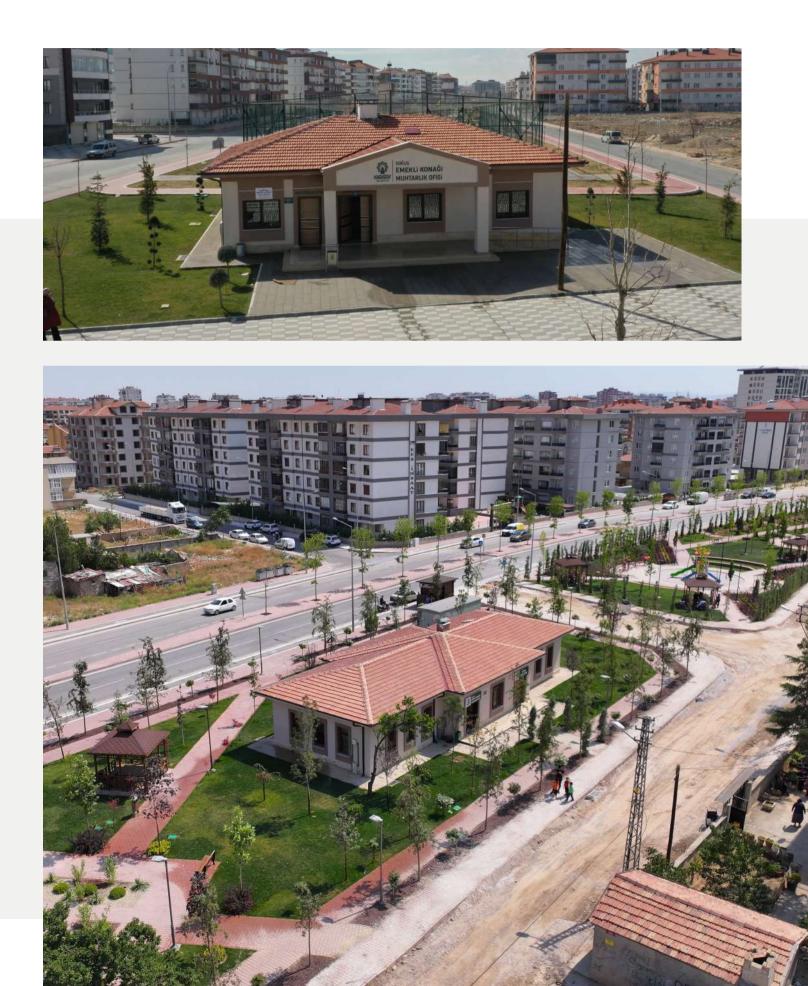
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

People from all income groups and various countries live within the borders of our municipality. Besides the ones that come from different countries for working purposes, there are also people who are in immigrant status or under temporary protection for various reasons. There is no discrimination regarding the access of public services.

Facilities such as seniors' recreation centers, community centers, libraries, and youth centers have been formed as reliable and equipped places where elders, teenagers, women or children can socialize.

Additionally, routine health check-ups, blood pressure, cholesterol and blood sugar measurements are held at seniors' recreation centers in Karatay.









## **SDG -10** REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

10.3 Ensure equal opportunity and reduce inequalities of outcome, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions in this regard

> There is no legal regulation based on discrimination. Innovative methods that are developed do not create a perception of discrimination in practices and thus, provide equal opportunities. All segments of our community can apply to any institution in Karatay.







10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

Efforts are put to ensure and adopt more equal fiscal, wage and social protection policies and progressively achieve greater equality. Additionally, Karatay Municipality puts great emphasis on eliminating wage differences amongst those who do similar work in other similar institutions. Moreover, measures are taken so as to become a preferred institution for employees.



**SDG -10** REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

10.7 Facilitate orderly, safe, regular and responsible MIGRATION and mobility of people, including through implementation of planned and well-managed migration policies

> The Konya Provincial Directorate of Migration Management conducts studies so as to implement planned and well-managed migration policies and facilitate systematic, safe, regular and responsible migration and mobility of people.

The Provincial Directorate of Migration Management conducts awareness-raising campaigns for first aid and anti-addiction practices for both Turkish and foreign students in cooperation with the "GSB Karatay Youth Center". Increasing social cohesion is aimed through these campaigns and practices.

Additionally, The Provincial Directorate of Youth and Sports regularly organizes integration activities that include traditional "mancala" games. Awareness-raising campaigns for anti-addiction and first aid are considered highly important. Therefore, health service specialists of the Provincial Health Directorate also contribute to the activities organized for Turkish and foreign students at the Karatay Youth Center.





Karatay Municipality organized informative events for headmen of neighborhoods in Karatay with the cooperation of the Provincial Migration Administration and District Governorship.

Informative topics about regular migration, irregular migration, international protection, temporary protection was discussed and adaptation activities considered extremely important for foreigners to ingrate into the community were carried out with the participation of social workers and project experts. In addition, information about the rights and obligations of Syrian foreigners under temporary protection is given. Moreover, various projects for refugees are conducted with the cooperation of UNHCR.





KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Sustainable Cities and Communities







### **SDG -11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums

A total of 40 mass housing projects were carried out under the leadership of Karatay Municipality, in order to provide housing, develop the real estate market and ensure urban transformation until 2021. Additionally, 2 mass housing projects, which took the attention of our citizens, were realized in 2021.

Karatay Municipality has constructed a total of 21,344 apartments. However, this number will increase with 312 apartments when the "Aksa Park Mass Housing Project" is completed. The mentioned project will be realized in an "urban transformation" declared area of 24 thousand 300m2 and consists of 312 apartments in 3+1- and 2+1-bedroom types. Besides, a total of 17 thousand m2 of green space is considered. Moreover, various sports fields, landscaping, park and recreation areas and indoor parking opportunities will be available. The project will consist of 26 blocks, each 6 floors high. The member recruitment of the project has been completed with huge interest of our community. KARATAY



We have gained land of approximately 5.485.000 m<sup>2</sup> for the reserves of the Municipality of Karatay with the "reserve area, clearing and barter" methods. Hereby, the Municipality of Karatay will take firm steps towards ensuring access for all to adequate, safe and affordable housing and basic services, and upgrading slums in the future.







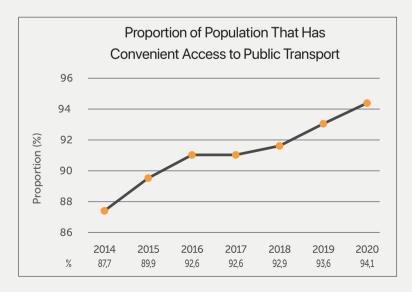
AFFORDABLE AND SUSTAINABLE TRANSPORT SYSTEMS

## SDG -11

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons Karatay comprises a 2.746 km2 wide ara in Konya and has a huge number of industrial and agricultural zones that occupy a large area. However, the rate of easy access to public transportation vehicles is quite high and has increased rapidly over the years.

While the rate to easy access to public transportation vehicles was 87.7% in 2014, it increased to 94.1% of our population as of the end of last year.







INCLUSIVE AND SUSTAINABLE URBANIZATION

## SDG -11

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.3 By 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries

Karatay Municipality conducts urban transformation studies in cooperation with relevant top institutions so as to enhance inclusive and sustainable urbanization. There are sufficient regulations on urban transformation. However, Karatay Municipality works on the urban planning of all rural neighborhoods so as to enhance integrated and sustainable human settlements. Additionally, a variety of studies are carried out with both the cooperation of ministries and Konya Metropolitan Municipality, aiming to manage human settlements and strengthen capacity. Furthermore, activities are realized within the scope of the "Local Government Reform Project".

### TARGET 11-4

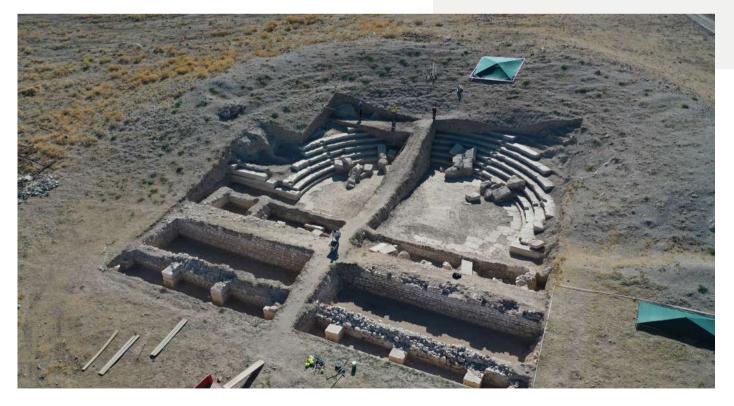
PROTECT THE WORLD'S CULTURAL AND NATURAL HERITAGE

11 SUSTAINABLE CITIES AND COMMUNITIES

# SDG -11

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage



Karatay Municipality focuses on the protection and transfer of natural cultural, archeological and other cultural assets to future generations aiming to protect the cultural and natural heritage of Karatay.





A cooperation protocol has been signed with the 8th Regional Directorate of Nature Conversation and National Parks in order to safeguard natural assets. Studies focused on the forming of a welcoming center for the Anatolian Wild Sheep, protected species located in Bozdağ, are conducted. Regular visits of schools and tourists will be possible and thus, awareness-raising activities for the protecting of these protected species will be considered with the completion of the project.

The excavation of Savatra Ancient City, located in Yağlıbayat (Karatay) and dating back to the 4th century, has started in cooperation with Selçuk University and Konya Metropolitan Municipality.

As a result of research and findings obtained, Boncuklu Mound seemed to show traces of agricultural activities going to Europe from Anatolia and thus, became the cover of the August, 2019 issued National Geographic Magazine (Turkey). Furthermore, Boncuklu Mound is considered as the ancestor of Çatalhöyük with its history dating back to 10,500 years ago.

In addition, Karatay Municipality cooperates with Konya Metropolitan Municipality so as to transfer natural cultural assets of Boncuklu Mound to future generations.



Project studies are conducted meticulously to create an attraction center on a total area of 70,800 m2 stretching from the back of the Mevlana (Rumi) Tomb to the Ali Ulvi Kurucu Avenue.

The transformation planned to be realized in the region will stand out with its features that include business centers, tourism areas, handicrafts centers, local product areas and gourmet streets, all suitable for the historical texture of the region. Additionally, a completely new museum center will be formed in the same area, which will also include hotels with special architecture, offering new accommodation opportunities in this area. The Precedency declared the region as an "Urban Renewal Area" on November 11, 2019. Project studies regarding the transformation of the Mevlana (Rumi) Tomb surrounding are carried out by the chairmanship of Mr. Murat Kurum, Minister of Environment and Urbanization.

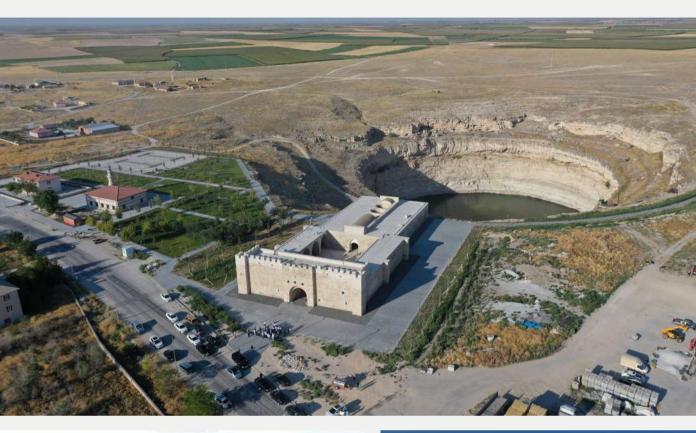
In addition to the restoration works at Obruk Inn, afforestation works around the Inn and the Lake are carried out by Karatay Municipality.

Karatay Municipality strives to turn Obruk Inn into a frequent destination for foreign and local tourists with the completion of all landscaping works conducted with an investment of 5,8 million Turkish Lira.



















**REDUCE THE ADVERSE EFFECTS OF NATURAL DISASTERS** 

## SDG -11

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

> Karatay Municipality conducts safety measures around sinkholes that have occurred as a result of geological factors and the increase in groundwater use. Konya has more than 300 sinkholes. Karatay Municipality is planning to turn sinkholes in its district into tourism centers in order to reduce the economic losses due to disasters. Herewith, an opportunity educating tourists about the effects of global warming, the conducted activities within the scope of combating drought, the change in the water level of the sinkholes and scientific reasons.

However, these regions are registered as "Sensitive Areas to be Protected". The Ministry of Environment and Urbanization has banned zoning in the aforementioned regions due to the increasing sinkholes recently.

Additionally, AFAD (Disaster and Emergency Management Presidency) organizes a variety of education practices to reduce the negative effects of natural disasters.





Compulsory Earthquake Insurance is considered within the framework of disaster insurance law no. 6305 in order to reduce the negative effects of natural disasters in Turkey. The mentioned insurance system is developed for residents within municipal boundaries and has to be renewed every year. The ratio of "earthquake insured people" is 47,30% in Konya, while it is 58,80% in Turkey in general.





### **SDG -11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

Efforts are put to reduce the density of the city center in order to improve air quality, bicycle paths are encouraged and special attention is paid to increasing the amount of green space per capita. In addition, active studies are carried out to reduce waste in housing and increase zero waste sensitivity.

Hasan Kılca, the Mayor of Karatay Municipality, was entitled to receive the "Zero Waste Award" from the Ministry of Environment and Urbanization as a result of all efforts put in this regard, the collaboration we have formed and the sensitive involvement of our fellow citizens.

Karatay Municipality provided 238 Recyclable Waste Units on the main arteries of its district.

Outdated and unused medicines are prevented from getting into nature with 45 medical waste collection bins in 32 Family Health Centers.









Karatay Municipality collects waste oil at 50 dropoff points and prevent batteries from mixing with nature with our waste battery boxes at 200 spots. An average of 20 tons of textile waste is being recycled per month with the "Clothes, Shoes and Textile Recycling drop-offs" at 176 different spots in Karatay.





Mobile waste collection units, allowing 8 different types of waste to be separated, were provided at 10 different spots.

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Agricultural Packaging Collection cages were placed at 38 different spots of various rural neighborhoods in Karatay.

Herewith, the prevention of soil and water pollution from agricultural packaging wastes was ensured.

Within the scope of the Zero Waste Management System Project, training and awareness-raising activities were carried out by reaching approximately 20,000 households in 2021.

The "Karacan" mascot was created and optimally used in during fieldworks and on the municipality's social media so as to ensure awareness for zero waste amongst children.





Karatay Municipality attended to the Local Administrations Reform Project (LARIII) organized by the United Nations Development Programme and received an award after having shared experiences and positive outcomes of the Zero Waste Project realized by the City Council and Karatay Municipality.





## **SDG -11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities



Universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities is ensured in Karatay. Projects regarding various recreation opportunities for elders including activities in Karatay Thermal Resort are being prepared.

Additionally, large parks that have the potential of serving to wider communities are being constructed by Karatay Municipality and green areas are added in neighborhoods.

There is huge interest for the large parks provided to the community by Karatay Municipality. The number of annual visitors to these parks has been increasing over the past years.











Additionally, sidewalks, toilets, disabled ramps, playgrounds for disabled children, battery charging opportunities and sitting areas are provided in parks.

Moreover, Karatay Municipality applied to the "Barrier-Free Cities" call of the Union of Municipalities of Turkey (TBB) to be able to use innovative designs related to disabled people and to provide areas for special activities such as goalball, amputee football, wheelchair basketball, etc.

The Karatay Alzheimer's Day Care Center was praised in a report published by the World Health Organization in 2019.

Karatay Municipality puts great effort to realize a barrier-free living center for disabled people.





## SDG -11

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

> The quality of road connections is primarily increased, taking into account the demands relevant regions, in order to support positive economic, social and environmental connections between rural areas around the city.

Additionally, local organizations provide support to planning institutions during the preparation of national and regional development plans. Beyond these plans, cooperation is also provided in economic, social and environmental projects.

The "Regional Plan" of the Mevlana Development Agency and the "KOP Regional Action Plan" of the KOP Regional Development Administration are both considered extremely important and evaluated as an opportunity for regional development. Therefore, cooperation with both KOP and Mevlana Development Agency is ensured in various projects.



Karatay Municipality allocates a sufficient budget for cooperation co-financing and thus, active participation in regional development cooperation projects that require co-financing becomes possible. The "European Union Project Office" of Karatay Municipality was established late-2019 in order to institutionalize such cooperation. Later on, Karatay Municipality decided to transform its European Union Project Office into the Directorate of Foreign Affairs in mid-2021. This transformation led to an approximate external project resource of 5.7 million TL thanks to the institutional structure of the mentioned directorate and active project collaborations with local and regional development institutions.

KARATAY



### TARGET 11-B

IMPLEMENT POLICIES FOR INCLUSION, RESOURCE EFFICIENCY AND DISASTER RISK REDUCTION

SUSTAINABLE CITIES

### **SDG -11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.b By 2020, increase by x% the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming hyogo framework holistic disaster risk management at all levels

Studies are underway to identify risk structures and reconcile beneficiaries within the framework of the urban transformation legislation in order to reduce potential disaster risks. In addition, important activities concerning the adaptation to climate change are carried out in cooperation with various projects. Anti-drought studies are considered as the most important of these activities. Therefore, projects are carried out in cooperation with relevant institutions within the scope of rehabilitation of irrigation and drainage systems. However, Karatay is located in the 4th and 5th degree earthquake risk zone.











### TARGET 11-C

11 SUSTAINABLE CITIES

### SUPPORT LEAST DEVELOPED COUNTRIES In Sustainable and resilient building

**SDG -11** MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11.c Support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local material

Karatay Municipality conducts wide activities within the framework of the zoning legislation aiming to support the construction of sustainable and durable buildings. Additionally, the use of local materials is preferred in constructions built by Karatay Municipality. Karatay Municipality puts great emphasis on ensuring that buildings are sustainable in terms of both energy and water use, and thus makes special efforts to realize insolation, lightening, heating and cooling systems with the most suitable architectural solutions.

Karatay Municipality, on the other hand, aims the use of local technologies such as bricks and compressed soil in potential tourism areas such as the Bozdağ Wildlife Welcoming Center and Obruk Inn and thus, encourage locals of these areas. Karatay Municipality widely conducts activities and inspects constructions and buildings within the framework of the zoning legislation. The Energy Performance Certificate Level A, includes data regarding the energy needs, energy consumption classification, greenhouse gas release level, insulation features and efficiency of the heating/cooling systems of buildings is regulated to specify the most efficient use while Level G specifies the minimum efficiency to ensure the effective and efficient use of energy resources, prevention of waste and protection of the environment.

KARATAY

Buildings built before the legal regulation do not have a minimum classification level requirement for energy performance certificates. However, new buildings must be designed and constructed to have at least an Energy Performance Certificate Level C. Buildings that are lower than class C are not legally license and thus, not allowed to be settled.









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# Responsible Consumption and Production







## **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.2 By 2030 achieve sustainable management and efficient use of natural resources

Protocols are signed to cooperate with various public institutions and organizations operating in Karatay district for sustainable management and effective use of natural resources. These institutions include the National Directorate of Education, Konya Metropolitan Municipality and several universities.





TARGET 12-3

2 RESPONSIBLE CONSUMPTION



#### HALVE GLOBAL PER CAPITA FOOD WASTE

## **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.3 By 2030 halve per capita global food waste at the retail and consumer level and reduce food losses along production and supply chains including post-harvest losses

In order to reduce food losses, an application was made to the "Save Your Food" program of the city council and the Union of Municipalities of Turkey. In addition, an application was made to the 17th edition of the R&D grant program organized by the Ministry of Agriculture and Forestry, General Directorate of Agricultural Research and Policies (TAGEM), in order to convert waste food into food that stray animals and animals in the zoo run by Karatay Municipality can consume.



## **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.4 By 2020 achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment

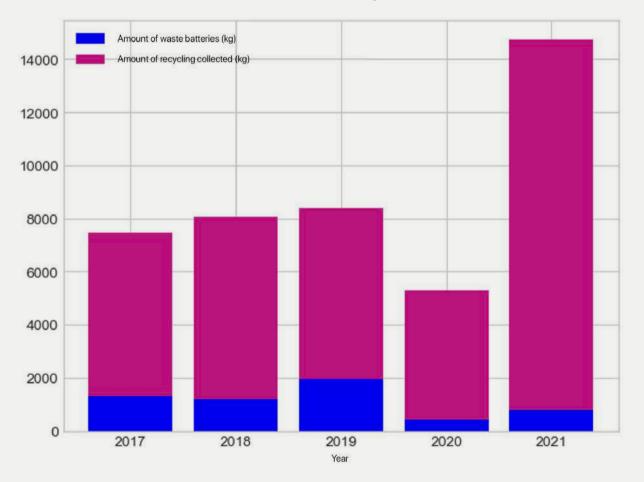
Karatay Municipality works with the Portable Battery Manufacturers and Importers Association (TAP), the only organization authorized by the Ministry of Environment, Urbanization, and Climate Change in Turkey for the collection, transportation, and disposal of waste batteries to ensure environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks.

Waste battery collection boxes are provided free of charge by the TAP association. Collected waste batteries are received free of charge by the TAP association or contracted companies.

Waste batteries pose a risk of affecting the environment and human health due to the chemicals they contain, such as carbon, zinc, iron, manganese, nickel, lithium, cobalt, cadmium, copper, aluminum, etc. By recycling waste batteries, efforts are made to minimize their negative impact on human health and the environment and to prevent them from mixing into the air, water, and soil by reducing the effects of chemicals and waste. The amount of waste batteries collected is increasing day by day. Although the amount collected in 2020 was low due to the pandemic, it has increased again since 2021. In 2019, 2 tons of waste batteries were collected, and as of 2021, more than 1 ton of batteries have been collected (Graph 21).



#### Waste Cleaning



Graph.21 Waste battery and packaging waste recycling amount of Karatay district (tons)





AND PRODUCTION PATTERNS

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse

In previous years, Karatay Municipality tendered the collection of packaging waste to companies and did not directly intervene in the collected waste. During this period, the packaging waste collected by companies has been increasing over the years. While around 6,000 tons of packaging waste is collected annually, our municipality has decided to collect and evaluate its own waste as of April 2020. Hundreds of citizens were reached for awareness-raising activities regarding the recycling and recovery of waste. Required information was provided on how to reduce waste as much as possible and how to recycle packaging waste.

Karatay Municipality provided its own vehicles and made teams to collect packaging waste. The results of all this quickly began to be seen. It was calculated that with the packaging waste collected in the first three months, the estimated total waste for a year could be 25,000 tons. Simulations were made about how many pine trees could be prevented from being cut down as a result of evaluating the packaging waste collected with the information obtained from previous years.

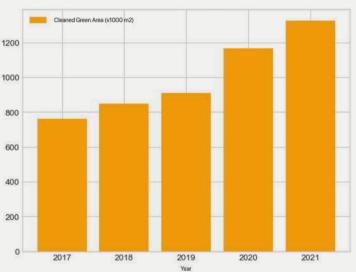
The population rate received waste service in Karatay city has reached 100%. However, as of 2022, the population rate provided with waste collection services has reached 99% due to the increase in rural settlements. Our city carries out waste collection and sorting processes for recycling with its own teams. Since the recycling of waste, done through private companies until 2020, started to be done with the teams established by our municipality, as of 2020, it reached 14 thousand tons in 2021 (Graphs 21 and 22). Our municipality carries out the cleaning of green areas, including all parks, gardens, median strips, school and mosque gardens, and waste collection in order to ensure environmental sustainability. While there were 900 thousand m<sup>2</sup> of green areas cleaned in 2019, it has reached 1.5 million m<sup>2</sup> by 2022 (Graph 23).



The ratio of the municipality population served by a waste service to the total municipality population.

KARATAY

Graph.22 Population rate provided with waste service in Karatay district (%)



#### **Cleaned Green Area**

Graph.23 Amount of cleaned green areas in Karatay district

According to municipal records, 44,495 pine trees can be saved from being cut down by utilizing 6,419 tons of packaging waste. 30,605 liters of fuel and 8,056,864 kWh of energy could be saved with the same amount of waste.

Waste batteries were collected as a result of research conducted by TAP in various centers and schools in the Karatay District. Prizes were given to the schools that collected the most batteries. Additionally, it was ensured that information regarding the risks of waste batteries to the environment was given. The reason for collecting a small amount of batteries in 2020 was due to the closure of schools during the pandemic conditions and general closure periods throughout the year. In previous years, around 2 tons of waste batteries were collected. It is estimated that much more battery collection will be done in the coming days within the framework of the zero waste project because the widespread use of digital technologies in recent years has increased battery consumption.



## **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.7 Promote public procurement practices that are sustainable in accordance with national policies and priorities

Sustainable public procurements in Karatay district are carried out in accordance with national policies and priorities. The environment and sustainability are of great importance during these procurements.

In the construction of the Bozdağ Wild Sheep Welcoming Center, the experience of the contractor company regarding sustainability was primarily researched, and the company is requested to pay attention to efficiency and sustainability issues in the water and energy consumption, heating, cooling, and ventilation systems of the building to be built.

In the tenders held in previous years for the collection of packaging waste, changes have been made within the framework of developments in the legislation, and within the framework of zero waste studies, thus the Directorate of Environmental Protection and Control has provided equipment and teams to collect packaging waste.









## **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.8 By 2030 ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Short training on "Zero Waste" has been given to citizens in 26 thousand residences as of 2021 within the scope of the work carried out by Karatay Municipality's Environmental Protection and Control Directorate teams and 'Zero Waste Working Group Volunteers'.

Along with these trainings, informative brochures, seed pens, and Waste Collection Bags were distributed to homes. Karatay Municipality aims to reach 40,000 families by the end of the year.

Karatay Municipality distributes waste battery collection boxes to workplaces throughout the city to prevent the risks caused by used batteries uncontrollably thrown into nature and to minimize environmental pollution.











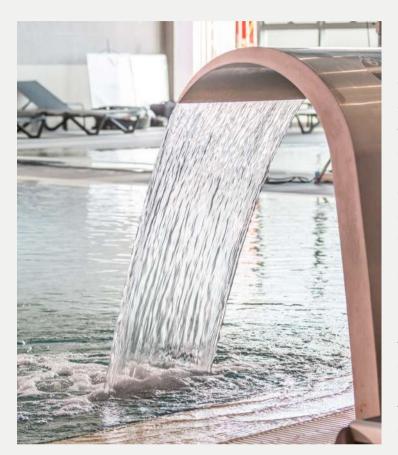
### **SDG -12** ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products

Karatay Thermal Holiday Village was established under the leadership of Karatay Incorp., one of the companies of Karatay Municipality, for the development and implementation of tools that allow monitoring of the sustainable development impacts for sustainable tourism that creates employment in the city of Karatay, promotes local culture and local products. This facility has been awarded by the Tourism Promotion and Development Agency (TGA) with a "Safe Tourism" certificate.

Karatay Thermal Holiday Resort consists of 7 blocks and 112 rooms, 1+1 and 2+1, and has a capacity of 280 beds. It offers a wide range of facilities such as a market, park cafeteria, terrace cafeteria, green areas, tartan track walking paths, electric vehicles, mosque, football, volleyball and basketball courts, social facility, men's and women's pools, sauna and steam room, Turkish bath, Fitness, SPA, foam and massage room, a restaurant, a lobby & cafeteria and meeting rooms for 500 and 100 people.





The thermal facility, which stands out with its healing water, modern structure, stylish restaurant, delicious food, comfortable rooms with thermal baths, children's and adult playgrounds, health club with spacious pools, and friendly staff, has set a record which is hard to break in our city in terms of the occupancy rate it has achieved since the openings days.

Within the scope of this title, it is planned to create an Agriculture-Based Specialized Greenhouse Organized Zone, where modern agricultural techniques will be used and fully automated greenhouse investments will be made, which will set an example for the digital transformation that needs to be done in the agricultural sector due to climate change and drought and will create employment.





KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Climate Action







#### **SDG -13** TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries

The Disaster and Emergency Management Directorate, or shortly, AFAD is organizing "Basic Disaster Awareness" training programs in order to strengthen the resilience and adaptation capacity against climate-related hazards and natural disasters in Karatay District.

'Disaster Ready Youth' module trainings are given in student dormitories. Stands are set up at various events and applications for AFAD volunteering are received at www.gonullu.afad.gov.tr. AFAD offers a wide range of online practices on its online system and aims to strengthen resilience and adaptive capacity to climate change and natural disasters.







13.3 Improve education, awareness raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning

Studies are being carried out strategically to grow products that consume less water in the agricultural sector and to encourage ovine breeding which requires less water than cattle farming in order to reduce climate change in Karatay district. In addition, efforts are continuing to switch irrigation systems to drip irrigation in order to protect and efficiently use dwindling water resources.

Dams are constantly monitored to provide early warning for drinking water, and the SCADA (Supervisory Control and Data Acquisition) system is used in the water network system to ensure continuous monitoring of the system, timely maintenance with planned stops, and energy and water savings.

Making important decisions regarding water management and distributing water optimally will be possible with efficient use of SCADA. With this system, water management can be controlled digitally and from a single center.

Karatay Sustainability Report 2023 225 Voluntary Local Review









### TARGET 13-B

13 CLIMATE ACTION



#### PROMOTE MECHANISMS TO RAISE CAPACITY For climate planning and management

### **SDG -13** TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in the least developed countries and small island developing states, including focusing on women, youth, and local and marginalized communities.





In the Karatay district, it can be possible to make planning more healthy, resultoriented, and feasible by increasing the awareness of women, young people, and local communities, especially the farmers who are most affected by climate change, and their participation in management. It is also thought that this situation will be very efficient in ensuring public participation and support in climate-related studies. Otherwise, those negatively affected by climate change may put pressure on administrative mechanisms and lead to wrong decisions. Rehabilitation projects of irrigation canals are carried out in cooperation between institutions, especially in order to reduce water losses due to climate change. In order for local communities to protect these investments, to repair any damage that may occur in a timely manner, they need to alert the relevant institutions and get their support to cooperate in catching those who cause damage.

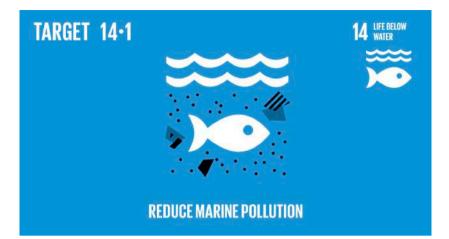


KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

## Life Below Water





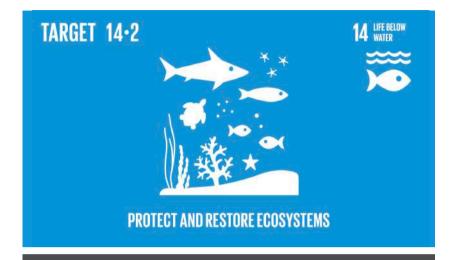


CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution

Karatay District is located in the inner region of Anatolian lands and there is no sea or ocean connection. There is also no river in Karatay city that reaches the sea. There are only sinkhole structures and water environments in the form of small lakes in our district. Therefore, no direct study can be done on the protection and sustainability of the seas.

However, the "Zero Waste" project was implemented in accordance with national strategies for waste reduction. Reducing waste and ensuring recycling indirectly contributes to the cleanliness of lakes and seas as it reduces the amount of waste that needs to be stored and is sometimes thrown into the sea



#### **SKA -14** CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and taking action for their restoration, to achieve healthy and productive oceans

There is no direct activity aimed at this goal since there is no seashore in Karatay District.

It is necessary to reduce and recycle the casting sand used by the casting industry operating in our district, thus reducing the negative impact on the marine and coastal ecosystem as much as possible. Current and future environmental regulations are predicted to make it increasingly difficult to obtain sand, which is widely used in the casting industry. Therefore, it is crucial to take the necessary measures immediately for the recycling of used sand. In this regard, it may also be possible to contribute to the sustainability of the production of the casting industry and directly to the protection of seashores by acting in cooperation with relevant institutions and industry representatives. In this way, both transportation-related emissions will be reduced and contributions will be made to the protection of the seashore.





#### **SDG -14** CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

14.5 By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

There is no direct activity aimed at this goal since there is no seashore in Karatay.







CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

14.b Provide access of small-scale artisanal fishers to marine resources and markets

There is no seashore and fishing in Karatay. However, various enterprises operate for the delivery of sea and lake fish to the public. The number of fresh fish stores in Karatay is pretty high.



KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Life on Land







PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15.1 By 2020 ensure the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements Within the scope of this purpose, Kızören Obruk Lake was registered as a "Sensitive Area to be Strictly Protected" on October 5th, 2019. It is aimed at creating tourism potential by landscaping the Kızören Sinkhole. In this way, the importance of protecting the area will be widespread as a result of the effects of tourism.

It will contribute to the creation of international public opinion on the protection of the relevant area within the framework of the international effects of tourism. Karatay Municipality is collaborating with relevant institutions for a geopark study that includes sinkholes, the most important geological formation in the region within the scope of the UNESCO International Geosciences and Geoparks Program (IGGP) and UNESCO Global Geopark program.





By establishing a geopark covering the sinkholes in the Karatay district and opening it to tourism, visitors will be provided with technical information about the effects of global warming, activities carried out within the scope of combating drought, the change in the water level in the sinkhole and its causes, and the geological formation.

There are international agreements that limit the practices in natural parks, such as the Cites Convention, the Bern Convention (Convention for the Conservation of European Wildlife and Natural Habitats), the Convention on Biological Diversity, and the European Landscape Convention, to which Turkey is a party, within the framework of the protection of natural values on the Earth and ensuring cooperation between countries in conservation.

In accordance with these agreements, efforts are put to realize a welcoming center at the "Bozdağ" Wildlife Development Center, located on the borders of Karatay. Great importance is attached to the sustainability of the mentioned welcoming center and thus, detailed studies are carried out to increase the efficiency of planned energy, lighting, heating, and cooling systems.

Architectural and landscaping studies are conducted in cooperation with companies considered highly experienced in this field, in order to reduce water consumption.





PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

There is generally plain and steppe vegetation in Karatay District and there is no dense forest area. However, great importance is given to afforestation efforts in parks and gardens. Various afforestation projects that ensure public participation are carried out to create an afforestation culture.

Landscaping works, especially afforestation and green area works in common areas such as schools and mosques, are carried out by Karatay Municipality. One of the issues that Karatay Municipality attaches most importance to is keeping the environment clean and increasing green areas.

The total grass area in Karatay city has approached 1 million m<sup>2</sup> as of mid-2023. In 2021, 167 thousand m<sup>2</sup> of afforestation was carried out in our city, and a total of 102 thousand m<sup>2</sup> of afforestation was carried out in 2022. It is anticipated that 150 thousand m<sup>2</sup> of afforestation will be done by the end of 2023.

The previously designed Karatay Lavender Garden was opened in 2023. Lavender Garden, which attracts great



attention every day, is flooded with visitors with its newly made rose creations. Karatay Municipality which underlined that the garden adds a completely different atmosphere to Konya and Karatay, invites citizens to experience all the beauties offered by Karatay Lavender Garden. Local and foreign tourists coming to the city, from those making marriage proposals to young couples who want to get engagement or wedding photos, from amateur and professional photographers to tens of thousands of citizens who want to immortalize the moment, choose Karatay Lavender Garden as the most important destination until the end of the summer. Income is generated from the 100,000 lavender seedlings harvested due to their aromatic plant extract.

Karatay district sets an example for other cities with its green areas, number of trees planted, park and recreation projects, ecology awareness activities, and "zero waste" motto. Parking areas have increased rapidly in recent years. The amount of green areas cleaned last year exceeded one million square meters.









PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15.5 Take urgent and significant action to reduce the degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species

The "Bozdağ" Wildlife Protection and Development Area, located on the borders of Karatay is declared as a protected area for the protection of biodiversity due to the presence of the Ovis Gmelinii Anatolica, also known as the Anatolian Wild Sheep. "Bozdağ" WPDA, is the only area in the world and in our country where the natural population of Anatolian wild sheep is found.

Furthermore, the area becomes even more important with its endemic plants and other endangered species. A total of 89 endemic plant species belonging to 370 taxa and 19 families were identified as a result of field and literature studies carried out at Bozdağ WPDA. 29 different types of medicinal and aromatic plants have also been identified in the area. In addition to the famous Anatolian Wild Sheep, 30 mammal species live in the area. Moreover, 43 different bird species, 16 species of reptiles, and 3 amphibians also live in the area. The butterfly species detected in the area are butterfly species seen in the steppe ecosystem. Among these species, there are 2 endemic species and 1 "Natura 2000" species. These species are natural and biological limiters for the area.

There isn't any international agreement or convention that provides the Bozdağ Wildlife Protection and Development Area protected status. However, the Cites Convention, the Bern Convention (Convention for the Protection of Europe's Wildlife and Natural Habitats), the Convention on Biological Diversity and the European Landscape Convention, which were signed to protect the natural values on Earth and to ensure cooperation between countries in conservation, and to which our country is a party, can be considered among the international agreements that limit the practices in nature parks. Protective-preventive activities are carried out in this field in accordance with the aforementioned agreements and national legislation.

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As of 2021, 1 million TRY has been spent to ensure sustainability in Bozdağ wildlife, and 40 million TRY is planned to be spent in the following years. 692 wild animals were treated and rehabilitated for 2021, and 651 wild animals were treated and rehabilitated as of 2022. Approximately 1.5 million TRY was spent on these services. Karatay Municipality continues the necessary work for both the survival of stray animals and the safety of the people. In 2021, it spent 1.5 million TRY for the capture and transportation of stray animals. In addition, the Voluntary Animal Project was implemented to instill a love for animals among the public. 1 million TRY was spent on this project. Food and feed were purchased for all stray animals, and the surrounding area of the district was sprayed against harmful pests and insects. A total of 3 million TRY funding has been used for maintenance and sustainability for the zoo from 2022. In addition, a total of 7.5 million TRY was spent on the Volunteer Animal project and the disinfection of the surrounding area.









PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15.9 By 2020, integrate ecosystems and biodiversity values into national and local planning, development processes, and poverty reduction strategies, and accounts

Efforts have been exerted to build a welcoming center for the protection of the ecosystem and biodiversity and its transfer to future generations with the cooperation of Karatay Municipality and Bozdağ Wildlife Protection and Development Center.

Several activities and visits will be held at the welcoming center, which will be built to introduce the biodiversity of the region, especially the Anatolian wild sheep, which has a natural habitat only in Bozdağ in the world, to students and the public from an early age, through exhibition areas, conference and seminar areas, and the life in the area will be monitored with cameras and shown to the visitors.

Awareness of protecting natural life and ecosystems will spread to all segments of society over time. The development of public awareness will ensure the participation of biodiversity values in national and local planning, development processes, poverty alleviation strategies, and reports.











PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation





Afforestation works were carried out in an area of 20 thousand square meters around Bozdağ National Park with the support provided by Karatay Municipality. By using Ekobox<sup>®</sup> sapling apparatus, which reduces the need for irrigation, trees have been successfully grown in areas with difficulty in irrigation.

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In practice, 15 liters of water is used at the time of initial installation. However, thanks to the Ekobox<sup>®</sup> support unit, used for potential irrigation needs afterward, the water demand of plants is met day and night through the collection of condensation and rainwater consisting of in-house temperature differences and feeding the roots of the plant thanks to the wick placed in the soil. In this way, the need for irrigation is reduced

In addition, both irrigation with purple mains water is becoming widespread in the parks of our district, and importance is given to the xerophytic plant landscape, which has very low water consumption. It is aimed to increase the use of lavender, succulent, and cactus-type plants that consume less water and to include xerophytic plant landscaping at a higher rate in landscaping, thus ensuring visuality and minimizing water consumption.







KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Peace, Justice and Strong Institutions





PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL, AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

16.1 Significantly reduce all forms of violence and related death rates everywhere

Karatay Municipality simultaneously conducts mass-housing projects to reduce violence everywhere and increase the security of the city. Both the revision of the old urban fabric resulting from poverty and the creation of decent housing areas are ensured with these works. As of 2021, it is observed that applications to mass-housing cooperatives led by the municipality are increasing. Herewith, it indicates the preference for safe mass-housing areas.

Security cameras are installed in some important centers and parks to increase security and reduce violence. Consciously not increasing the density in the city center enables security services to be provided more easily. Apart from this, outdoor urban lighting also contributes to citizens' sense of security at a high level.









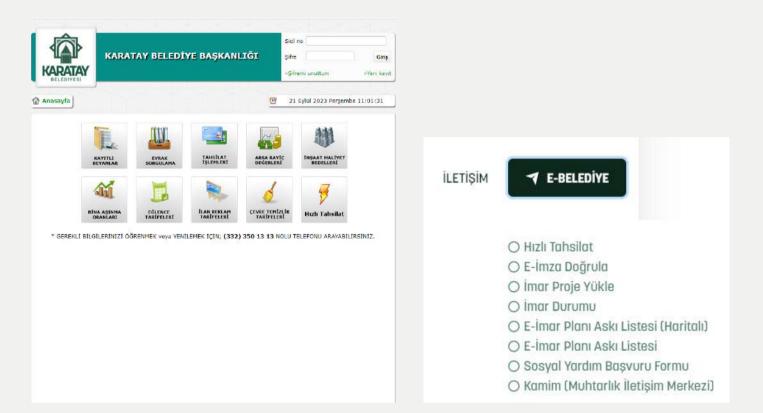
PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL, AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

16.5 Substantially reduce corruption and bribery in all its forms

There is sensitivity to corruption and bribery throughout the social structure in Karatay city. The fact that the income level of the people is lower than in other parts of the city center supports the sensitivity to this issue. On the other hand, various practices that do not allow bribery and corruption are implemented in public institutions. The most significant of these is the realization of digital transformation.

Since people's communication with institutions is carried out through computer servers and clients with digital transformation, human intervention decreases, transparency, reliability, and speed increase, thus reducing one-to-one human relations where corruption and bribery can occur. In this context, Karatay Municipality e-municipality services are provided. All applications of citizens are recorded, transmitted digitally to the relevant units, inspected by the management, and the citizen is notified when finalized. This reduces unnecessary mobility within the city, one-to-one human relations, and naturally the possibility of corruption and bribery.











PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL, AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

16.6 Develop effective, accountable and transparent institutions at all levels

Transparency and accountability are one of the most important matters for Karatay Municipality. Karatay Municipality is always ready to fulfill its duty towards creating a more peaceful and inclusive society.

In this context, institutions in Karatay put great emphasis on the preparation of annual activity reports in accordance with the legislation. Additionally, strategic plans of all institutions are made public. All applications of any citizen are recorded and feedback on the outcome is provided.

Karatay Municipality makes use of infrastructural services provided by the Ministry of Interior and the Ministry of Environmental Urbanization and Climate Change. In this way, audit processes between local governments and central governments have been able to take place faster and easier. The "Local Government Reform" (LAR) project, organized by the United Nations Development Programme (UNDP) and funded by the European Union within the framework of IPA funds, is being carried out for the development of effective, accountable and transparent institutions. Both inperson and online meetings and trainings are organized within this framework.



Activities aimed at developing and strengthening the administrative capacities of local governments and the participation in local government systems were carried out. Karatay Municipality puts great emphasis on these activities. Herewith, the development of corporate capacities directly contributes to increasing accountability.





# SDG -16

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL, AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

16.7 Ensure responsive, inclusive, participatory, and representative decision-making at all levels

The Municipality Council and Karatay City Council make great efforts to make decision-making mechanisms in Karatay District more responsive, inclusive, participatory, and representative to the needs the society. These institutions were already established in a representative and inclusive manner as a result of their structure.

If needed, detailed discussed matters are determined with the support of technical commissions in accordance with a participatory and inclusive principle considering the needs of the society.

Karatay Municipality takes the demands and needs of its citizens into consideration firsthand with the Karatay "Speech" Assembly meetings, which turned into a tradition, and puts great emphasis on evaluating all applications as quickly as possible.

The demands and needs of the people can be directly consulted with the Mayor through the speech assemblies made traditionally by Karatay Municipality. Work plans are directed in the direction of the issues, priorities, and needs that can be resolved quickly.











# TARGET 16.10 16 PEACE\_JUSTICE Image: Constraint of the second

# SDG -16

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL, AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

Works carried out by our municipality are explained on the website and e-municipality system. The number of users in the e-municipality system increased from 15000 to 25000. The usability rate of our website increased from 60% to 75%. These rates continue to increase rapidly. In addition, an information security system has been established, its scope has been expanded, and its implementation rates have been determined. Our municipality responds to all requests and complaints.

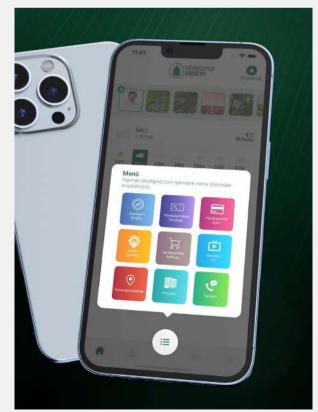
KBYS (Karatay Information Management System) has been realized, in which the ideas, requests, suggestions, and demands of our citizens are managed. This system, prepared within our own structure without support, led to a decrease in paperwork, and an increase in productivity In addition, the requests received can be categorized and analyzed. These opportunities contribute to the principle of participatory municipalism.

While e-municipal services are being used very successfully and intensively, Karatay Municipality has signed a new project. The most comprehensive municipal public relations mobile application in Turkey became available at the end of January 2023. The application, which simplifies the work of citizens and contributes to increasing the quality of social life with the services it offers, takes the corporate communication between Karatay Municipality and citizens to an advanced level. Turkey's most comprehensive municipal public relations application, "Yanıbaşımda Karatay", received full marks



from citizens thanks to its user-friendly interface and interactive design. Inquiries for the tax debt payments to the municipality and zoning status can be made from the 'Online Hizmetler" (Online Services) section of the application. In this tab, citizens can also apply for "Hoşgeldin Bebek" (Welcome Baby). Citizens who click on "Projem Var" (I Have a Project) under the "Online Services" tab can upload any idea or project related to Karatay. The application also received a great deal of attention for its entertaining aspect. Citizens who click the "Yarışmalar (Competitions)", "Anketler (Surveys)", "Yanıbaşımdaki Fırsatlar (Opportunities at my elbow), "Görevler (Missions)" ve "Sürprizler (Surprises)" sections, where all aspects of Karatay and Konya are covered, can also shop for free from the "Yanıbaşımda Market (Market at My Elbow)" with the points they earned on their virtual cards by collecting points. Thus, Karatay Municipality can be closer to its people.







KARATAY SUSTAINABILITY REPORT 2023 VOLUNTARY LOCAL REVIEW

# Partnerships for The Goals





# **SDG -17** STRENGTHEN THE MEANS OF

IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17.1 Strengthen domestic resource mobilization, including through international support to developing countries to improve domestic capacity for tax and other revenue collection

> Information systems are used to improve domestic income collection. Payment information is delivered to taxpayers by text messages which prevents income losses and late payment penalties due to oblivion. However, the ability to strengthen revenue estimates and budgets to be more realistic depends on the improvements in this regard.



KARATAY

The "Monitoring of Sustainable Development Goals (SDGs)" training was organized with the support of UCLG-MEWA aiming to improve policy consistency for sustainable development. The question of how activities conducted by Karatay Municipality can be related to sustainable development was evaluated practically during the program. As a result, it has been revealed that it would be more useful to plan strategic plans and programs made in accordance with the sustainable development goals and legal legislation by associating them with each other.



#### **SDG -17** STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17.16 Enhance the global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technologies, and financial resources to support the achievement of sustainable development goals in all countries, particularly developing countries

Karatay Municipality places great importance on the proliferation of multi-stakeholder partnerships that mobilize and share the knowledge, expertise, technology, and financial resources they need to achieve sustainable development goals.

Karatay Municipality has become a sister city with 12 municipalities so far. Sister municipality protocols were signed with the cities of Gorajde (Bosnia-Herzegovina), Belh (Afghanistan), Kenitra (Morocco), Gevaş (Van), Tatvan (Bitlis), Günkırı/Güroymak (Bitlis), Novi Grad (Bosnia-Herzegovina), Teocak (Bosnia-Herzegovina), Tatlısu (Girne-TRNC), Samsat (Adıyaman), Kadınhanı (Konya) and Seydişehir (Konya).

A protocol was signed with Poland, Croatia, Hungary, Macedonia, Bulgaria, and Italy within the scope of environmental education and environmental awareness with the acceptance of the Erasmus +KA2 project in the application made by Fetihkent Kindergarten, which was constructed with the budget of Karatay Municipality.

Karatay Sustainability Report 2023 | 263 Voluntary Local Review













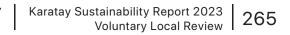
## SDG -17 STRENGTHEN THE MEANS OF

IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17.17 Encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships

Great importance is attached to cooperation between public institutions and organizations in Karatay. Cooperation protocols have been signed by Karatay Municipality with many public institutions and organizations. Universities, funding organizations, sister municipalities, various public institutions and organizations operating in different fields, city councils, and non-governmental organizations can be listed among the main institutions and organizations with whom it cooperated. Beyond these, efforts are being made to establish new collaborations depending on the projects to be realized.







# 1882 Konya Chamber of G









**TARGET 17-18** 



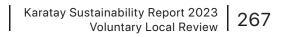


#### **ENHANCE AVAILABILITY OF RELIABLE DATA**

#### **SDG -17** STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17.18 Until 2020, enhance capacity-building support to developing countries, including for LDCs (Low developed Countries) and SIDS (Small Island Developing States), to increase significantly the availability of high-quality, timely, and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location, and other characteristics relevant in national contexts

Karatay Municipality aims to establish a data-driven infrastructure to greatly increase the availability of high-quality, timely, and reliable data disaggregated by income, age, race, ethnicity, immigration status, disability, geographical location, and other relevant qualifications in national contexts. Furthermore, legislation on improving existing infrastructure and information security supports this target. In this context, information-sharing protocols are made to ensure the continuity of the data produced and to exchange information with institutions qualifiedly, accurately, and rapidly. For example, data-based analyses are made, in social aid application systems, about the address information of the applicant, whether he/she has received aid before, if so, how much aid he/she received and on what dates, and whether other institutions have provided any aid to the relevant applicant within the scope of the cooperation protocol. Software teams put great effort into continuously improving the mentioned data systems





#### TARGET 17.19



SYSTEMIC ISSUES

17 PARTNERSHIPS FOR THE GOALS

#### FURTHER DEVELOP MEASUREMENTS OF PROGRESS

# SDG -17

STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP and support statistical capacity building in developing countries

> Karatay Municipality strives to develop measures to advance sustainable development that complements gross domestic product. The importance of statistical consultancy was recognized and consultancy was taken in order to measure progress actively. Efforts are underway to provide the municipality with access to health statistics to be analyzed in order to create result-oriented data-driven decision support systems.







# REFERENCES

Ağcabay, M., 2012, Türkiye'de Çocuk İşçiliği, Eğitişim Dergisi, Sayı 33, https://www.egitisim.gen.tr/tr/index.php/arsiv/sayi-31-40/sayi-33-insan-haklari-egitimi-ocak-2012/716-turkiye-de-cocuk-isciligi http://ekofen.com.tr/ekobox http://www.konyamimod.org.tr/blog/haberler/yagmur-suyu-toplama-sistemi https://bolge8.tarimorman.gov.tr/Sayfalar/Detay.aspx?TermStoreId=368e785b-af33-487d-a98dc11d5495130b&TermSetId=6638a202-26da-4daf-bdeb-dd6f4855d212&TermId=dcbda54d-586f-4170-8f13-9bd6f4df4eed&UrlSuffix=24/Yaban-Hayati-Gelistirme-Sahalari https://csb.gov.tr/enerji-kimlik-belgeli-bina-sayisi-1-milyona-yaklasti-bakanlik-faaliyetleri-29648 https://dask.gov.tr/toplumsal-paylasim-etkilesimli-deprem.html https://konya.goc.gov.tr/dogru-bilinen-yanlislar-biz-birlikte-guzeliz-toplantilarina-start-verildi https://kosgeb.gov.tr/site/tr/genel/detay/6878/kosgebden-kadinlara-pozitif-ayrimcilik https://mevzuat.gov.tr/mevzuat?MevzuatNo=2709&MevzuatTur=1&MevzuatTertip=5 https://mevzuat.gov.tr/mevzuatmetin/1.4.222.pdf https://ozelbirkonum.com/ https://tap.org.tr/pil-atik-pil/sss/atik-pil-nedir-ve-neden-toplanmalidir/ https://tga.gov.tr/search-hotel/?certificateType=5 https://www.cocukaile.net/cinsel-istismarci-dogan-medya-hesap-versin/ https://www.cocukaile.net/cinsel-istismar-degil-genc-evlilik/ https://www.cocukaile.net/cinsel-istismarin-tarihi/ https://www.haberler.com/haberler-karatay-belediyesi-nde-sifir-atik-calismalarina-14442793-haberi/ https://www.iletisim.gov.tr/turkce/yerel\_basin/detay/yeralti-suyu-takip-altinda https://www.karatay.bel.tr/haberdetay/3423/karatay-belediyesi-21-saglik-tesisini-tamamliyor https://www.karatay.bel.tr/haberdetay/4360/karatay-belediyesi-2020-boyunca-pandemiyi-basariyla-yuruttu https://www.karatay.bel.tr/haberdetay/4360/karatay-belediyesi-2020-boyunca-pandemiyi-basariyla-yuruttu https://www.karatay.bel.tr/index.php/haberdetay/3018 https://www.karatay.bel.tr/index.php/haberdetay/3018/karatayda-anne-ve-cocuklara-y%C3%B6nelik-a%C4%9F%C4%B1zve-di%C5%9F-sa%C4%9Fl%C4%B1%C4%9F%C4%B1--konferans%C4%B1-ger%C3%A7ekle%C5%9Ftirildi https://www.konhaber.com/haber-konya\_da\_ciftciler\_karayolunu\_ulasima\_kapatip\_eylem\_yapti-1590440.html https://www.koski.gov.tr/sayfa/icme-suyu-tarihcesi https://www.kureselamaclar.org/en/ www.koski.gov.tr www.tuik.gov.tr

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