#### SUSTAINABLE GOALS











#### **Karatay Sustainability Report 2021** Voluntary Local Review



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The 2030 Agenda for Sustainable Development, agreed upon by world leaders at the United Nations (UN) Sustainable Development Summit held in 2015, was adopted with the signatures of 193 countries. The 2030 Agenda, which accepts the elimination of poverty as a part of sustainable development and brings together the fight against climate change with economic and social development, was prepared

as a continuation of the Millennium Development Goals that were implemented in 2000 and as an agenda that aims to take these goals further. With the 2030 Agenda it is aimed to; involve all societies in reducing poverty and promoting well-being around the world; protect cultural and social values and, prevent environmental damage.

Being aware of the importance of working in line with the United Nations Sustainable Development Goals, we have started restructuring. We have formed relevant directorates in order to achieve sustainable development goals. We attach great importance to our Zero Waste studies. Herewith, we have made serious investments to achieve these goals while our teams did not leave any home, workplace, school, or public institution untouched. We thrive on our way by carrying out exemplary works. We are working to create a green environment all over Karatay. We contribute to this process with our Lavender Gardens and new park projects. Besides, we established solar power plants and cover new outdoor markets in our region with solar energy panels.

Additionally, Karatay Municipality conducts diverse social support activities in cooperation with the district governorate, governorship, and other municipalities. We everlastingly continue to stand by our community with our food bank and "Compassion Houses" where dozens of families maintain their live. Undoubtedly, we contribute to education with significant investments. As part of these investments, we realize the construction of new schools in district neighborhoods that are in need of new school buildings. As a result, we have built 6 new education facilities in the last 2 years.

Hereby, we believe that we have achieved success in reflecting the 17 global sustainability goals to the local level. We aim toc contribute to these goals with our endless service and each step we set for a better future of our community. Within the scope of the Karatay Volunteer Local Review, we consider the 2030 agenda of cities extremely important. I would like to express my appreciation to our stakeholders who contributed to the Karatay Sustainability Report 2021 Voluntary Local Review, which we prepared on a voluntary basis.





#### ABOUT KARATAY

Karatay, which was established with the June 20th, 1987 dated and 3399 numbered law, started its activities in 1989 and took its name from Celalettin Karatay, one of the greatest statesmen raised by the Anatolian Seljuk Empire, and is considered as the heart of Konya due to its historical background.

The number of existing neighborhoods in Karatay has reached to 80 after the closure of townmunicipalities with the 6360 numbered law. The population of the district is 363,177 according to official data of the Turkish Statistical Institute. Karatay is located between 38°15' and 37°37' North latitudes and 32°27' and 33°22'East longitudes. Its area is 2,746.440,000 m2, and its average height above sea level is 1,016 meters. Karatay is surrounded by Altınekin in the north, Çumra in the south, Meram, Selçuklu in the west and Karapınar in the east.

The district has a plain characteristic structure. The Bozdağ range cuts this plain on the northwest-northeast axis.





Figure 1: Population change of Karatay between 2007-2021



Figure 2: Distribution of population by age

## KARATAY The City Of Rumi

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 Şemseddin-i Tebrizi 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 the province of the so-called Diyar-I Rum country located in Anatolia during the 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 presentday 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.

### KARATAY 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'd-dîn, 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.





## KARATAY The Inheritor of Great History

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.



#### AZİZİYE MOSQUE

This 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.







#### SELİMİYE MOSQUE (SULTAN SELİM MOSQUE)







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 minarets, are decorated with hand-drawn artwork.

#### ŞERAFEDDİN 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 Şerafeddin 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

#### 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 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 the 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.











#### OBRUK INN AND LAKE

Obruk Inn, which is located nearby the Konya-Aksaray Highway in Karatay dates back to the 13th century. The Kızören Pothole, 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 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.



## KARA AY The City Of Museums

The museums in Karatay district attract great attention of local and foreign visitors. The museums, where many finds and relics are exhibited, continue to host their guests who want to see the traces of history today.







#### 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

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 the 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.





#### The Bridge Between Traditional Touch and Spirit

Karatay is a very special center where our traditional texture is preserved in addition to its modern and planned development. It is possible to see a building from many centuries ago in almost every street which allows us to wander through the paths of history.

REN

#### 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.









#### 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.







## KARATAY The Glazed Center of Ancient Ages





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.









## KARATAY Host of Themed Amusement Parks





#### 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> self-cleaning biological pond, which offers a visual feast with its lotus flowers, 418 sitting areas and, 46 barbecue sports.

#### 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.





#### 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.








### THE KARATAY TRAFFIC EDUCATION PARK

The park, whose construction was completed in the Ulubatlı Hasan Neighborhood in 2021 by Karatay Municipality, has a size of 8940m2.

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 (JUSTİCE) PARK

Adalet Park is located right next to Karatay University. This park is one of the most important social areas of the region with its large trees, walking paths, sports fields, recreation areas, pool, café spread over an area of 100 thousand m2.





### 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 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.





### 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.





## A New Center in Education, Industry, Health, Agriculture and Livestock

1.5.1

er and the

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.



### STRONG AND ORGANİZED INDUSTRİAL 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

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



### AGRICULTURE AND LIVESTOCK

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.

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

### KARATAY Favorite Center Of Thermal Tourism

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.



### Sustainable DEVELOPMENT GOALS

## No Poverty

Karatay Sustainability Report 2021 Voluntary Local Review



### SDG -1 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



There are no people in extremely poverty in Karatay. The minimum daily wage is about 9 to 11 times more than the extreme poverty line.



Figure 3: Daily minimum wage in \$(2010-2021)

Karatay Municipality conducts many studies and projects for the benefit of impoverished people. A large number of families are provided with social assistance.



Picture 1: Karatay Municipality's Social Assistance Team







Figure 4: Number of people that received social assistance (2017-2020)

Food and clothing assistance for disadvantaged people in our district is provided through personal vouchers within the scope of social assistance projects conducted by Karatay Municipality. In this way, it is ensured that our citizens buy products they personally prefer. Zeroing poverty in our city is one of our biggest goals. The graphic given below shows that the number of people receiving social assistance from Karatay Municipality has increased.



Figure 5: Amount of social assistance provided in TL (2018-2021)



Figure 6: Poverty headcount ratio at \$1.90 p/day (%)





### SDG -1 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



Karatay Municipality conducts various projects with an eye toward meeting the needs of any citizen and end poverty completely. The rapid population growth of our district adds extreme importance to the mentioned projects.



The ratio of employed people at risk of poverty in our district decreased in parallel with the ratio of Turkey in general, from 76.71% in 2010 to 54.86% by 2020. It is aimed to reduce the ratio of employed people at risk of poverty to below 50% by 2030.

Karatay Municipality is aware of the fact that poverty cannot be eliminated by only providing social assistance. Therefore, studies are carried out in cooperation with stakeholder institutions. In addition, projects are carried out and implemented within the framework of the objectives of participation in social life, encouraging the society to support each other, and eliminating the poverty of people of all ages permanently.

The necessity of co-financing for projects regarding the support of impoverished groups has emerged as a result of strategic planning studies. Most social projects aim to eliminate poverty completely. However, it is clearly observed that eliminating poverty permanently depends on the development of business environments and increase in incomes. Therefore, both local studies and policies at countrylevel employment are considered extremely important in this context.







Figure 6: Employed population at-risk-of-poverty (%)

Figure 7: Number of families that have received social assistance (2018-2021)

### SDG -1 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





Picture 2: Pictures from Karatay Women's Council Courses and Workshops



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 efforts to support women entrepreneurs.

Social assistance rates are kept high for women applicants. 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** Regional Development Administration. "The Vocational **Development and Adjustment** Project" and "Wicker Handicrafts Production Project", carried out in cooperation with KOP are the most shining examples of the previous mentioned projects.





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

Associations and foundations fighting hunger and poverty operate in Karatay. Their activities are usually in the form of collecting donations and delivering it to impoverished countries. Our society allocates some of their income to help these people in need. Citizens presume this as a religious and humanitarian duty. Karatay Municipality is building a new soup kitchen to support vulnerable people in cooperation with the Red Crescent. Thus, it is aimed to take measures so as to create an opportunity to support impoverished people and disadvantaged groups as fast as possible.



Picture 3: New soup kitchen project for the Red Crescent

# Zero Hunger

Karatay Sustainability Report 2021 Voluntary Local Review



### SDG -2 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 House provides hot meals to citizens in need. A wide range of food is cooked and prepared twice a day in a way to meet the nutritional needs of human being in accordance with hygiene rules. Hundreds of families that visit our Soup House receive hot meals throughout the 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. 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.



Picture 4: Karatay Municipality Zemburi Soup Kitchen





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



Picture 5: Production and sale of gluten-free bread



Picture 6: Production of gluten-free bread

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 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."

We cooperate with the Seydişehir, Meram and Selçuklu districts of Konya and cities such as Antalya, Sivas, Çorum, Bursa, Elazığ, Samsun, Niğde, Aksaray, Karaman, Afyon and Mersin to produce more "affordable gluten-free" food for our citizens.

The "Karatay Halk Ekmek" Bread Factory, which produces 300 thousand gluten-free breads per month, increases the product variety in this area and offers gluten-free food such as bagels, cookies, and cakes to our citizens at sales points on certain days of the week.

We always stand for all our citizens, especially our celiac patients, who need safe and affordable gluten-free food.

### SDG -2 End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture

2.3 By 2030 double 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



Greenhouse (da)



Figure 8: Agricultural greenhouse areas in Karatay (2016-2020)

The "Pasture Sheep Breeding Project" falls under this title. Official data state that Konya possess 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 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.



Picture 7: Green housing example



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



Figure 9: Agricultural fields in Karatay (2016-2020)

Agricultural areas in our country continue to decrease day by day as it is around the globe. Therefore, coherent land-use is of great importance.

Greenhouse agriculture, which occupies an important place in agricultural activities, is also increasing expeditiously in our district. There is sufficient sunshine in Karatay to obtain high-quality products of greenhouse cultivation.

Karatay Municipality conducts a variety of activities regarding the development of greenhouse agriculture.

# Good Health And Well-Being

Karatay Sustainability Report 2021 Voluntary Local Review



### SDG-3

#### Ensure Healthy Lives and Promote 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 ratio of maternal and infant mortality. There is a rapid decline in maternal mortality rates.



Figure 10: Maternal Mortality Rate (2010-2020)

The maternal mortality rate per 100,000 births declined from 17 to 13 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, Karatay Municipality puts great efforts to contribute to both reducing maternal mortality rates and under-five mortality rates by constructing sustainable health facilities.





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



Picture 8: Konya "City" Hospital (Gynecology and Children's Department)



Figure 11: Under-five mortality rate (2010-2020)

The rate of mortality in children under the age of 5 decreased from 15 to 11 per 1000 births.

Our target is to decrease 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.

### SDG-3

#### Ensure Healthy Lives and Promote 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, WATER-BORNE DISEASES, and other communicable diseases



Karatay Municipality "TSI Covid-19" Safe Service Certificate



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 and 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 anti-covid 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 headmen of 80 neighborhoods in our region. Additionally, Karatay Municipality continues to supply its employees with free masks on monthly basis.



Picture 9: Karatay Municipality's Anti-Covid19 campaign





In 2019, Karatay Municipality carried out 150 thousand tons of hot asphalt work throughout its district and thus directly contributed to the target of reducing the number of deaths and injuries from road traffic accidents.



Figure 12: Development of the amount of asphalt used for road infrastructures

The municipality's asphalt capacity has reached a total of 200.000 tons/per year with an increase of approximately 33% in 2020 compared to 2019.



Figure 13: Number of newly asphalted streets in Karatay (2019-2020)

Herewith, we have increased the transportation power and road quality of our district with a total of 1 million m2 hot asphalt in 2019-2020.

3.6 By 2020 halve global deaths and injuries from ROAD TRAFFIC ACCIDENTS

Hot asphalt works are planned for both the city center and suburbs of Karatay.

We have increased the road quality of inland access roads and connection crossings of neighborhoods in our district through a total surface coating work of 485.000 m<sup>2</sup>. Transportation became easier with surface dressing works in 115 streets, avenues, connection roads and various areas.



Picture 10: Asphalt constructions in the suburbs of Karatay

In 2019 and 2020, a total of 260 thousand m2 of patio works was carried out.

In 2019 and 2020, a total of 150 thousand meters of curbing was carried out.

The "Traffic Education Park", we plan to form on an area of approximately 9,000 m<sup>2</sup> in our Ulubatlı Hasan neighborhood, will also contain children's playgrounds, green areas, a simulation center, tunnels, intersections, and crossings.

An opportunity to teach kids traffic rules at an early age and to spend productive time with children in general will be realized with this project which will be implemented with an investment of approximately 6,2 Million TL.

### SDG -3 Ensure Healthy Lives and Promote Well-Being For All At All Ages

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



Seminars about healthcare were organized for the whole society free of charge.



Picture 11: Family Health Seminars

Seminars regarding various 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.


Picture 12: The "Selim Sultan" family health center constructed by Karatay Municipality

In addition, it is ensured that family health centers are included in development plans and programs in cooperation with relevant institutions in order to establish qualified health centers that also serve sexual and reproductive healthcare, and that infrastructure deficiencies in this area are eliminated with the support of Karatay Municipality through the construction of modern buildings.



Picture 13: The "Hayırloğlu" health and community center constructed by Karatay Municipality

AILE SAĞLIĞI MERKEZİ

### SDG -3 Ensure Healthy Lives and Promote Well-Being For All At All Ages

3.9 Zararlı kimyasallardan ve hava, su ve toprak kirliliğinden kaynaklanan ölümlerin sayısının 2030'a kadar önemli ölçüde azaltılması



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



Picture 14: Packaging and agricultural plastic waste collection cages

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.





Picture 15: Analysis of environmental pollution risks arising from drainage channels

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 without any water, soil, and air pollution.

Additionally, studies will be carried out in cooperation with the Mevlana Development Agency, Konya Directorate of Environment, Urbanization and Climate Change and Karatay Municipality in order to investigate arising environmental pollution risks from the Konya city center evacuation channel. Consequentially, relevant institutions will take necessary measures so as to reduce environmental pollution.

In this way, Karatay Municipality aims to reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

# Quality Education

Karatay Sustainability Report 2021 Voluntary Local Review



### SDG -4

Ensure Inclusive and Equitable Quality Education and Promote Lifelong Education 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



Our city attaches great importance to gender equality. The gender ratios of students in education are equal to each other.



Figure 14: Gender Ratios in Education (%)

Primary education is compulsory. In brief, male-female ratios are close to each other at all education levels.

As of 2019, Karatay Municipality has been gifting schoolbags and stationery materials to all students starting the 1st grade.





Each schoolbag includes a lunch box, pencil holders, dry paint, diverse color pencils, etc. Additionally, education is free in Turkey and educational books are provided by the government.



Picture 16: School bag and stationary gifts from Karatay Municipality



Picture 17: Test examination and book gifting events for students

Karatay Municipality conducted special studies for eight grade students, in preparation to start high school, in cooperation with the District Directorate of National Education. In 2019, a total of 8,000 high school entrance exam preparation books were delivered to 2,000 students who succeeded in the trial exam held at all high schools in our district. Additionally, we held online high school entrance test exams for nearly 6 thousand students in our district. The participation of both male-female students was ensured free of charge. In this way, it is ensured that all girls and boys have access to complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

### SDG-4

Ensure Inclusive and Equitable Quality Education and Promote Lifelong Education 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



The construction of 2 new kindergartens, both consisting of 8 classrooms, was completed by Karatay Municipality in 2020.



Picture 18: Kindergarten built by Karatay Municipality

Access to pre-school education is possible for both boys and girls but is not compulsory. In order to increase the quality of pre-school education, studies continue in cooperation with stakeholder institutions. The kindergartens are located in the Hamzaoğlu and Köprübaşı neighborhoods. We give great importance to the education of our youth, or better said, our future. Male and female students have access to kindergartens under the same conditions. In order to ensure equal access to qualified pre-school education, new Kindergarten Construction projects are being conducted in cooperation with the District Directorate of National Education in specific neighborhoods in need. Infrastructure deficiencies in this regard are eliminated by our municipality.





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

A cooperation protocol was signed with the KOP administration for the project "Bringing Students Together with Modern Agricultural Techniques". In this context, training programs on modern techniques of agriculture were organized.

Special examinations for students in preparation phase of starting high school have been carried out 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 eight grade students during the COVID-19 pandemic in 2020. Equal access for all women and men to education is ensured with these activities.



Picture 19: Vocational Development Cooperation protocol ceremony

### SDG-4

Ensure Inclusive and Equitable Quality Education and Promote Lifelong Education 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



An increase in the number of youth and adults who have relevant skills, including technical and vocational skills is necessary for employment, decent jobs 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.



Picture 20: TUBITAK Library" of popular science publications





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 refugees 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, social and cultural reasons. Special precautions are taken to allow students with disabilities to be admitted both in education and in exams.



Picture 21: Karatay Municipality Kids Workshops

### SDG -4

Ensure Inclusive and Equitable Quality Education and Promote Lifelong Education Opportunities For All

4.7 By 2030 ensure all learners acquire 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

# TARGET 4.74 EDUCATIONEDUCATION FOR SUSTAINABLE DEVELOPMENT<br/>AND GLOBAL CITIZENSHIP

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.



Picture 22: Protocol signing ceremony of the KOPSOGEP Program

Within this context, Karatay Municipality applied to the KOPSOGEP assistance program 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 have an income. Besides, the region was sociologically purified from negative situations.

Likewise, we do our best to support disadvantaged groups of our society through projects aimed to create opportunities for disadvantaged groups to earn an income through handicraft products in cooperation with the Karatay District Governorship Social Assistance and Solidarity Foundation.

Karatay Municipality's Directorate of Cultural Affairs regularly organizes trips to cultural and historical cities for the promotion of a peaceful and non-violence culture, global citizenship, and the appreciation of cultural diversity and contribution of culture to sustainable development.



Picture 23: Wicker Basket Production





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



schools in Karatay. We, especially place barrier-free elevators

Barrier-free lifts, ramps and entrances have been built in official institutions and

and entrances at schools in order to allow special individuals of our community to enter school buildings and classrooms easily.

Picture 24: Accessible Lift



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.

Picture 25: Karatay Science and Arts Center



Picture 26: Karatay Municipality "Sezai Karakoç" Imam Hatip Secondary School

Important necessities for physically challenged people are being considered pre-construction and post-construction.

## Gender Equality

Karatay Sustainability Report 2021 Voluntary Local Review



### 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. Sensitivity towards the protection, education and upbringing of women and girls continues in the society.

It is observed that the legal regulations, actually considered to be made with the goal of strengthening women more and to protecting girls better have given insufficient results in many countries of the world. In many Eastern societies, women have been valued for thousands of years, and religious cultural changes often reinforce this value rather than destroy it.

Women in Turkey gained their rights to vote and enter politics through legislation enacted on December 5th, 1934 and full universal suffrage was given, after first having gained the right to participate in municipal elections, the right to be elected to be mayors in villages and a series of other laws since 1930. The fact that women in Turkey achieved these rights earlier than many other countries can be considered as an indication of the importance given to women in our country.

Karatay Municipality conducts various activities to increase women employment in cooperation with non-governmental organizations and public institutions and organizations operating in the socialcultural field. 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.







Picture 27: "Karatay Healthy Communication" Seminars

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.



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 by the Republic of Turkey.

In the current legal regulations, the trade of women's own body, 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 strengthen social cooperation in order to strengthen the family ties of young people, to encourage marriage and to solve financial problems of young people who cannot get married due to financial difficulties. However, the 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.



Picture 29: Mayor, Hasan Kılca's meeting with intern students



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

Child marriage, early forced marriage and female genital mutilation are not common in Karatay. On the other hand, awarenessraising activities and seminars about child, early and forced marriage are organized by the Ministry of Family, Labor and Social Services.

### 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



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.





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

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.

Effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life is constitutionally possible. Women actively participate in areas as civil society movements, municipality councils and city councils in Karatay.

Figure 15: Women in local governmental positions





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 of owning and controlling property.

Grants that support entrepreneurship are given in a higher amount than normally by The Small and Medium Industry Development Organization (KOSGEB) so as to increase access of women to economic resources.

Picture 30: Wicker basket handicrafts



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 level

Karatay Municipality conducts various works in order to observe gender equality in its community. The municipality has 67-woman 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 of the Directorate of Social Support Services of Karatay Municipality shows that 90% of the citizens that 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.

### Clean Water And Sanitation

Karatay Sustainability Report 2021 Voluntary Local Review



### 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. With an application that can be considered as unique in the world, started in 1989, spring waters brought from the Dutlu, Çayırbağı, Mukbil, Beypinarı and Kırankaya springs, located 15-20 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.



Figure 16: Number of Free Fresh Water Fountains in Karatay (1990-2020)

Two combined water vehicles provided by Karatay Municipality are in service to deliver portable fresh drinking water directly to the suburbs.



Picture 31: Freshwater transportation

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, 24 hours a day and 7 days a week with fresh water per 2 water vehicles and a total of 68 freshwater tanks installed in these regions.



Picture 32: Freshwater tanks



Figure 17: Change in number of freshwater tanks in Karatay

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



Figure 18: Amount of distributed fresh water free of charge

In addition to the daily distribution of fresh water from 280 fresh water fountains located in the center of Karatay, the amounts of fresh water transported to rural areas are shown in figure 16.

When the above-given graphic is examined, it can be observed that the consumption of fresh water has increased continuously since 2016. It is predicted that this increase may turn into an unsustainable structure in the coming years and thus, the need of economical and sustainable solutions for drinkable fresh water has emerged in rural areas.

### SDG -6 Ensure Availability and Sustainable Management Of Water and Sanitation For All

6.2 By 2030, achieve access to adequate and equitable SANITATION 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 cultural 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 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.".



Picture 32: Free public WC services

Furthermore, 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 mosque-masjid outbuildings, and free public WC service is provided in crowded public places. The mentioned public toilets are periodically cleaned by Karatay Municipality. Karatay Municipality attempts to reach everybody in its community regarding essential services.





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

The "Zero Waste" project is implemented with the support of the Union of Municipalities of Turkey so as to reduce pollution. In addition, waste cages are placed in suitable places for the storage of pesticide packages and various activities are organized in cooperation with the City Council, targeting the decrease of waste and a raise in awareness of recycling.



6.4 By 2030, substantially increase wateruse 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 in the supply and logistics of irrigation water, 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".



Picture 33: 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 realized for the management of integrated water resources. Transferring 100 million m3 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 channels (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 channels are considered the highest. With an annual water saving of 70 million m3, an added value of approximately 160 million TL a year will directly be contributed to the national economy. The mentioned project is at signing stage and is planned to be 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.





6.6 By 2020 protect and restore waterrelated 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".



Picture 34: Obruk Lake

Studies regarding 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.



Picture 35: Groundwater Survey

Furthermore, 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 means to monitor and, sustainably manage groundwater, considered extremely important for agriculture in Konya.



Picture 36: Smart well-meter applications

Achieving the modernization of 122 groundwater monitoring stations located in the Konya Closed Basin and Upper Sakarya Sub-Basin, and instantly monitoring groundwater levels with online systems by installing automatic level measurement systems was 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.





Periodic cleaning services of, especially, fresh water tanks are conducted in line with 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 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 installations of the warehouses. Herewith, damage caused by bad weather conditions is prevented and improvements in water and sanitation management is ensured.



Picture 37: The protection of freshwater installations

6.B Support and strengthen the participation of local communities for improving water and sanitation management

### Affordable And Clean Energy

Karatay Sustainability Report 2021 Voluntary Local Review



### 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.



There is no neighborhood that does not have access to energy in Karatay. Geothermal housing and greenhouse heating is 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.



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

Karatay Municipality realized the construction of two solar power plants which produce a total of 1,300 kW sun energy. Both plants contribute to the share of renewable energy in the global energy mix. Besides, energy as much as the annual electricity need of all municipal faculties in Karatay is directly met. The mentioned solar plants produce a total of 2,578 MWh energy annually.



Picture 38: Solar Power Plants





800 personnel from local governments received education within the scope of the YEVDES Energy Project. Employees from relevant directorates of our municipality contributed to the project and thus, attended to the above-mentioned education activities organized in Ankara.

Consequently, the necessity of having a manager for energy services and conducting energy audits in public institutions with 1000m2 indoor area or an energy consumption of 250 TE was emphasized. Energy audits should be held every seven years. The importance of such audits is observed after improvements in energy bills within the framework of the legislation on the financing of renewable energy. 7.3 By 2030, double the global rate of improvement in energy efficiency

### Decent Work And Economic Growth

Karatay Sustainability Report 2021 Voluntary Local Review



### 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.

Specially, 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.

Karatay Municipality applied to the "Social Development Program" of the "Mevlana Development Agency" (MEVKA) affiliated with the Ministry of Industry and Technology. As a result of this application, the "RoboKaratay Project" received a grant of 2.558.774 Turkish Lira. Followingly, a wide range of workshops were realized. These workshops included graphic and web design workshops, augmented reality applications, drone pilot trainings, game and animation workshops, artificial intelligence educations and video montage trainings. Besides, a "book café" was formed.




Picture 39: Introduction of "RoboKaratay"



Picture 40: "RoboKaratay" education activities



Picture 41: "RoboKaratay" Project Logo

## SDG -8

#### Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work For All

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



Karatay Municipality considers men, women, young people and disabled people, shortly everyone to access employment and jobs and investments and practices are carried out in this regard so as the achieve the goal of ensuring access to full and productive employment for everyone.

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.

Karatay Municipality put great emphasis on this project and strived to ensure employment of young people through professional development practices.

In addition, it was aimed to ensure that young people in disadvantaged groups part of our community receive qualified education.

On the other hand, the organization of cultural, artistic and sports activities for the above-mentioned group was targeted.





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 wellbeing and resilience.

The "Karatay Youth Business Incubation Center" will be created as part of the project. It is aimed to implement both daily life and professional skills development programs throughout 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. However, the legal status of the Youth Business Incubator will be formed 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 labour, eradicate forced labour, and by 2025 end child labour in all its forms including recruitment and use of child soldiers



There is sufficient legislation in our country that eradicates forced labor, ends modern slavery and human trafficking and secures the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers. Forced labor was prohibited with 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."

Those of primary age and do not continue to compulsory primary education institutions are prohibited to work in any public, private workplace and in other places that require work under any form by the 222. Issued Primary Education Act.





8.8 Protect labour rights and promote safe and secure working environments of 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" carried out by UNHCR in coordination with the Ministry of Family and Social Policies.

We implemented the "Vocational Development and Adjustment Project" consisting of a budget of 230,000 TL and carried out in cooperation with the KOP Regional Development Administration to promote local and cultural handicraft arts and products.

In addition, we realized the "Wicker and Basket Reviving Project", which consists of a budget of 156.000 Turkish Lira, within the framework of the before mentioned project. Hereby, we created employment opportunity for 20 women and men through courses given by educators from the District Public Education Center and supported these citizens with forming a safe and secure working environment as they had the chance to turn the art of wicker and basket production into a profession and thus, create a source of income. Moreover, several substane addicted people in our community recovered as a result of various activities within this context.

Additionally, legal audit activities are carried out in to improve working conditions in Karatay.

## 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 products



Activities aiming to implement policies to promote sustainable tourism that creates jobs and promotes local culture and products are carried out in Karatay.

As mentioned under the "9.22 Increasing the Effectiveness 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 stakeholder is ensured at the point of creating policies regarding the subject.



Picture 40: Historical artifact found in Savatra Ancient City

"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. Preparing a list according to the types of events and their locations, the classification of even themes, and to ensure whether the events are spread in the calendar widely so as to support local culture and products, to promote related activities, to analyze outputs of the mentioned events and to reveal new events by analyzing its potential across the province is also necessary." However, Konya Metropolitan Municipality conducts several studies within the framework of this plan.

Event management from one common center with the participation of local institutions will provide great benefit. For instance, the chance that events are organized on the same date/time can be avoided. Besides, effective and efficient use of corporate resources and balanced organization of events throughout the year can be ensured.





Picture 41: Obruk Inn Restoration Works



Picture 41: Obruk Inn pre-restoration



Picture 42: Interior design concepts of Obruk Inn

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

Sustainability is considered as top 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.

Additionally, Obruk Inn will be opened to tourism after all restoration works conducted by Karatay Municipality are finished.

Karatay Municipality prioritizes sustainability in the preference of the balance of the protection of restored historical sites.

## Industry, Innovation and Infrastructure

Karatay Sustainability Report 2021 Voluntary Local Review



## SDG-9

Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation

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.



Picture 43: Street paving works



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.

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.

Picture 44: Asphalt works





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.



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. 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.

# Reduced Inequalities

Karatay Sustainability Report 2021 Voluntary Local Review



## 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.



Picture 45: Area of the "Pasture and Sheep Farming Project"





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



Picture 46: Karatay Municipality's Seniors' Recreation Center

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.



Picture 47: Karatay Municipality's Seniors' Recreation Center

## 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.



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.

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





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.



Picture 48: Activities at the Provincial Migration Administration - Karatay Youth Center



Picture 49: Events organized by the Provincial Migration Administration

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.

## Sustainable Cities And Comunities

Karatay Sustainability Report 2021 Voluntary Local Review



## 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.

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.



Picture 50: Urban transformation works



Picture 51: Comperative project concept







Figure 19: Rate of easy access to public transportation

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.



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

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".

#### 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





Picture 52: Anatolian Wild Sheep

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.



Picture 53: Arkeological excavation of Savatra Ancient City

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.



Picture 54: Boncuklu Mound



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.



Picture 55: Projects around the Mevlana (Rumi) Tomb



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.

Picture 56: Landscaping projects around Obruk Inn

### 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.





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



Picture 57: "Zero Waste" Awards

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.



Picture 58: Collection bin for masks during the pandemic

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



Picture 59: Collection bin for medical wastes

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

#### SDG -11 **Make Cities and Human** Settlements Inclusive, Safe, **Resilient and Sustainable**

Karatay Municipality collects waste oil at 50 drop-off points and prevent batteries from mixing with nature with our waste battery boxes at 200 spots.



Picture 60: Collection bin for organic oil waste



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.

Picture 61: Recycling of clothes, shoes and textile



Picture 62: Mobile waste collection units

provided at 10 different spots.





Picture 63: Agricultural waste collection cage

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.



Picture 64: "Zero Waste" activities for kids



Picture 65: Local Administrations Reform (LAR III) award ceremony

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

## TARGET 11-7





Picture 66: The Karatay "City Park"



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PROVIDE ACCESS TO SAFE AND INCLUSIVE GREEN AND PUBLIC SPACES

Picture 67: The Karatay "Justice Park"

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.



Picture 68: The Karatay "Olympics Park"





Picture 69: The Karatay Alzheimer's Day Care Center



Picture 70: "Barrier-Free Living Center" project studies

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.



11.a Support positive economic, social and environmental links between urban, periurban 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.

### 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.



Picture 71: Seismic hazard map of Konya





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



Picture 72: The use of puddled clay concepts at Obruk Inn

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.

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.



Picture 73: The use of local materials in architecture (compressed soil)



Picture 74: Energy performance in buildings

## Responsible Consumption And Production

Karatay Sustainability Report 2021 Voluntary Local Review



## 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.



We applied to the "Save Your Food Program" of the Union of Municipalities of Turkey along with the Karatay City Council. Additionally, we have applied to the 17th edition of the R&D grant program organized by the by the General Directorate of Agricultural Research and Policies of the Ministry of Agriculture and Forestry. With this application, it is aimed to convert waste food into food for stray-animals.

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





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 cooperates with TAP (Portable Battery Manufacturers and Importers Association), the only "Ministry of Environment and Urbanization authorized" organization that collects, transports and disposes waste batteries in Turkey, to achieve environmentally sound management of chemicals and all wastes throughout their lifecycle 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.

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



Figure 19: Amount of collected waste batteries

Waste batteries contain carbon, zinc, iron, manganese, nickel, lithium, cobalt, cadmium, copper, aluminum etc. Such components have the potential of risking the environment and human health due to chemicals. With the recycling of waste batteries, it is ensured that chemicals and wastes are significantly reduced in air, water and soil in order to minimize their negative effects on human health and the environment.

## SDG -12 Ensure Sustainable Consumption 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 packing waste and there was no direct intervention in this regard. However, the packing waste collected by companies continued to increase over the years. Around 6000 tons of packing waste was collected annually. Therefore, Karatay Municipality decided to collect and evaluate its own waste as of April 2020. In this regard, hundreds of female citizens in our community were reached for awareness raising activities. Information was given on how to separate waste.



Figure 20: Amount of collected packaging waste

Our municipality established its own vehicles and teams and the results of all the mentioned activities began to be seen quickly. Considering the total number of packing waste collected in the first three months, the estimated total waste for one year was stated to be 25000 tons.




Figure 21: Number of pine trees prevented from cut down

As a result of research conducted by Karatay Municipality with official data of collected waste in previous years, it was predicted that a huge number of pine trees could have been prevented from being cut down.

It was seen that 44495 pine trees could be saved from being cut down when considering 6419 tons of packing waste. Moreover, 30,605 liters of fuel and 8,056,864 kWh energy could be saved.

Waste batteries were collected as a result of research conducted by TAP in various centers and schools in Karatay. Schools that collected the most batteries were awarded with prizes. Additionally, it was ensured that seminars regarding the risks of waste batteries for the environment were given. Last year, a small number of batteries was collected due to the fact that schools were closed under pandemic conditions. However, the waste batteries collected from the same schools were around two tons in the previous years. It is estimated that much more batteries will be collected in the future since the use of technology is increasing in recent years.



Picture 75: Waste Batteries

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



Experience in sustainability in water and energy consumption, heating, cooling and infrastructural systems will be considerable during the construction of the "Bozdağ" Anatolian Wild Sheep Welcoming Center.

Changes in tenders carried out for the collection of packing waste were realized within the framework of the developments in the legislation and thus, the necessary equipment was provided and zero waste were put together by the Directorate of Environmental Protection.



Picture 76: Water, Energy and Sustainability studies at the Bozdağ Anatolian Wild Sheep Welcoming Center





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

Awareness-raising education was given to a high number of housewives in order to separate waste and collect waste in accordance with recycling. The positive results of the above-mentioned education were clearly seen with the increase in the amount of collected waste.

Moreover, informative brochures, seed pens and Waste Collection Bags were distributed through door-to-door visits. Karatay Municipality aims to reach 40,000 families by the end of the year.

Additionally, waste-battery collectionboxes were delivered to industrial areas and small shop owners in Karatay to prevent the dangers arising from uncontrolled disposal of batteries. Herewith, environmental pollution will be minimized.



Picture 77: "Karacan", mascot of the "Zero Waste Project"

### 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

### TARGET 12-B



#### DEVELOP AND IMPLEMENT TOOLS TO MONITOR SUSTAINABLE TOURISM



Picture 78: Karatay Thermal Resort

Karatay Municipality created opportunity for the development and implementation tools to monitor sustainable development impacts for sustainable tourism that create jobs, promote local cultures and products with the establishment of Karatay Thermal Resort. This facility has been awarded by the Tourism Promotion and Development Agency (TGA) with a "Safe Tourism" certificate.





Picture 78: Karatay Thermal Resort



18 accommodation facilities in Karatay possess the before mentioned "Safe Tourism" certificate while 10 of these facilities are certificated by Karatay Municipality and 8 by the Ministry of Culture and Tourism.

Moreover, it is planned to realize the forming of an agricultural specialized organized greenhouse zone where modern agricultural techniques are used and fully automated greenhouse investments are made to exemplification the digital transformation necessary done in the agricultural sector due to climate change and drought.

Picture 78: Karatay Thermal Resort

### \_\_\_\_\_17 Climate Action

Karatay Sustainability Report 2021 Voluntary Local Review



### 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. Additionally, 'Disaster Ready Youth' module trainings are given in student dormitories.

AFAD receives volunteering applications from their official website (www.gonullu.afad.gov.tr) and attends to various events so as to raise awareness. AFAD offers a wide range of online practices on their online system and aims to strengthen resilience and adaptive capacity to climate change and natural disasters.



Picture 79: AFAD volunteering applications





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

Karatay Municipality puts great emphasis on strategical efforts towards the promotion of less water-consuming crops in agriculture and the promotion of small cattle-raising, which needs less water, than cattle raising in order to reduce climate change. In addition, the change from irrigation systems to drip irrigation are considered important in near plans aiming the protection and efficiently use of water resources.

Dams are continuously controlled with the SCADA (Supervisory Control and Data Acquisition) System in order to manage and distribute water as best as possible and give early warnings when necessary. Herewith, it is observed that energy and water-savings are achieved.

Making important decisions regarding water management and distributing water optimally will be possible with efficient use of SCADA.



Climate change-related planning and management in Karatay can be improved, result-oriented and feasible through raising awareness for climate change amongst farmers, women and the youth. Furthermore, it is thought that such improvements will be effective in ensuring public participation and contribution in climate-related studies. This situation is also thought to be very effective in ensuring public participation and support in climaterelated studies. 13.B Promote mechanisms for raising capacity for effective climate changerelated planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities

Additionally, projects regarding the rehabilitation of irrigation canals are conducted in with the coordination of various institutions. However, it is of great importance that local communities protect such investments that directly affect climate-change, and alert relevant institutions to resolve any damage.

# Life Bellow Water

Karatay Sustainability Report 2021 Voluntary Local Review



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, is located in the inner region of Anatolian lands and there is no sea or ocean connection. There are only sinkhole structures and water environments in the form of small lakes in our district. Therefore, there are no studies conducted on the direct protection and sustainability of seas. In addition, there is no river reaching the seas from our region.

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.



There is no direct activity aimed at this goal since there is no seashore in Karatay. However, it is of great importance to reduce the amount of casting sands used by the casting industry operating in our district and to carry out studies for recycling, 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. 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans

Therefore, it is crucial that the necessary measures for the recycling of sand used in the before mentioned industry are taken immediately. 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.





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

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

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.



### 15 Life On Land

Karatay Sustainability Report 2021 Voluntary Local Review



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 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 Kızören Obruk Lake was registered as a "Sensitive Area to be Strictly Protected" on October 5th, 2019. It is aimed to create 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.

Karatay Municipality is working on studies focused on a geopark that also involves sinkholes, the most important geological formation in the region in cooperation with relevant institutions within the scope of the UNESCO International Geosciences and Geoparks Program (IGGP) and the UNESCO Global Geopark program.

Additionally, the planned geopark will create the opportunity for visitors to be provided with technical information about the effects of global warming, the activities carried out within the scope of combating drought, the change in the water level in the sinkhole and its reasons, and the geological formation.



Picture 80: Landscaping projects around Kızören Sinkhole 158





Picture 81: Sustainability studies at the Bozdağ Anatolian Wild Sheep Welcoming Center

Turkey agreed on international conventions so as to ensure the protection of natural values and the cooperation between countries in this regard. These conventions include the Cites Agreement, the Berne Convention on the Conversation of European Wildlife and Natural Habitats, the Convention on Biological Diversity, the European Landscape Convention and other international agreements that limit activities in natural parks.

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 in 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.



Picture 82: Architectural and landscaping works

Protect, Restore and Promote Sustainable Use Of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification and Halt and Reverse Land Degradation and Halt Biodiversity Loss 

TARGET 15-2
15 UFE DISCRIPTION

Image: State of the stat

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

Plain and steppe vegetation are widespread in Karatay. Therefore, attention is given on the reforestation of parks and gardens. Various reforestation projects are carried out, aiming to raise awareness and increase public participation in the creation of a green culture.

Karatay Municipality conducts afforestation projects, and puts great emphasis on increasing green areas in its districts. Especially around common areas such as schools and mosques.



Picture 83: Urban greening works in Karatay



Figure 22: Number of cleaned green areas in Karatay (2019-2020)

Moreover, Karatay sets an example for other cities with its green areas, number of trees, park and recreation projects, ecology awareness activities and its "zero waste" motto. It is observed that green areas have increased rapidly in recent years. Additionally, the total number of green areas cleaned by our municipality last year has exceeded one million square meters.





15.5 Take urgent and significant action to reduce 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 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, home to the natural population of the Anatolian Wild Sheep.

Furthermore, the area gains special importance 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.

In addition, 29 different types of medicinal and aromatic plants have been identified in the area. Other than the famous Anatolian Wild Sheep, 30 mammal species are observed in the area. Moreover, 43 different bird species, 16 species of reptiles and 3 amphibians were examined in the borders of the Bozdağ Wildlife Protection and Development Area. The fact that butterfly species detected in the field are butterfly species seen in the step ecosystem is another interesting feature of the area. These species include 2 endemic and 1 "natura 2000" species. The mentioned species are considered as natural and biological limiters for Bozdağ WPDA.

There is no international agreement or convention that provides the Bozdağ Wildlife Protection and **Development Area protected** status. However, international conventions aiming to ensure the protection of natural values and the cooperation between countries in this regard are considered highly important. These conventions include the Cites Agreement, the Berne Convention on the Conversation of European Wildlife and Natural Habitats, the Convention on Biological Diversity, the European Landscape Convention and other international agreements. Preventive activities are carried out in the area in accordance with the before mentioned conventions and national legislation.



Picture 84: The "Anatolian Wild Sheep" (Ovis Gmelinii Anatoli)



Picture 85: Endemic plant species found at "Bozdağ WPDA

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 

TARGET 15-9
15 UFE

Image: State of the sta

Efforts have been put 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 Area.

The realization of the Bozdağ Welcoming Center will give us the opportunity of introducing the biodiversity in the region to the community, especially to students so as to raise awareness to the importance of our ecosystem from a young age on, through a variety of activities with exhibition, conference and seminar areas. Additionally, it is planned to give visitors the chance to observe the area live on huge monitors.

Karatay Municipality is aware of the importance of this matter and thus, puts great effort to integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts. Herewith, it is aimed to increase awareness on the protection of wildlife and the ecosystem amongst segments of the community.





Picture 86: Architectural details of Bozdağ Wildlife Protection and Development Area Welcoming Center





15.B Mobilize significantly 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



Picture 87: Installation of Ekobox® in areas with irrigation challenges

With the support provided by Karatay Municipality, afforestation works were carried out in an area of 20 thousand m<sup>2</sup> around Bozdağ National Park. Despite challenges regarding irrigation, trees in the region have been successfully grown by the use of Ekobox® sapling apparatus, which reduce the need for irrigation.

In practice, 15 liters of water is used at the time of initial installation. However, thanks to the Ekobox® support unit, used for potential irrigation needs afterwards, water demand of plants are met 24/7 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.



Picture 88: Reforestation works around the "Bozdağ Anatolian Wild Sheep Welcoming Center

## Peace, Justice And Strong Institutions

Karatay Sustainability Report 2021 Voluntary Local Review



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 that include security services through urban transformation projects.

As a result, both the revision of the old urban fabric, emerged from poverty, and the construction of new, decent and safe housing was realized. As of 2021, it is observed that applications to masshousing cooperatives carried out under the leadership of Karatay Municipality are gradually increasing. Herewith, we underline the preference for safe mass-housing areas.

Additionally, security cameras are installed in some important centers and parks. The fact that the crowd in the city center is not increased consciously ensures that security services are provided more easily. In addition, outdoor urban lighting also contributes to the sense of security of citizens at high level.





16.5 Substantially reduce corruption and bribery in all its forms

The social-structure of Karatay has sensitivity to corruption and bribery. The fact that the income per person in Karatay is lower than the PCI of other districts in Konya is increasing the awareness on this matter. On the other hand, various practices that do not allow bribery and corruption are carried out in public institutions.

Since citizens and the municipality are in communication with computer servers and one-onone human intervention is reduced, transparency, reliability and speed increase which decreases the chance of corruption and bribery completely. In addition, online municipality services are provided by Karatay Municipality. These services allow all applications of citizens to be recorded, transmitted digitally to the relevant units and supervised by the management. Citizens are notified when their applications are resulted. Such opportunities reduce unnecessary mobility in the city, one-to-one human relations and thus, the possibility of corruption and bribery within and between institutions.



Picture 89: E-Municipal System of Karatay Municipality

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





Picture 90: Attendance to the Local Government Reform (LAR) Project Online Event

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.



Fotoğraf 91: Yerel Yönetim Reformu (LAR) Projesi Fiziki Etkinlik

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 in-person 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.







Picture 92: Karatay City Council



Picture 93: The "Participatory" decision-making process of Karatay

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 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.

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 at first hand with the Karatay "Speech" Assembly meetings, which turned into a tradition, and puts great emphasis on evaluating all applications as quick as possible.

Demands and suggestions of our community are considered by the Mayor of Karatay Municipality with our community gathering activities.



Picture 95: Community gatherings in Karatay



Picture 96: Neighborhood visits

In addition, 80 neighborhoods are regularly visited so as to exchange ideas with our society regarding recent and future plans and to examine ongoing works in the field.

Demands and suggestions of our citizens are considered and directly evaluated.

Karatay Municipality organizes meetings with tradespeople in its regions so as to exchange ideas

and take demands with the aim of working towards these ideas and demands.

Furthermore, all schools in Karatay are frequently visited along with the District Directorate of National Education. All demands and suggestions we receive from teachers, administrators, and students are being considered within the responsibilities of our municipality.



Picture 97: Experience sharing visits to tradespeople in Karatay





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 illustrated on both our website and mobile application. The users of our e-municipality application have increased from 15000 to 25000. The usability rate of our website has increased from 60% to 75%.

In addition, a special information security system for both the website and mobile application have been established, their scope has been expanded and the implementation rates have increased. Karatay Municipality takes all requests into consideration.

We have implemented an exemplary system 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, received requests can be categorized and analyzed. Such opportunities directly contribute to the participatory municipality principle.



Picture 98: The Karatay Information Management System (KBYS)

## Partnerships For The Goals

Karatay Sustainability Report 2021 Voluntary Local Review



### 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.



17.14 Enhance policy coherence for sustainable development

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.





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 puts great emphasis on developing cooperation with multi-stakeholders that mobilize knowledge, expertise, technology, and financial resources so as to achieve sustainable development goals.

Karatay has become sister cities with Kenitra in Morocco, Belh in Afghanistan and, Gorajde and Novigrad in Bosnia and Herzegovina. In this way, the goal of reaching targets faster by realizing joint projects as well as mutual knowledge and experience sharing was set. Furthermore, Karatay Municipality is now working on signing sister city protocols with various countries and cities in order to develop its international cooperation network.



Picture 99: Sister city protocol between Novi Grad and Karatay

### SKA -17

### Uygulama Araçlarını Güçlendirmek ve Sürdürülebilir Kalkınma İçin Küresel Ortaklığı Canlandırmak

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 the cooperation between public institutions and organizations in Karatay. A cooperation protocol has been signed by Karatay Municipality with many public institutions and organizations.

When considering our partners, universities, funding organizations, sister municipalities, various public institutions and organizations operating in different fields, city councils, non-governmental organizations and institutions are included.



Picture 100: Cooperation protocol of the KOPSOGEP project



Picture 101: Cooperation protocol with Selçuk University



Picture 102: Cooperation protocol with Konya Technical University





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 carried out in order to ensure the continuity of the data produced and to carry out the exchange of information with the institutions in a qualified accurate and fast way. Data-based analyses are carried out so that a citizen's application for social assistance can be controlled before the procedure starts. These data-based analyses show us whether the applicant received any assistance before, the eventual amount and whether any other institution provided assistance to the relevant applicant. Software teams put great effort to continuously improve the mentioned data systems.



17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and 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

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 and 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://kosqeb.gov.tr/site/tr/genel/detay/6878/kosqebden-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%B6nelika%C4%9F%C4%B1z-ve-di%C5%9F-sa%C4%9Fl%C4%B1%C4%9F%C4%B1--konferans%C4%B1ger%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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