BARTIN UNIVERSITY
SUSTAINABILITY REPORT
2020-2021

TABLE of CONTENTS

1. INTRODUCTION

Bartın University focuses on education, research and social responsibility, environmental consciousness and sustainability issues on the aspect of "**Sustainable Environment**" and moves with the aim of becoming a "Green Campus".

Bartın University has accelerated its studies within the scope of **GreenMetric**, "World Environmental Universities Ranking". In the 2019 ranking, it was ranked 16th among 43 universities in our country and 348th in the world.

With the "**Zero Waste Project**" on sustainability and environment, especially wastes and recycling; Important steps have been taken in the fields of water use, energy saving, education and research. Special studies are carried out on energy efficiency.

In this context, Bartın University provides both infrastructure and energy efficiency with its smart buildings under construction on the Kutlubey Campus and thermal insulation made with environmentally friendly insulation materials on the Ağdacı Campus in terms of structure and infrastructure.

It supports the green campus policy with its efforts to protect and increase and improve green areas and even to increase water-absorbing areas.

On the Kutlubey campus, a pond was created with rain harvesting and this water source is used for irrigation of green areas. In addition, this pond and its surroundings have been developed, increasing biodiversity and providing a valuable recreation area to the campus and Bartın.

Still, within the scope of the “Zero Waste Project”, waste reduction programs have been put into practice for the recovery and disposal of waste.

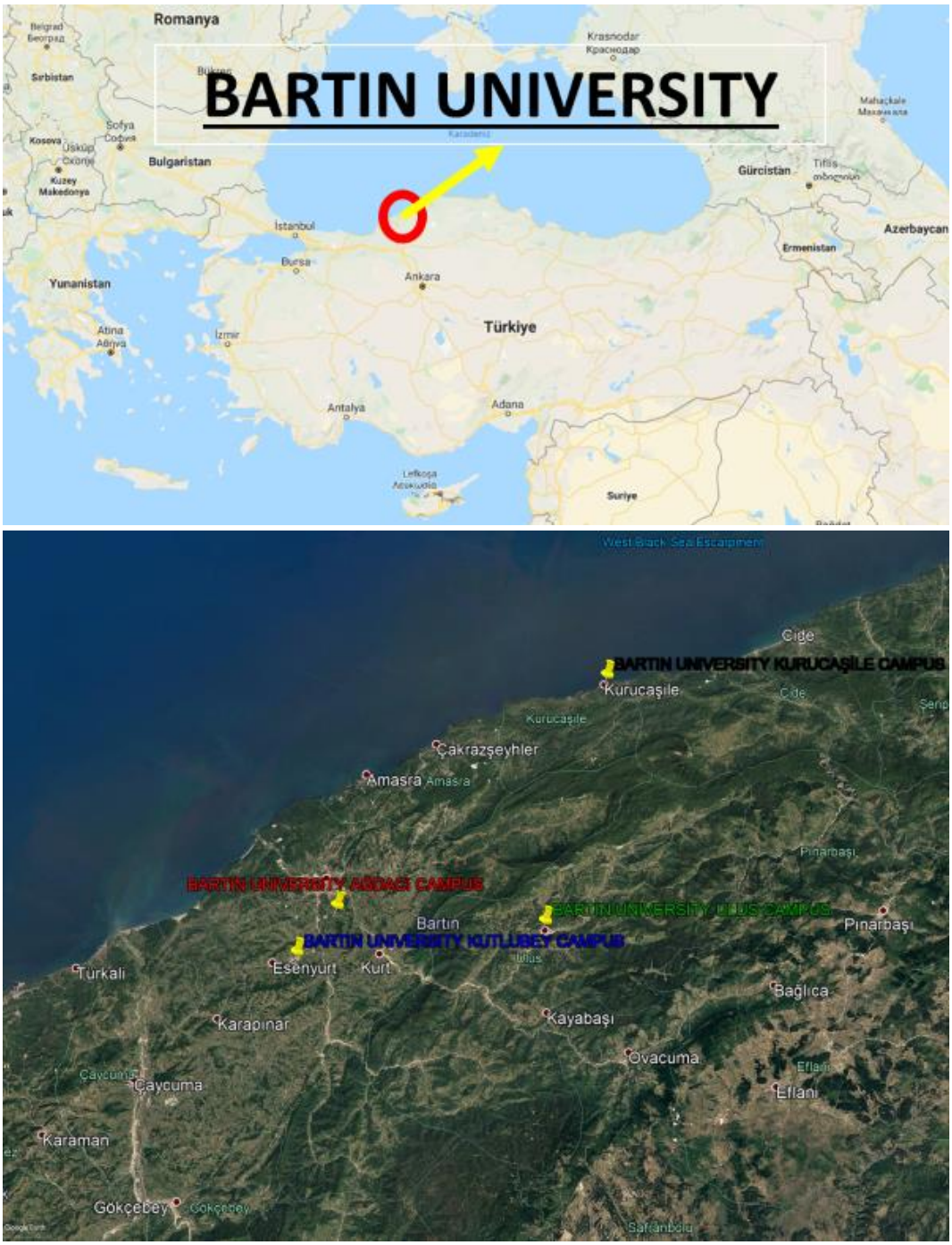
There are wastewater treatment plants in both campuses, they are operated with high efficiency and their discharges are given to wetlands, contributing to the water cycle. It develops water saving programs and water recycling programs for the efficient use of water resources and prevention of waste.

In terms of transportation, for less carbon footprint ring applications performed in the University. In the field of education, courses and applications are carried out in the associate, bachelor, master and doctorate programs.

Within the scope of “100/2000 YÖK Doctoral Scholarships Project” of Council of Higher Education (YÖK), “Sustainable Forestry”, “Forestry Products and Technology” and “Sustainable and Intelligent Cities” doctoral education provided by Bartın University and also Bartın University raise awareness together with research projects and practices with various kind of activities with environmental educations.

2. CAMPUS LOCATION and INFRASTRUCTURE

Bartın University has 4 Campuses and green areas are covering high amount of area within the campus. Design, maintenance and application practices are carried out for the green areas. The buildings have the features of green building properties such as natural ventilation, all day natural lighting, energy management system etc.



Bartın University operates on 4 different campuses.

Ağdacı Campus

Ağdacı Campus

Ağdacı Campus

Ağdacı Campus

Ağdacı Campus

Kutlubey Campus

Kutlubey Campus

Kutlubey Campus

Kutlubey Campus

Kutlubey Campus

Kutlubey Campus

Kutlubey Campus

Ulus Campus

Ulus Campus

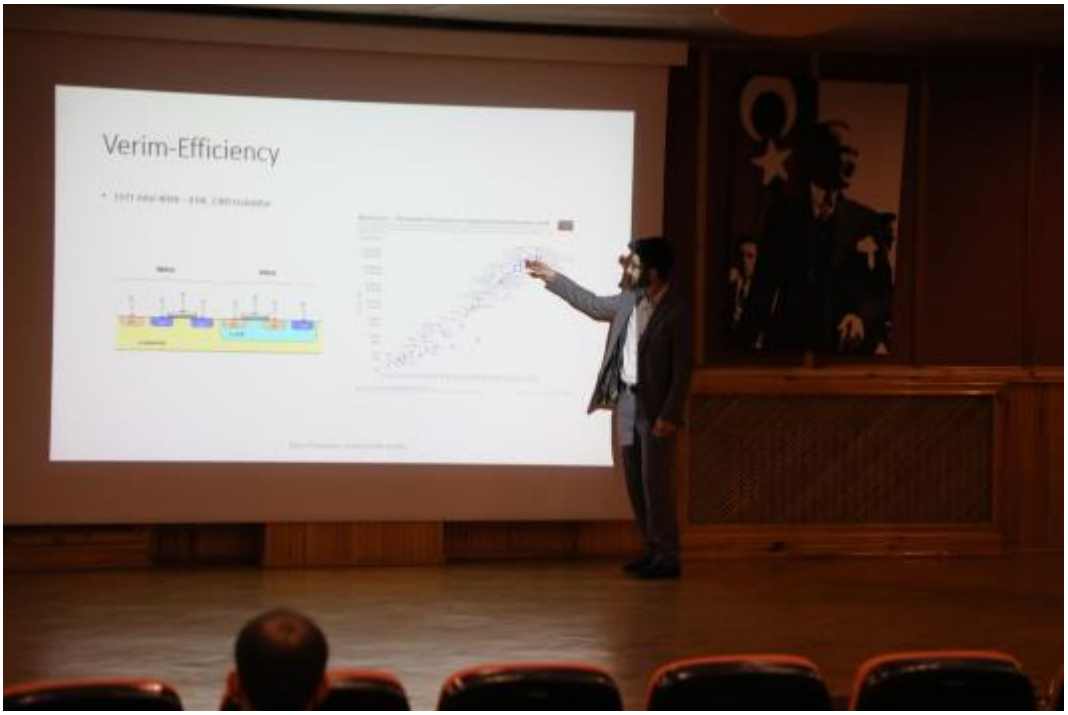
Kurucaşile Campus

Kurucaşile Campus

3. ENERGY and CLIMATE CHANGE

Energy and Climate Change Energy efficient devices and applications are used in buildings. LED lightening and energy saving bulbs are used throughout the campus. Energy efficient devices are also used. Most of the buildings have automatic doors and automatic fire alarm systems.

Energy savings are achieved with LED lighting systems.



"**Energy Saving Seminars**" were held to explain Energy Saving and make it permanent.

"**Energy Efficiency Conferences**" were held to teach what Energy Efficiency is and what it is not.

Within the scope of the "**Renewable Energy and Energy Efficiency Technical Assistance Project (YEVDES)**" carried out under the Ministry of Energy and Natural Resources, 2 projects of our university, which are in the top 5 in the fields of renewable energy and energy efficiency, succeeded in receiving R&D support.

- **"Intelligent Energy Management System for a Smart University"**: includes developing a smart energy management system in order to minimize energy consumption in universities, supporting the system with renewable energy sources and developing a smart phone application that will enable remote control of this system. When the project is completed, rooms, classrooms, corridors, toilets, stairs, etc. Artificial intelligence and internet of things (IOT) technology will be used in the energy management of areas.

- **"Production of High Energy Efficiency Base Ash/Phase Change Material Composites, Their Use in Building Materials and Determination and Optimization of Thermal Regulation Performances"**: Production of low cost phase change composite materials with high energy efficiency, their use in building materials and determination of thermal regulation performances within the scope of the project and to be optimized. Thus, it is aimed to obtain an energy efficient material with high thermal storage capacity. The effect of this material on building energy performance will be examined. With the newly obtained material with heat storage feature, there will be results such as reducing the cost of energy and fuel, and as a result, contributing to the reduction of foreign dependency in energy in our country by reducing environmental pollution.

LED lighting systems.

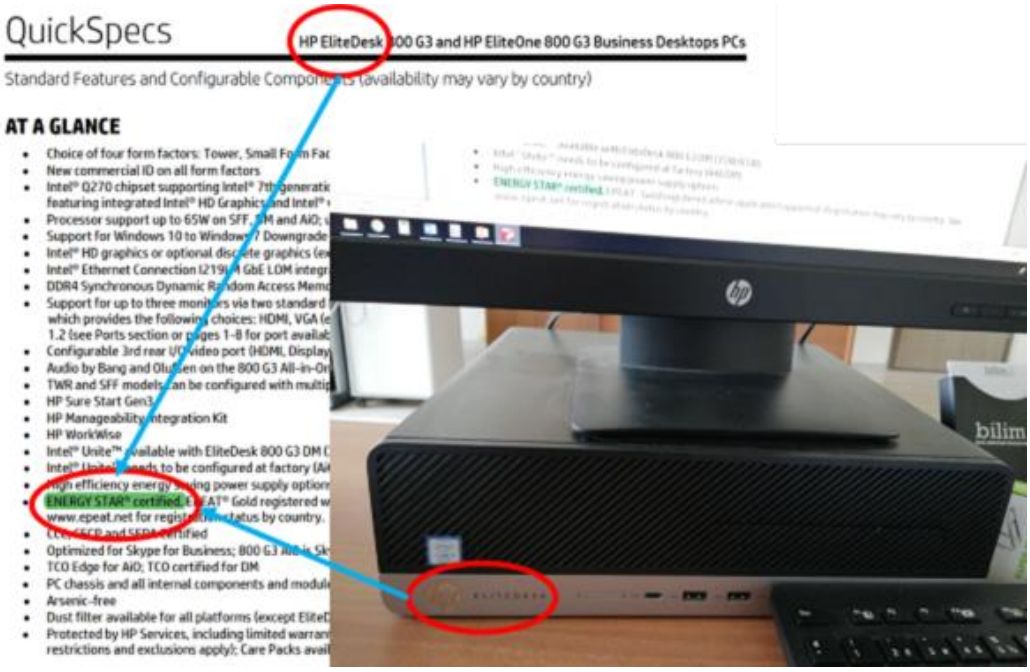
The number of LED lightings throughout the campus is increasing day by day and energy-saving bulbs are used predominantly. In this way, it is aimed to reduce energy consumption.

Lamps with sensors

The sensor lamps located indoors provides more healthy, comfortable, and efficient lighting. In addition, energy consumption is also reduced.

A + refrigerators and air conditioners with inverter technology.

At the same time, energy efficient devices are used. In this way, it is aimed to reduce the amount of energy consumption and it is aimed to reduce the amount of consumption per person. Many computers etc. Our device is covered by ENERGY STAR and its energy efficiency is certified.



Energy-efficient computers and monitors

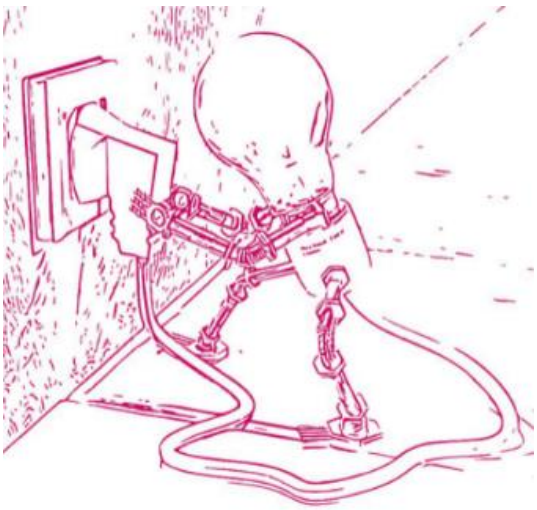
Energy efficient printers and scanners

Energy efficient co-printers and copiers


Efficient and energy-efficient heating is provided by adjustable radiator systems.

In order to save energy, informative presentations and stimulating visuals are prepared and presented to employees and students.

Don't Forget to Shut Down Your Computer!



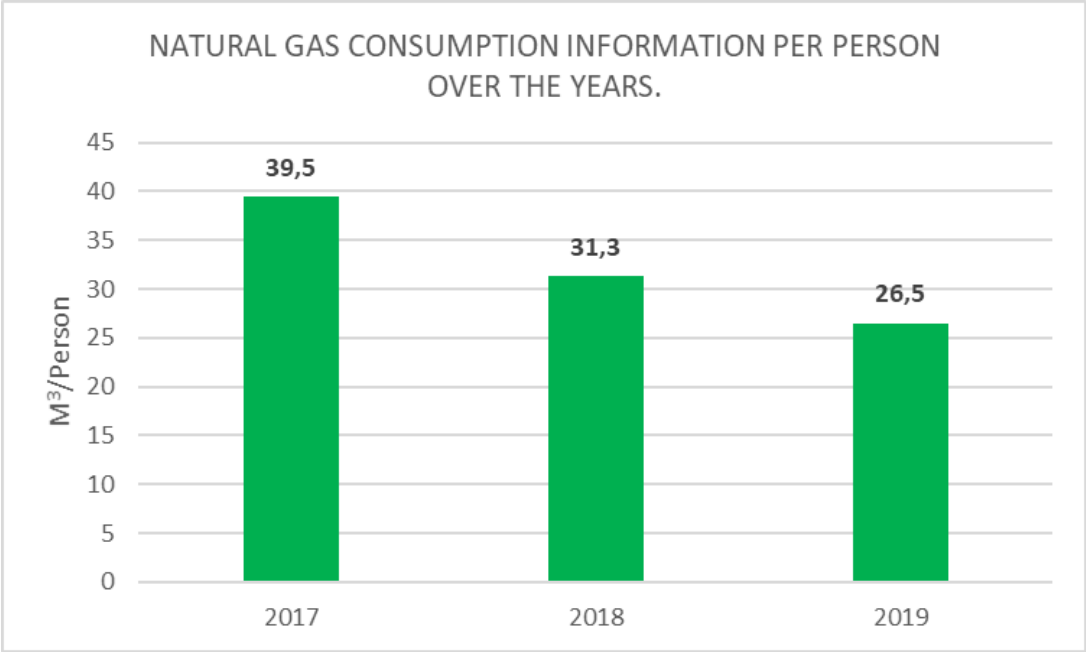
Turn off The Lamps!

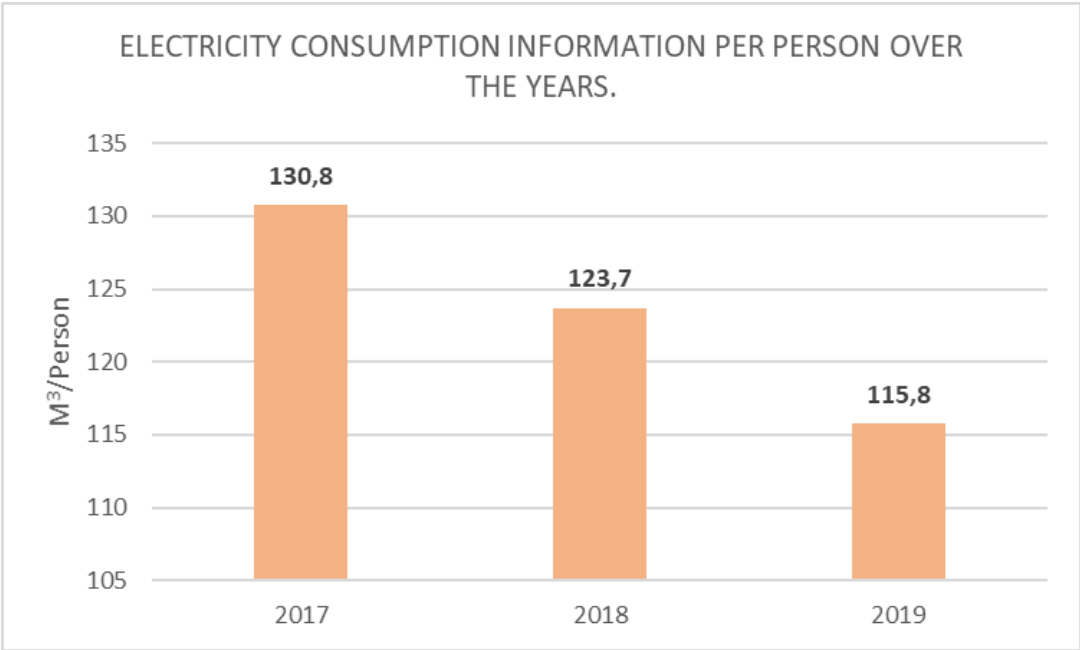
Do not Leave Devices in Stand-by Position!

Use LED Lamp!

The Energy Efficiency and Savings Club was established in our university to increase Energy Efficiency and Savings and to encourage students more in this regard.

"Energy Efficiency and Savings Club" started its activities.





The amount of natural gas and electricity consumption per capita decreases every year.

Automatic fire alarm systems are available in our buildings.

There are automatic doors at the entrances of the buildings in our campuses.

The inside and outside of the buildings are continuously monitored by camera systems.

These features complement some of the requirements to ensure that our buildings are smart buildings and they work in harmony with our building management system.

Awareness studies are carried out to obtain energy from renewable energy sources. It is aimed to increase these with academic studies.

Solar energy system for charging devices like telephone etc.

Solar watering system for automatic watering of plants in offices

Academic studies are carried out using solar energy

Our First Electric Vehicle **ÇEŞM-İ CİHAN**

Our Second Electric Vehicle **GÖKBÖRÜ**

Üçüncü Elektrikli aracımız **SİMURG**

We participated in national competitions and won awards in different categories with our electric vehicles prepared by Mechanical Engineering students and consultants.

Promotion and Dissemination Incentive was received with **GÖKBÖRÜ** in 2019

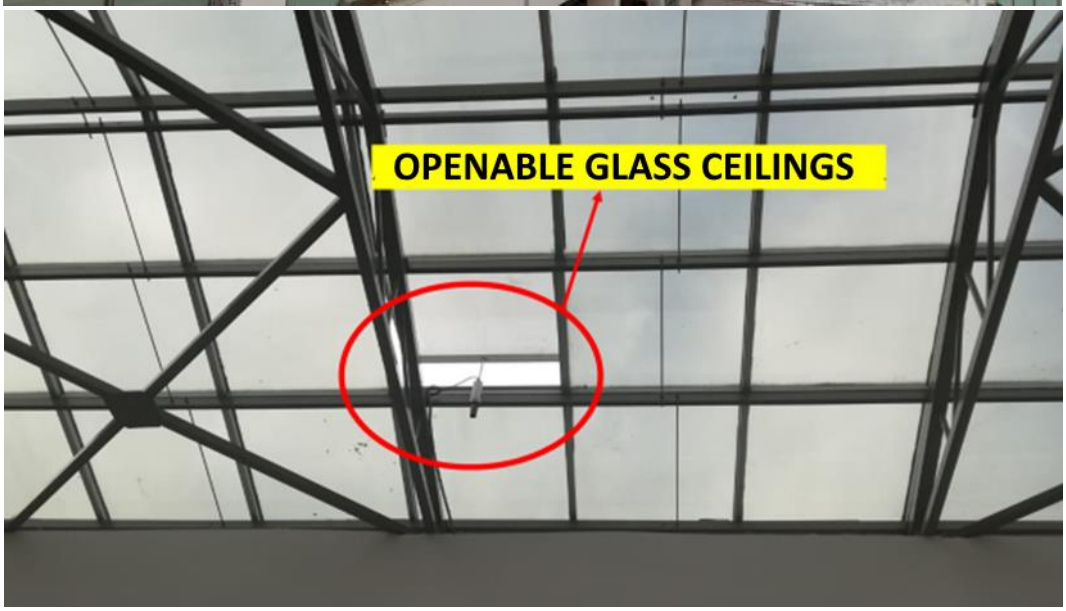
SIMURG became the 2nd fastest car in the 16th TÜBİTAK Efficiency Challenge Electric Vehicle Races organized within the scope of TEKNOFEST 2020, and ranked 7th in efficiency.

Since the gallery system is glass, natural lighting is provided all day long in the corridor and breathing areas (No lighting elements are used).

Natural lighting (Faculty of Forestry)

Natural lighting (Faculty of Engineering, Architecture and Design)

All living areas have windows that provide natural ventilation that gives fresh air inside of the buildings.



Natural lighting is provided by openable glass ceilings

Natural ventilation (Sözel Classroom)

Plants that increase indoor air quality and visuality are located in the corridors.

With the vertical gardens in our buildings, green space is obtained and natural insulation is also provided.

All buildings are thermally insulated and heat losses are prevented. In this way, the amount of fuel in winter is minimized. Materials made from natural wool are used in the insulation.

The old buildings in Ağdacı Campus.were made energy efficient by making insulation

The newly built buildings on the Kutlubey Campus are insulated

4. WASTE MANAGEMENT

Bartın University carries out a recycling and waste reduction program with the "Zero Waste Management" approach. Precautions are taken to protect natural resources and use them efficiently. "**Zero Waste Project**" is carried out in all units. Trainings on waste management have been initiated and efforts have been on progress to prevent waste.

The amount of waste collected on our university campuses in 2018 and 2019

Zero Waste Collecting Points.

Our students have been educated with trainings about Zero Waste Project

Wastes are collected separately (packaging waste, battery, etc.) and given to recycling companies. Food waste is sent to animal shelters.

All employees pay attention to the collection of wastes with Zero Waste Project

With the waste recycling program carried out within the scope of Zero Waste Project, wastes are collected in an appropriate manner and delivered to recycling companies.

Zero Waste Temporary Storage Area

The collected wastes are weighed and entered into the system regularly.

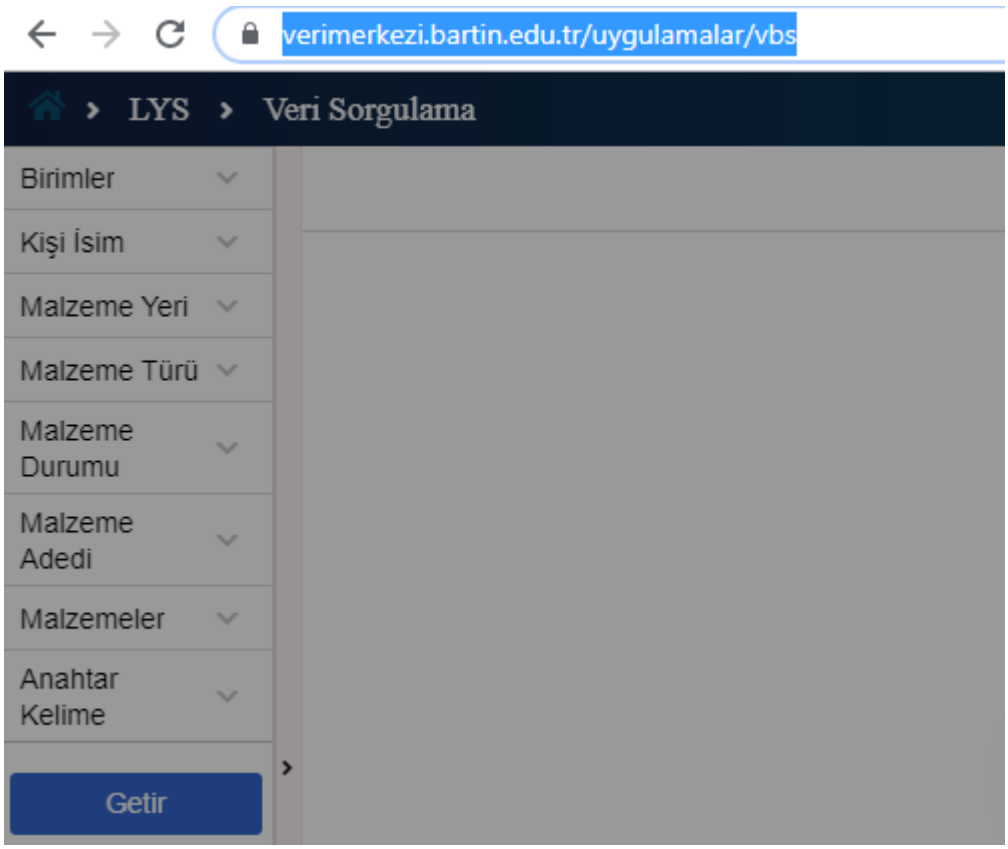
Waste materials are recorded and delivered to recycling company

Compost is produced from organic wastes in our campuses.

Together with the Zero Waste Project, different waste reduction programs are used in our university. Thanks to these programs, paper and plastic consumption and waste production are minimized.

Within the scope of waste reduction program

1. Logistics Management System (LYS) (**https://verimerkezi.bartin.edu.tr/uygulamalar/vbs**)
2. Sıfır Atık Projesi Zero Waste project
3. E-signature system (**https://ubys.bartin.edu.tr/**)
4. Double-sided printing
5. Joint printer usage policy
6. Use of glass, porcelain and metal cups
7. The use of the back side of printed paper is preferred.
8. The use of cloth bags is encouraged; this reduces the consumption of plastic bags.



With the LYS system, the materials of units that are not needed are shared and savings are prevented from wasting

E-signature system was launched to reduce paper and plastic usage on campus.

Our energy efficient printers and copier machines that can do double-sided printing are connected to the joint network and used as a common printer.

This saves both desreasing the number of devices and reduces energy use.

To reduce the use of plastic and cardboard cups, our employees use glass, porcelain and metal cups for tea, coffee and so on. Our tea stoves, which can supply beverages, were put into service in every building.

Within the scope of Zero Waste, efforts are being made to reduce paper waste and awareness is being created.

Within the scope of Zero Waste, works are being carried out to reduce plastic waste.

Our university aims to minimize the use of plastic bags with the cloth bags it has made.

Our University realizes the distribution of cloth bags with different activities

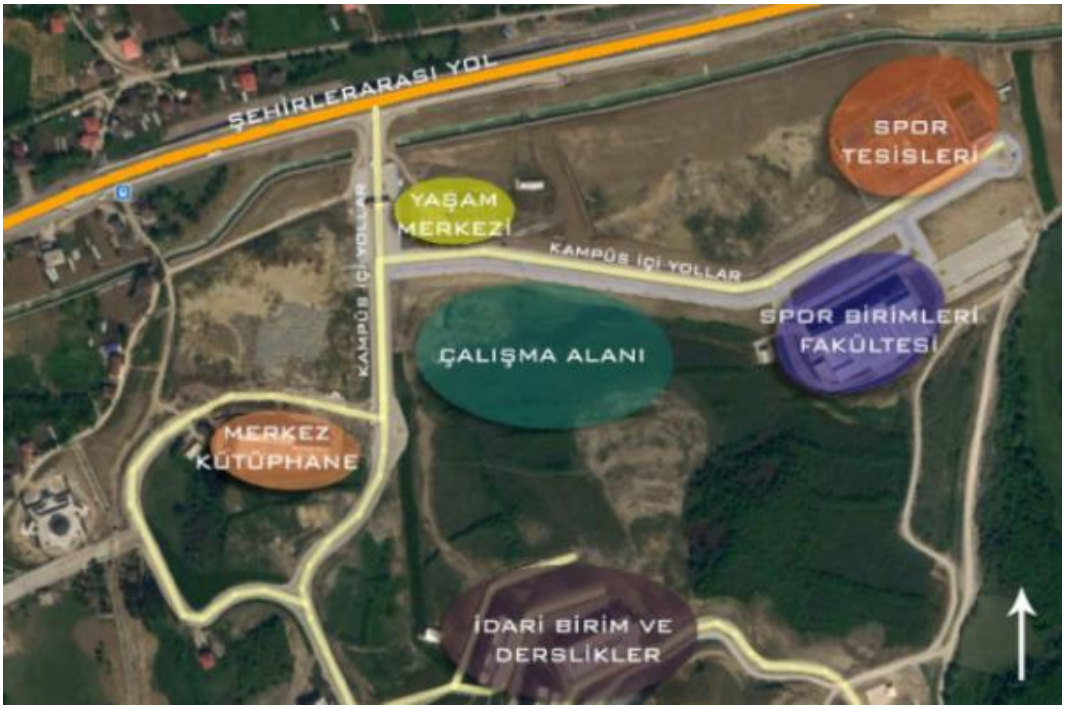
There are biological treatment facilities on campuses for the treatment of wastewater.

Ağdacı Campus Treatment Plant

Kutlubey Campus Package Treatment System

5. WATER RESOURCES

In order to "**Save Water**" a program has been created in Bartın University. For this purpose, a pond was created for collecting and storing the rainwater on Kutlubey Campus. For the irrigation of green areas was started in the campus area. Currently there is an automatic irrigation system for green areas, and it is watering the green lands in appropriate times.



Bartin University Kutlubey Campus Pond Project

The Pond Project has also started to host many living things. It has become rich in terms of biodiversity with the shelter of different species in and around it.

Kutlubey Campus Pond

Water from the pond is used for irrigation of green areas

Biodiversity increases on campus thanks to the Kutlubey pond

By placing various duck species in the pond, the diversity of ecological life increases and the lake become home to different species.

Another missing ecological step was eliminated by adding the juvenile carp fish to the pond.

In addition to animal species, different plant species began to grow thanks to the pond water.

Since the existing irrigation system has an automatic irrigation system for green areas, it saves water by irrigating at suitable times.

Automatic irrigation systems

The taps used in our university have flow-reducing properties,
that helps saving water.

Our electrical cleaning tools used in building cleaning are effective in the efficient use of water by achieving low water consumption.

6. TRANSPORTATION

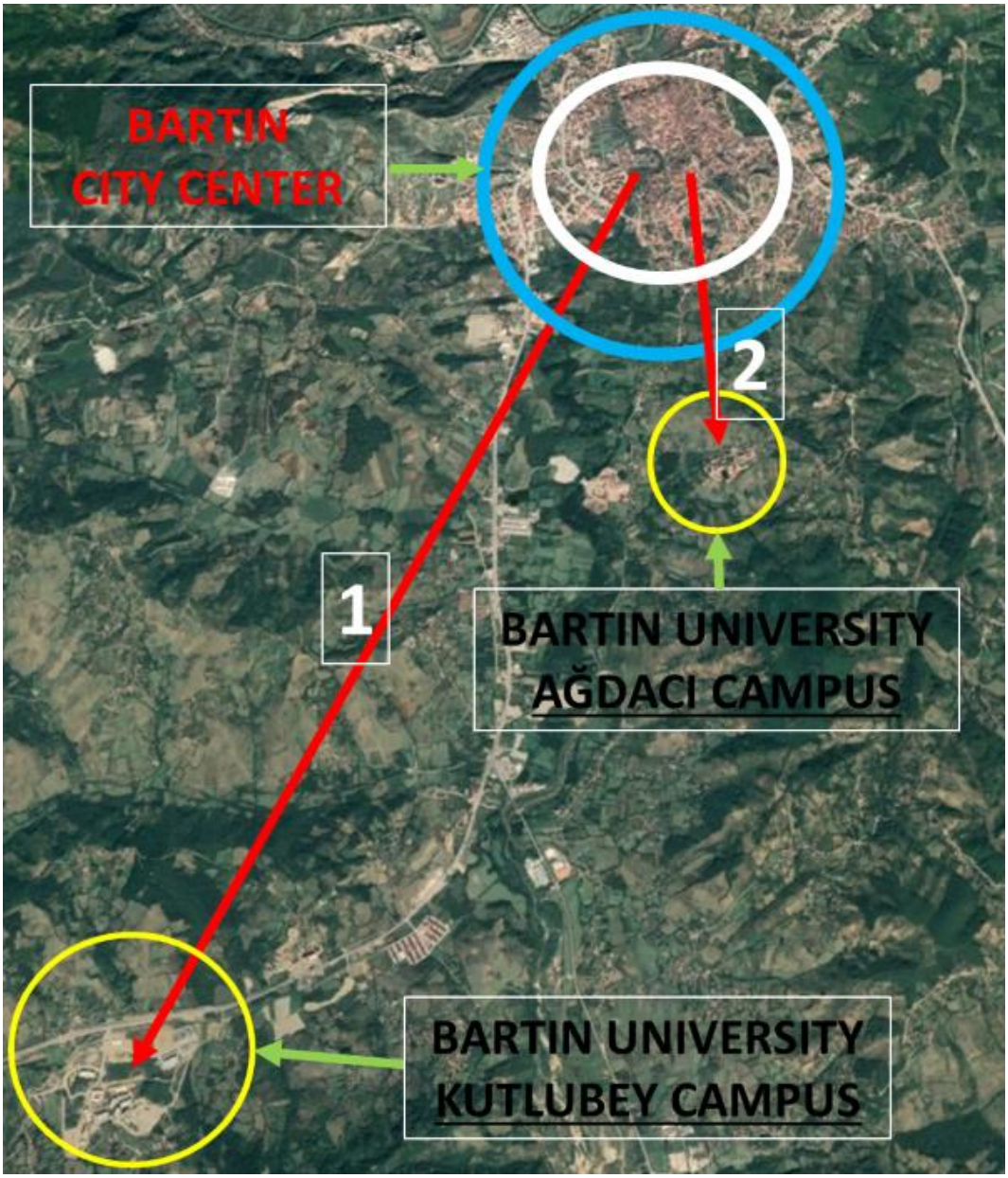
Bartin University provides public transportation with a ring service to reduce vehicle use. Two free shuttles are offered to Kutlubey and Ağdacı campuses every work day, for academic and administrative staff.

BARTIN ÜNİVERSİTESİ 2018-2019 YILI PERSONEL SERVİSİ VE RİNG GÜZERGAHI		
AĞDACI KAMPÜSÜ PERSONEL SERVİSİ		
DURAK	HAREKET YERİ VE PERSONEL SERVİSİ GÜZERGAHI	HAREKET SAATİ
1.Durak	KAMPÜS ÇIKIŞ	07:45
2.Durak	TÜRBE IŞIKLAR	07:53
3.Durak	BALAMBA HASTANE KAVŞAĞI	07:55
4.Durak	ULUS DURAĞI	07:57
5.Durak	ORDU YERİ KÖPRÜSÜ	07:59
6.Durak	YALI	08:01
7.Durak	MİLLİ EĞİTİM MÜDÜRLÜĞÜ	08:03
8.Durak	AKTIP	08:07
9.Durak	ÖZEL İDARE	08:11
10.Durak	A 101 DURAĞI	08:13
11.Durak	AFAD	08:15

KUTLUBEY YAZICILAR KAMPÜSÜ RİNG GÜZARGAHI		
DURAK	HAREKET YERİ VE RİNG GÜZERGAHI	HAREKET SAATİ
1.Durak	KAMPÜS ÇIKIŞ	07:45
2.Durak	MYO	07:50
3.Durak	TÜRBE LOJMANLARI	07:52
4.Durak	ADLİYE LOJMANLARI	07:54
5.Durak	AKTIP	08:00
6.Durak	FORD BAYİİ	08:05
7.Durak	TOKSÖZLER PETROL	08:07
8.Durak	MİMAR SİNAN DERSLİĞİ	08:16

Free Staff Services
(http://imid.bartin.edu.tr/ulasim-hizmetleri/ulasim-hizmetleri.html)

The daily transportation of personnel is carried out free of charge with the shuttle vehicles of Bartın University, and the transportation of personnel and students between campuses is also carried out on special days.



Free staff services bring our staff from Bartin City Center to Ağdacı and Kutlubey Campus.

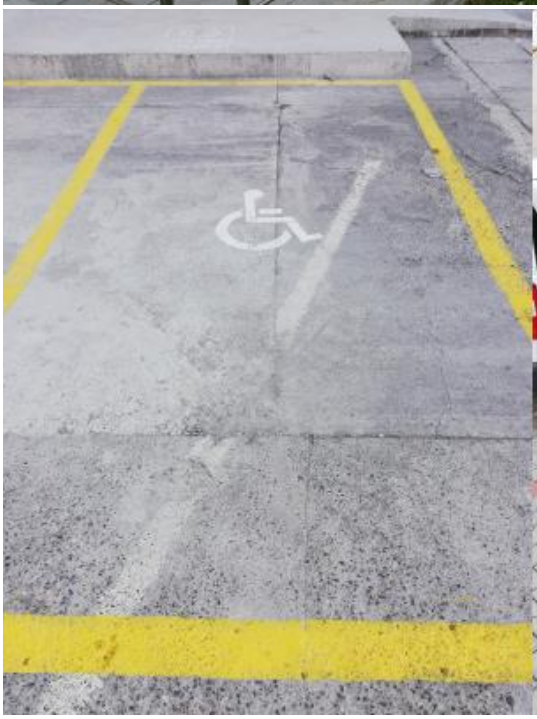
120 bicycles were distributed to the administrative and academic units and student clubs by our university and they were provided free of charge.

Bicycle paths are available on our campuses

Our campus hosts a variety of cycling activities.

For cyclists, bicycle parking spaces are located on different campuses.

Boats and canoes built by the Naval Architecture Department in Kurucaşile are used free of charge for educational and sightseeing purposes



Sidewalk, road and building entrances on campuses are designed to be disabled and pedestrian friendly

Signboards are placed inside the campuses for easy access of pedestrians and vehicles.

Bartın Üniversitesi

6 Birimde Turuncu Bayrak Almıştır

BAŞVURAN BİRİM	BAŞVURULAN KATEGORİ	BAŞVURULAN BAYRAK
Beden Eğitimi ve Spor Yüksekokulu	Fakülte Mekan	
Edebiyat Fakültesi	Fakülte Mekan	
Eğitim Fakültesi	Fakülte Mekan	
Fen Fakültesi	Fakülte Mekan	
Mühendislik Fakültesi	Fakülte Mekan	
İslam İlimler Fakültesi	Fakülte Mekan	

Bartın Üniversitesi Beden Eğitimi ve Spor Yüksekokulu
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Bartın Üniversitesi Edebiyat Fakültesi
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Bartın Üniversitesi Eğitim Fakültesi
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Bartın Üniversitesi Fen Fakültesi
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Bartın Üniversitesi İslam İlimler Fakültesi
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Bartın Üniversitesi Mühendislik Fakültesi
engellilerle ilgili
MEKANDA ERİŞİM
konusunda yapmış olduğu düzenlemelerden dolayı
Turuncu Bayrak
almaya hak kazanmıştır.
Prof. Dr. M.A. Yekta SARAÇ
YÖK Başkanı

Our university has been awarded by YÖK for 6 Faculties in Barrier-Free Access.

7. EDUCATION

Courses, researches, academic publications and academic activities related to "Environment and Sustainability" are carried out in our university.

Many activities, studies, examinations are conducted by both academic and administrative, also by students in existing faculties and departments. In addition, environmental and sustainability activities are organized and/or contributed together with external stakeholders.

In the field of education, courses and applications are carried out in the associate, bachelor, master and doctorate programs. Within the scope of “100/2000 YÖK Doctoral Scholarships Project” of Council of Higher Education (YÖK), “Sustainable Forestry”, “Forestry Products and Technology” and “Sustainable and Intelligent Cities” doctoral education provided by Bartın University and also Bartın University raise awareness together with research projects and practices with various kind of activities with environmental educations.

In order to increase the participation of students in sustainability activities, numerous clubs such as Environment Club, Forest Club, Bicycle Club, Maritime Club, Science and Technology Club have been established.

1 - Science and Technology Club

https://www.instagram.com/biltekbartinuni/

2 - Bicycle Club

https://www.facebook.com/BisikletBrtnUni

3 - Environment Club

- **Büyükkızılkum Coastal Cleaning Activity -** https://greenmetricsen.bartin.edu.tr/haberler/buyukkizilkum-coastal-cleaning-activity.html

4 - Nature and Animal Club
https://dohak.bartin.edu.tr/ - https://www.instagram.com/bartinunidohak/

5 - Science Club
http://fenkulubu.bartin.edu.tr/

- **Science Day with Kids -** http://fenkulubu.bartin.edu.tr/haberler/kucuk-misafirlerimizle-bilim-etkinligi-gerceklestirildi..html

6 - Management and Information Systems Club
https://ybskulubu.bartin.edu.tr/

- **Our Club Met at Breakfast and Sapling Planting Event -** https://ybskulubu.bartin.edu.tr/haberler/kulubumuz-kahvalti-ve-fidan-dikme-etkinliginde-bulustu..html

7 - Energy Efficiency and Conservation Club
http://verimlienerji.bartin.edu.tr

- **Energy Efficiency and Conservation Club prepared documents for all campus people in order to increase how to conserve energy and how to use it efficiently.**

8 - Forestry Club
https://www.instagram.com/bartinormankulubu/

9 - Scientific Research Club

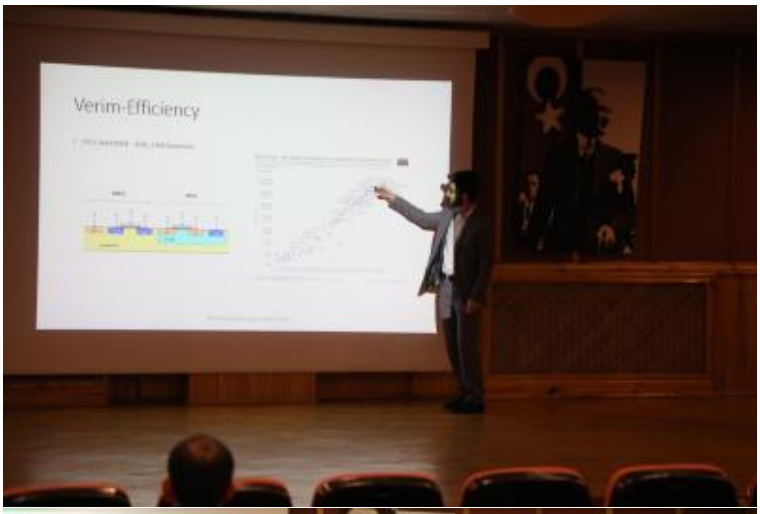
10 - Electric Electronic Club

11 - Health club

12 - Engineer Development and Project Design Club

Faculties, institutes and clubs in our university carry out many different activities on sustainability and the environment.

2020



Energy Saving Issue Was Noted. (17.01.2020) – Link: https://w3.bartin.edu.tr/haberler/enerji-tasarrufu-konusuna-dikkat-cekildi.html -

Information on energy efficiency and saving was given. (27.02.2020) – Link: https://w3.bartin.edu.tr/haberler/enerji-verimliligi-ve-tasarrufu-konusunda-bilgiler-verildi.html

Our Department of Vegetable and Animal Production Has Harvested Vegetables and Fruits. (26.08.2020) – Link: https://greenmetricsen.bartin.edu.tr/haberler/first-watermelon-harvest-from-our-plant-and-animal-production-department.html-

Compost Production was carried out within the scope of Organic Fertilizers, Fertilization and Ecology Course. (30.06.2020) – Link: http://bitkisel.bartin.edu.tr/haberler/ogrencilerimizle-kompost-yapimi.html -

2019

'TÜBİTAK 4004 Nature Education Project' was accepted (03.01.2019) – Link: https://w3.bartin.edu.tr/haberler/tubitak-4004-doga-egitimi-projesi-kabul-edildi.html -

"Forestry in Turkey" Panel was Performed (27.03.2019) **– Link:** https://greenmetricsen.bartin.edu.tr/haberler/forestry-in-turkey-panel-was-performed.html

"Bartın Urban Identity Workshop" Was Held (17.04.2019) – Link: https://greenmetrics.bartin.edu.tr/haberler/bartin-kent-kimligi-calistayi-gerceklestirildi.html -

"ZERO WASTE FOR OUR FUTURE" Event was Held (22.05.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/zero-waste-for-our-future-event-was-held.html

"That Village is Our Science Village" Project Brought 'Science, Nature and Art' Children in Villages (03.07.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/that-village-is-our-science-village-project-brought-science-nature-and-art-children-in-villages.html

“Gökbörü” Entered Top 10 at TÜBİTAK's Electric Vehicle Races (23.09.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/gokboru-entered-top-10-at-tubitaks-electric-vehicle-races..html -

For a Green, Environmentally Friendly and Sustainable University We are Planting Trees at Kutlubey Campus (15.10.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/for-a-green-environmentally-friendly-and-sustainable-university-we-are-planting-trees-at-kutlubey-campus.html -

Our Students Supported 'Sustainable Green Campus' Studies with Authentic Learning Activities (16.10.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/our-students-supported-sustainable-green-campus-studies-with-authentic-learning-activities.html -

5000 Saplings were Planted Within the Scope of "National Afforestation Day" and "Breathing to the Future" Campaign! (11.11.2019) – Link: https://greenmetricsen.bartin.edu.tr/haberler/5000-saplings-were-planted-within-the-scope-of-national-afforestation-day-and-breathing-to-the-future-campaign.html -

Plastic Lives, Drinking Plastics and Cancer Conference was Held (29.11.2019) – Link: https://greenmetrics.bartin.edu.tr/haberler/plastik-hayatlar-icilen-plastikler-ve-kanser-konferansi-gerceklestirildi..html -

https://w3.bartin.edu.tr/haberler/universitemizdeki-konferansta-plastikteki-tehlikeye-dikkat-cekildi.html

Upcycling Workshop Held (22.12.2019) – Link: https://greenmetrics.bartin.edu.tr/haberler/ileri-donusum-upcycling-atolyesi-gerceklestirildi.html -

2018

Sustainable Development Goals in Turkey and the World Conference (10.01.2018) – Link: https://greenmetricsen.bartin.edu.tr/haberler/sustainable-development-goals-in-turkey-and-the-world-conference-was-held.html

https://w3.bartin.edu.tr/haberler/surdurulebilir-gelisme-hedefleri-konferansi.html

Bartın University lecturers gave nature education (26.03.2018) – Link: https://greenmetricsen.bartin.edu.tr/haberler/bartin-university-lecturers-gave-nature-education.html

https://w3.bartin.edu.tr/haberler/bartin-orman-fakultesi-ogretim-uyeleri-doga-egitimi-verdi.html

Forestry panel in the World and Turkey (20.03.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/dunyada-ve-turkiyede-ormanciligin-gundemi-konusuldu.html

Forests and Forestry Exhibition (20.03.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/ormanlarimiz-ve-ormancilik-sergisi.html

Büyükkızılkum Coastal Cleaning Activity (30.04.2018) – Link: https://greenmetricsen.bartin.edu.tr/haberler/buyukkizilkum-coastal-cleaning-activity.html

Tree Planting Event at Kutlubey Campus for a Green University (05.04.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/daha-yesil-universite-icin-kutlubey-kampusunde-fidan-dikim-etkinligi.html

https://w3.bartin.edu.tr/haberler/daha-yesil-bir-kampus-icin-fidan-diktiler.html

IV. Environmental Engineering Project Event (09.05.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/iv.-cevre-muhendisligi-proje-etkinligi-gerceklestirildi.html

https://cevre.bartin.edu.tr/etkinlikler/v.-cevre-muhendisligi-proje-etkinligi-04265903.html

II. R & D (Research and Development) Project Market (11.05.2018) – Link: https://w3.bartin.edu.tr/haberler/ii.arge-projepazarinda-en-iyi-projeler-odullendirildi.html

https://w3.bartin.edu.tr/haberler/ii.argeprojepazarinatubitaktandestek.html

Güzelcehisar Coastal Cleaning Activity (12.05.2018) – Link: https://bartin.csb.gov.tr/guzelcehisar-da-kiyi-temizligi-etkinligi-haber-225945

Adana Bicycle Workshop (25.05.2018) – Link: https://greenmetrics.bartin.edu.tr/duyurular/adana-bisiklet-calistayi.html

TÜBİTAK 4004 Nature Education and Science Schools Program (19.07.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/tubitak-4004-doga-egitimi-ve-bilim-okullari-programi.html

https://w3.bartin.edu.tr/haberler/tubitak-4004-doga-egitimi-ve-bilim-okullari-programi.html

Bartin University Kutlubey Campus Cycling Tour
(22.09.2018) – Link**:** https://www.facebook.com/events/248923979101825/

2nd Meeting for "Zero Waste" Project
(04.10.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/universitemizde-uygulanacak-olan-sifir-atik-projesi-icin-2.-toplanti-duzenlendi.html

Our 1st Electrical Car (Çeşm-i Cihan) Participated to the Efficiency Challange
(06.08.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/cesmi-cihan-yuvaya-dondu.html

Bartin University Kutlubey Campus Pond and Surrounding Area Project Work (01.10.2018) – Link: http://peyzaj.bartin.edu.tr/haberler/b.u.-kutlubey-kampusu-golet-ve-yakin-cevresi-proje-calismasi-yapildi..html

Ulus Vocational School realized"Our Lesson in Nature" activity (04.10.2018) – Link: http://greenmetrics.bartin.edu.tr/haberler/ulus-meslek-yuksekokulu-ulus-myo-dersimiz-dogada-etkinligi-gerceklestirildi.html

https://w3.bartin.edu.tr/haberler/ulus-myo-ogrencileri-dogada-ders-islediler.html

Recent Developments in Landscape Architecture Applications (17.10.2018) – Link: http://peyzaj.bartin.edu.tr/haberler/carsamba-soylesilerinin-ikincisi-gerceklesti.html

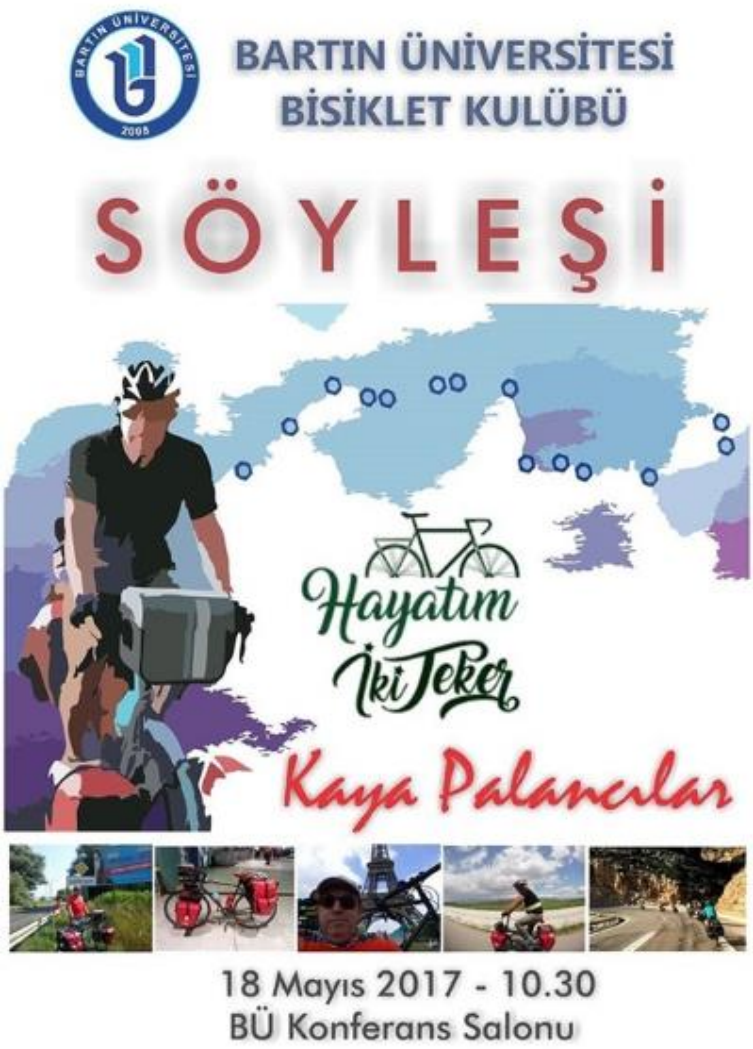
"Zero Waste" Project Information Presentation (13.12.2018) – Link: http://cevre.bartin.edu.tr/haberler/cevre-muhendisligi-ogrencilerine-sifir-atik-projesi-hakkinda-bilgilendirme-sunumu-yapildi.html

Ecological Neighborhood Design for Sustainable (13.12.2018) – Link: http://peyzaj.bartin.edu.tr/haberler/carsamba-soylesileri-prof.-dr.-h.-selma-celikyay-surdurulebilir-yerlesmeler-icin-ekolojik-mahalle-tasarimi.html

Opening Ceremony of Zero Waste Project (28.12.2018) – Link: https://w3.bartin.edu.tr/haberler/universitemiz-sifir-atik-projesi-acilis-toreni-gerceklestirildi.html

2017

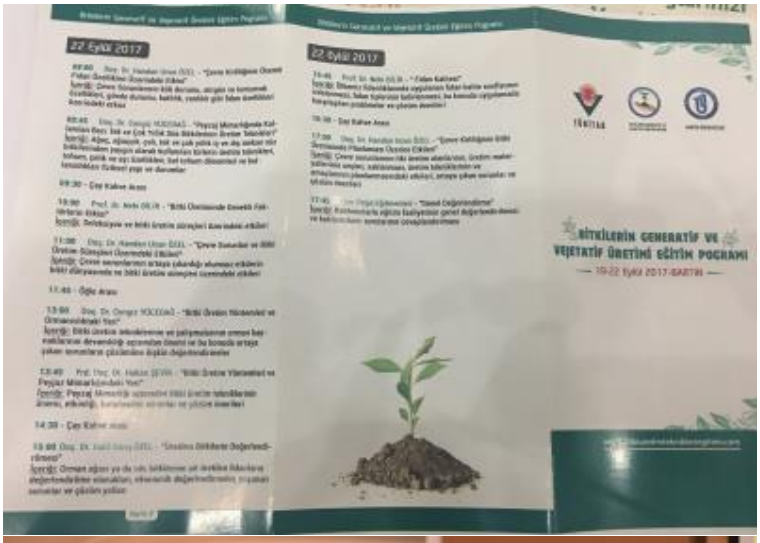
Aquatic Ecosystems Conference
(03.01.2017) – Link: http://greenmetrics.bartin.edu.tr/haberler/sucul-ekosistemler-konferansi.html



"My Life is Two Wheels" Interview with Kaya Palancılar (18.05.2017) – Link: https://greenmetrics.bartin.edu.tr/duyurular/hayatim-iki-teker-konulu-soylesi.html

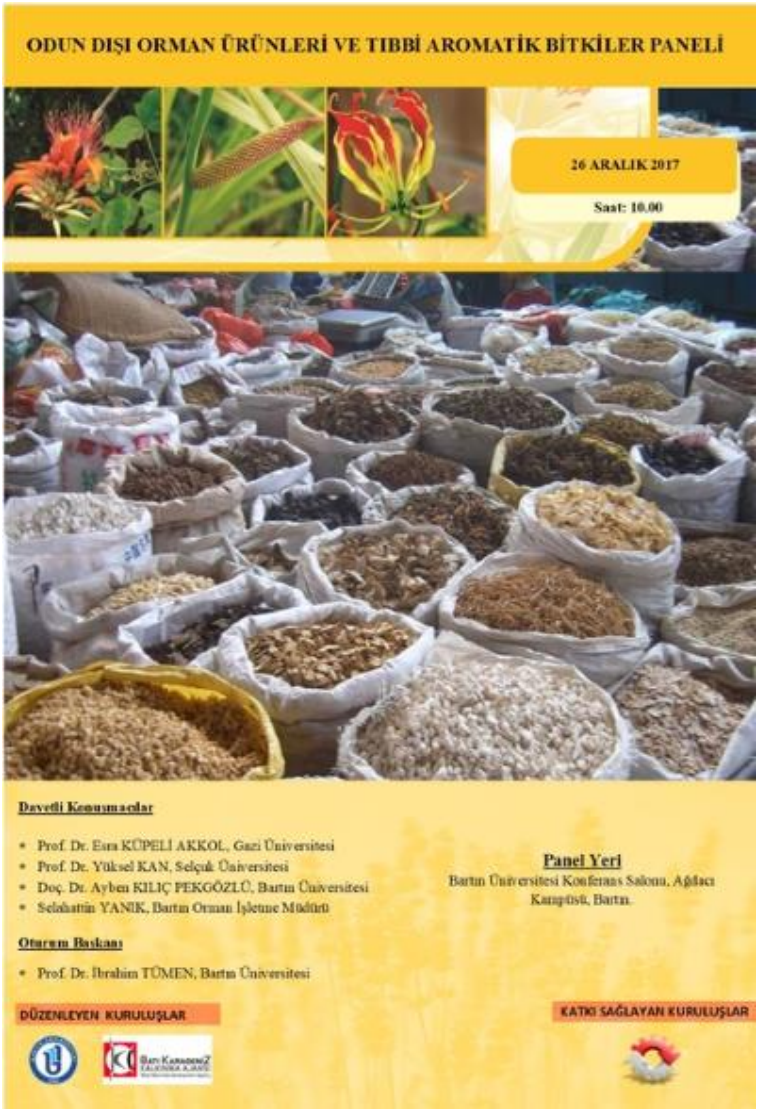
III. Environmental Engineering Project Event (24.05.2017) – Link: http://greenmetrics.bartin.edu.tr/haberler/iii.-cevre-muhendisligi-proje-etkinligi-gerceklestirildi.html

15 July Martyrs' Memorial Forest Planting Saplings (13.07.2017) – Link: http://greenmetrics.bartin.edu.tr/haberler/15-temmuz-sehitleri-hatira-ormani-fidan-dikimi.html



Training of generative and vegetative production of plants (19.09.2017) – Link: https://w3.bartin.edu.tr/haberler/bitkilerde-generatif-vejetatif-uretimi-projesi.html

Global Climate Change and the Importance of Renewable Energy Panel (22.12.2017) – Link: https://buyenarum.bartin.edu.tr/duyurular/kuresel-iklim-degisikligi-ve-yenilenebilir-enerjinin-onemi-konusuldu.html



Non-Wood Forest Products and Medicinal Aromatic Plants Panel (26.12.2017) – Link: https://greenmetrics.bartin.edu.tr/duyurular/odun-disi-orman-urunleri-ve-tibbi-aromatik-bitkiler-paneli.html

2016

Salep Station Kozcağız (03.02.2016) – Link: http://www.bartin.info/tarim/salep-duragi-kozcagiz-protokolu-imzalandi-h22634.html

Bartin University Sapling Planting Ceremony (24.03.2016) – Link: http://greenmetrics.bartin.edu.tr/haberler/bu-fidan-dikme-toreni.html

II. Environmental Engineering Project (31.05.2016) – Link: http://greenmetrics.bartin.edu.tr/haberler/ii.-cevre-muhendisligi-proje-etkinligi-gerceklestirildi.html

Greenmetric Meeting (1.11.2016) – Link: http://greenmetrics.bartin.edu.tr/haberler/universitemzide-greenmetric-toplantisi-yapildi.html

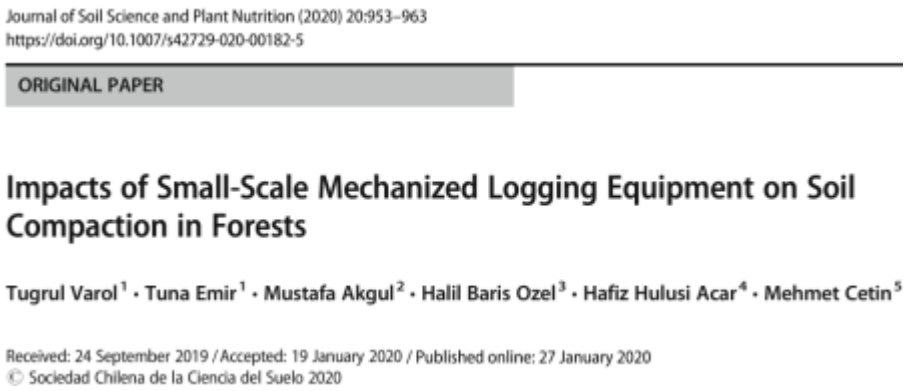
Technical trip to Küre Mountains
(24.11.2016) – Link: http://myo.bartin.edu.tr/haber_goster.php?olay_ID=37

Bartin OSB Wastewater Treatment Plant Technical Trip
(09.12.2016) – Link: http://cevre.bartin.edu.tr/etkinlikler/organize-sanayi-atiksu-aritma-tesisine-ve-bartin-inovasyon-ve-test-merkezi-teknik-gezileri.html

Bartın University's academic staff continues their scientific studies in different branches and as a result of these studies, hundreds of articles, papers and books are produced every year. Among these studies, dozens of them are **Sustainability** oriented publications.

Publications in 2020:

1- Impacts of Small-Scale Mechanized Logging Equipment on Soil Compaction in Forests. (Varol, T., Emir, T., Akgul, M. et al. Impacts of Small-Scale Mechanized Logging Equipment on Soil Compaction in Forests. J Soil Sci Plant Nutr (2020). https://doi.org/10.1007/s42729-020-00182-5)


Journal of Soil Science and Plant Nutrition (2020) 20:953–963
https://doi.org/10.1007/s42729-020-00182-5

ORIGINAL PAPER

Impacts of Small-Scale Mechanized Logging Equipment on Soil Compaction in Forests

Tugrul Varol[1] · Tuna Emir[1] · Mustafa Akgul[2] · Halil Baris Ozel[3] · Hafiz Hulusi Acar[4] · Mehmet Cetin[5]

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2- Integrating of settlement area in urban and forest area of Bartin with climatic condition decision for managements. (Zeren Cetin, I., Ozel, H.B. & Varol, T. Integrating of settlement area in urban and forest area of Bartin with climatic condition decision for managements. Air Qual Atmos Health 13, 1013–1022 (2020). https://doi.org/10.1007/s11869-020-00871-1)

3- Properties of lightweight concrete blocks with waste zeolitic tuff (Ilker TEKIN, Turkay KOTAN, Allison T. OSMANSON, Witold BROSTOW, Osman GENCEL, Gonzalo MARTINEZ-BARRERA, Properties of lightweight concrete blocks with waste zeolitic tuff, Materials Science, Vol. 26 No. 4 (2020), https://doi.org/10.5755/j01.ms.26.4.22777)

4- A fast and robust approach for the green synthesis of spherical Magnetite (Fe3O4) nanoparticles by Tilia tomentosa (Ihlamur) leaves and its antibacterial studies (Rajendrachar, S., Karaoglanli, A. C., Ceylan, Y., & Uzun, O. (2020). A fast and robust approach for the green synthesis of spherical Magnetite (Fe3O4) nanoparticles by Tilia tomentosa (Ihlamur) leaves and its antibacterial studies. Pharmaceutical Sciences, 26(2), 175-183.)

5- Effects of concrete waste on characteristics of structural fired clay bricks (Gencel, O., Erdogmu, E., Sutcu, M., & Oren, O. H. (2020). Effects of concrete waste on characteristics of structural fired clay bricks. Construction and Building Materials, 119362.)

6- A Comparative Study of Thermal and Fuel Performance of an Energy-Efficient Building in Different Climate Regions of Turkey (Ustaoğlu, A., Kurtoğlu, K., & Yaras, A. (2020). A Comparative Study of Thermal and Fuel Performance of an Energy-Efficient Building in Different Climate Regions of Turkey. Sustainable Cities and Society, 102163.)

7- Prediction of evaporation in arid and semi-arid regions: a comparative study using different machine learning models (Yaseen, Z. M., Al-Juboori, A. M., Beyaztas, U., Al-Ansari, N., Chau, K. W., Qi, C., ... & Shahid, S. (2020). Prediction of evaporation in arid and semi-arid regions: a comparative study using different machine learning models. Engineering applications of computational fluid mechanics, 14(1), 70-89.)

8- The activation energy and antibacterial investigation of spherical Fe3O4 nanoparticles prepared by Crocus sativus (Saffron) flowers (Rajendrachari, S., & Ceylan, K. B., The activation energy and antibacterial investigation of spherical Fe3O4 nanoparticles prepared by Crocus sativus (Saffron) flowers, Biointerface Research in Applied Chemistry, Volume 10, Issue 4, 2020, 5951 - 5959)

9- Determining the priorities in utilization of forest residues as biomass: an A'wot analysis. (Kurt, R. (2020). Determining the priorities in utilization of forest residues as biomass: an A'wot analysis. Biofuels, Bioproducts and Biorefining, 14(2), 315-325.)

10- Socio-economic and cultural sources of conflict between forest villagers and forest; a case study from Black Sea Region (Durkaya, B., Kaptan, S., & Durkaya, A. (2020). Socio-economic and cultural sources of conflict between forest villagers and forest; a case study from Black Sea Region, Turkey. Crime, Law and Social Change, 1-19.)

All of our publications in 2020:
Our Academic Publications on Environment and Sustainability (2020) - Greenmetrics eng - Bartın Üniversitesi (bartin.edu.tr)

Publications in 2019:

1- Landscape Design for a Sustainable Campus: Bartın University Kutlubey Campus Natural Pond And Surroundings (Artar, M., Dal, İ., Öztaş, R. G., & Karayılmazlar, A. S. Landscape Design for a Sustainable Campus: Bartın University Kutlubey Campus Natural Pond And Surroundings. İnönü Üniversitesi Sanat ve Tasarım Dergisi, 9(19), 129-136.) https://dergipark.org.tr/tr/pub/iujad/issue/47468/571716

2- Orchid Species and Their Habitats Located in Ağdacı Campus of Bartın University (NAYİM, Y. S. Orchid Species and Their Habitats Located in Ağdacı Campus of Bartın University, Turkey. Bartın Orman Fakültesi Dergisi, 21(1), 21-30.) https://dergipark.org.tr/tr/pub/barofd/issue/42096/487937

3- Relationship Between Renewable Energy Resources and Domestic Savings: The Case of Turkey (CEYHAN, Ö. Ü. S., PEÇE, A. G. M. A., & KAMACI, Ö. Ü. A. Yenilenebilir Enerji Kaynakları İle Yurtiçi Tasarruflar Arasındaki İlişki: Türkiye Örneği1.)

4- CHARACTERIZATION OF CLAY BASED BRICKS WITH BOTTOM ASH AND FLY ASH WASTE ADDITION (Erdoğmuş, E., Sütçü, M., Gençel, O., & ÇAY, V. V. CHARACTERIZATION OF CLAY BASED BRICKS WITH BOTTOM ASH AND FLY ASH WASTE ADDITION.)

5- Analysis of forest change and deforestration in Turkey (Günşen, H. B., & Atmiş, E. (2019). Analysis of forest change and deforestration in Turkey. International Forestry Review,21(2), 182-194.) https://bioone.org/journals/international-forestry-review/volume-21/issue-2

6- Urban Greenway Systems within the Context of Sustainable Landscapes (CENGİZ CANAN, BOZ AYBÜKE ÖZGE (2019). Urban Greenway Systems within the Context of Sustainable Landscapes. New Approaches to Spatial Planning and Design, Applications, pp: 165-181. First Edition, Publisher: Peter Lang. ISBN 978-3-631-78274-3.)

7- Influence of tea waste concentration in the physical, mechanical and thermal properties of brick clay mixtures (S Ozturk, M Sutcu, E Erdogmus, O Gencel, Influence of tea waste concentration in the physical, mechanical and thermal properties of brick clay mixtures Construction and Building Materials 217, 592-599) https://www.sciencedirect.com/science/article/pii/S0950061819312838

Construction and Building Materials
Volume 217, 30 August 2019, Pages 592-599

Influence of tea waste concentration in the physical, mechanical and thermal properties of brick clay mixtures

Savas Ozturk [d], Mucahit Sutcu [a], Ertugrul Erdogmus [b], Osman Gencel [c]

8- Recovery and Reuse of Waste Tetra Pak Packages by Using a Novel Treatment. (Martínez-Barrera, G., Ana, L., Martínez-López, M., del Coz-Díaz, J. J., Gencel, O., Ávila-Córdoba, L., ... & Martínez-López, A. (2019). Recovery and Reuse of Waste Tetra Pak Packages by Using a Novel Treatment. In Trends in Beverage Packaging (pp. 303-341). Academic Press.)

9- Recycle of ground granulated blast furnace slag and fly ash on eco-friendly brick production. (Surul, O., Bilir, T., Gholampour, A., Sutcu, M., Ozbakkaloglu, T., & Gencel, O. (2019). Recycle of ground granulated blast furnace slag and fly ash on eco-friendly brick production. European Journal of Environmental and Civil Engineering, 1-19.) https://www.tandfonline.com/doi/full/10.1080/19648189.2020.1731714

10- Macrofungi of Küre Mountains National Park in Bartın region of Turkey. (Özkazanç, N. K., & Keleş, Y. Y. (2019). Macrofungi of Küre Mountains National Park in Bartın region of Turkey. Türkiye Ormancılık Dergisi, 20(1), 8-14.)

11- Assessment of a solar energy powered regenerative organic Rankine cycle using compound parabolic involute concentrator (Ustaoglu, A., Okajima, J., Zhang, X. R., & Maruyama, S. (2019). Assessment of a solar energy powered regenerative organic Rankine cycle using compound parabolic involute concentrator. Energy Conversion and Management, 184, 661-670.)

All of our publications in 2019:
Our Academic Publications on Environment and Sustainability (2019) - Greenmetrics eng - Bartın Üniversitesi (bartin.edu.tr)

Publications in 2018:

1- Estimation of global wood pellet production as a renewable energy source by ARIMA method (Kurt, R., Imren, E., Cabuk, Y., & Karayilmazlar, S. (2018). Estimation of global wood pellet production as a renewable energy source by ARIMA method. Fresenius Environmental Bulletin, 27(7), 5147-5152.)

2- Energy Analysis of Solid Waste Fueled Cogenerative Organic Rankine Cycle for Different Working Fluids (USTAOĞLU, A., TORLAKLI, H., & ERDOĞMUŞ, E. (2018). Energy Analysis of Solid Waste Fueled Cogenerative Organic Rankine Cycle for Different Working Fluids. International Journal of Natural and Engineering Sciences (IJNES) E-ISSN: 2146-0086, 9(2), 27-30.)

3- Yeni bir Birleşik Parabolik İnvolüt Yoğunlaştırıcının Termal Üniformluğunda Kesme Etkisi (USTAOĞLU, A., OKAJIMA, J., ÖZBEY, U., ZHANG, X. R., & MARUYAMA, S. (2018). Yeni bir Birleşik Parabolik İnvolüt Yoğunlaştırıcının Termal Üniformluğunda Kesme Etkisi. Mühendislik ve Teknoloji Bilimleri Dergisi, 6(1), 49-53.)

4- Optimal Energy Recovery from Water Distribution Systems Using Smart Operation Scheduling (Telci, I., & Aral, M. (2018). Optimal Energy Recovery from Water Distribution Systems Using Smart Operation Scheduling. Water, 10(10), 1464.)

5- Global warming and climate change: a practical study on Bartin, Zonguldak and Düzce (Bolat, I., Kara, Ö., & Tok, E. (2018). Global warming and climate change: a practical study on Bartin, Zonguldak and Düzce. Bartın Orman Fakültesi Dergisi, 20(1), 116-127.)

6- Global warming awareness" sample of Bartin University students". (Durkaya, B., & Durkaya, A. (2018). Global warming awareness" sample of Bartin University students". Bartın Orman Fakültesi Dergisi, 20(1), 128-144.)

7- Advances in the Assessment of Climate Change Impact on the Forest Landscape (Öztürk, M., Palta, Ş., & Gökyer, E. (2018). Advances in the Assessment of Climate Change Impact on the Forest Landscape. New Perspectives in Forest Science, 167.)

8- Truncation effects in an evacuated compound parabolic and involute concentrator with experimental and analytical investigations (Ustaoglu, A., Okajima, J., Zhang, X. R., & Maruyama, S. (2018). Truncation effects in an evacuated compound parabolic and involute concentrator with experimental and analytical investigations. Applied Thermal Engineering, 138, 433-445.)
https://doi.org/10.1016/j.applthermaleng.2018.04.062

9- Anaerobic digestion of chicken manure: Mitigating process inhibition at high ammonia concentrations by selenium supplementation (Molaey, R., Bayrakdar, A., Sürmeli, R. Ö., & Çalli, B. (2018). Anaerobic digestion of chicken manure: Mitigating process inhibition at high ammonia concentrations by selenium supplementation. Biomass and Bioenergy, 108, 439-446.)

10- Analysis of land use/land cover changes following population movements and agricultural activities: a case study in northern Turkey (Şen, G., & Güngör, E. (2018). Analysis of land use/land cover changes following population movements and agricultural activities: a case study in northern Turkey. Applied Ecology and Environmental Research, 16(2), 2073-2088.)

All of our publications in 2018:
https://greenmetricsen.bartin.edu.tr/haberler/our-academic-publications-on-environment-and-sustainability-2018.html

Publications in 2017:

1- Syntheses, structures, dye adsorption properties and molecular dynamics simulations (Güneş Günay Sezer, Mürsel Arıcı, İlknur Erucar, Okan Zafer Yeşilel, Handan Ucun Özel, Betül Tuba Gemici, Hakan Erer, Zinc(II) and cadmium(II) coordination polymers containing phenylenediacetate and 4,4′-azobis(pyridine) ligands: Syntheses, structures, dye adsorption properties and molecular dynamics simulations, Journal of Solid State Chemistry, Volume 255, 2017, Pages 89-96,)

2- Land Use Suitability Classification for the Actual Agricultural Areas within the Bartın Stream Watershed of Turkey (Öztürk, M. (2017). Land Use Suitability Classification for the Actual Agricultural Areas within the Bartın Stream Watershed of Turkey. Periodicals of Engineering and Natural Sciences, 5(1).)

3- Change of temperature and precipitation in Kastamonu, Karabük and Bolu between 1980-1999 and 2000-2015 years. (Bolat, İ., Kara, Ö., & Tok, E. (2017). Change of temperature and precipitation in Kastamonu, Karabük and Bolu between 1980-1999 and 2000-2015 years. Bartın Orman Fakültesi Dergisi, 19(1), 276-289.)

4- Removal and recovery of ammonia from chicken manure (Sürmeli, R. Ö., Bayrakdar, A., & Çalli, B. (2017). Removal and recovery of ammonia from chicken manure. Water Science and Technology, 75(12), 2811-2817.)

5- SUSTAINABLE YACHT TOURISM PRACTICES (Sevinç, F., & Güzel, T. (2017). SUSTAINABLE YACHT TOURISM PRACTICES. Management & Marketing Journal, 15(1).)

6- The Village-Based Determination of Ecotourism Potential of the Küre Mountains National Park (Görmüş, S., Atmış, E., Günşen, H. B., Artar, M., Özkazanç, N. K., & Cengiz, S. The Village-Based Determination of Ecotourism Potential of the Küre Mountains National Park. Uluslararası Türk Dünyası Turizm Araştırmaları Dergisi, 2(2), 161-174.)

7- Concretes with synthetic aggregates for sustainability (Tekin, I., Durgun, M. Y., Gencel, O., Bilir, T., Brostow, W., & Lobland, H. E. H. (2017). Concretes with synthetic aggregates for sustainability. Construction and Building Materials, 133, 425-432.)
https://doi.org/10.1016/j.conbuildmat.2016.12.110

Construction and Building Materials
Volume 133, 15 February 2017, Pages 425-432

Concretes with synthetic aggregates for sustainability

Ilker Tekin [a], Muhammed Yasin Durgun [b], Osman Gencel [b], Turhan Bilir [c], Witold Brostow [d], Haley E. Hagg Lobland [d]

8- Recycled cellulose from Tetra Pak packaging as reinforcement of polyester based composites (Martínez-Barrera, G., Martínez-López, M., González-Rivas, N., del Coz-Diaz, J. J., Ávila-Córdoba, L., dos Reis, J. M. L., & Gencel, O. (2017). Recycled cellulose from Tetra Pak packaging as reinforcement of polyester based composites. Construction and Building Materials, 157, 1018-1023.)

9- Evaluation of biomass use in terms of energy, environment, health and economy (Sözen, E., Gündüz, G., AydemİR, D., & Güngör, E. (2017). Evaluation of biomass use in terms of energy, environment, health and economy. Bartın Orman Fakültesi Dergisi, 19(1), 148-160.)

10- Biogas production from chicken manure: Co-digestion with spent poppy straw (A Bayrakdar, R Molaey, RÖ Sürmeli, E Sahinkaya, B Çalli, Biogas production from chicken manure: Co-digestion with spent poppy straw, International Biodeterioration & Biodegradation 119, 205-210)

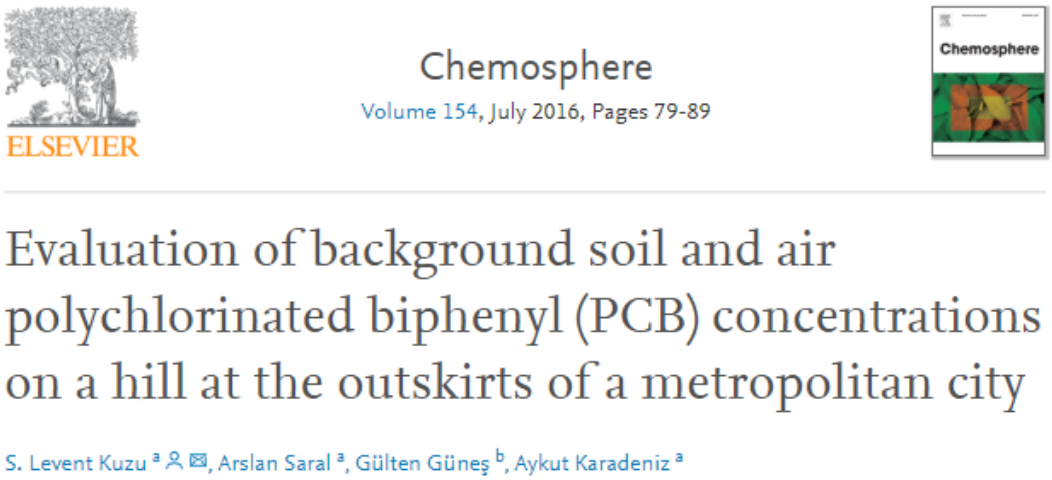
All of our publications in 2017:
https://greenmetricsen.bartin.edu.tr/haberler/our-academic-publications-on-environment-and-sustainability-2017.html

Publications in 2016:

1- Bartın Irmağı Kirlilik Profilinin Fiziksel Parametrelerle Belirlenmesi (ÖZEL, H. U., & GEMİCİ, B. T., Bartın Irmağı Kirlilik Profilinin Fiziksel Parametrelerle Belirlenmesi, Mehmet Akif Ersoy Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 7(1): 52-58 (2016))

2- The effects of dusts of bartin cement factory on Taurus Cedar (Cedrus libani A. Rich.) seeds' germination (Ozel, H. U. (2016). The effects of dusts of bartin cement factory on Taurus Cedar (Cedrus libani A. Rich.) seeds' germination. Journal of environmental biology, 37(6), 1331.)

3- Evaluation of background soil and air polychlorinated biphenyl (PCB) concentrations on a hill at the outskirts of a metropolitan city (S. Levent Kuzu, Arslan Saral, Gülten Güneş, Aykut Karadeniz, Evaluation of background soil and air polychlorinated biphenyl (PCB) concentrations on a hill at the outskirts of a metropolitan city, Chemosphere, Volume 154, 2016, Pages 79-89,)
https://doi.org/10.1016/j.chemosphere.2016.03.095



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