

## 13. CLIMATE ACTION

The energy needs in the buildings of Kadir Has University for both interior and exterior lighting depend on the heating & cooling and lighting groups. The energy needs are met by natural gas and electricity. The electric needs in 2021-2022 were 2,829,451 MW per year, while the natural gas needs were 282,900 m<sup>3</sup> per year. The active usage area at the campus is 39722 m<sup>2</sup>, including the Selimpaşa campus, and the active outdoor usage area is 18973 m<sup>2</sup>. Table 1 shows the TEP values. Fifty-one percent of the energy needs are met by electricity and 49 percent by natural gas. Efforts are made to minimize energy consumption by controlling the temperature by using LED bulbs for the lighting and using Class A equipment for heating & cooling at the campus.

Kadir Has University makes great efforts regarding energy efficiency and sustainability, contributing to the attention of the goal of the UN for “Life on Land”. The energy needs at the University depend on the lighting systems in the buildings and exterior locations. The energy needs are met by natural gas and electricity.

For the period of 2021 & 2022, the electric needs of the University were calculated as 2,829.451 MW per year, while the natural gas needs as 282,900 m<sup>3</sup> per year. The total campus area is 39,722 m<sup>2</sup>, including Selimpaşa, and the active outdoor area usage therein covers an area of 18,973 m<sup>2</sup>. Table 1 shows the TEP (Ton Equivalent of Petroleum) values and energy consumption.

<b>Amount</b>	<b>Unit</b>	<b>Energy Source</b>	<b>Coefficient</b>	<b>TEP Value</b>
	ton	Mineral Coal	0.610	0.00
	ton	Coking Coal	0.720	0.00
	ton	Briquette	0.500	0.00
	ton	Lignite Teshin and Industry	0.300	0.00
	ton	Lignite Power Plant	0.200	0.00
	ton	Elbistan Lignite	0.110	0.00
	ton	Petroleum Coke	0.760	0.00
	ton	Print	0.430	0.00
	ton	Sawdust	0.300	0.00
	ton	Crust	0.225	0.00
	ton	Graphite	0.800	0.00
	ton	Cocking Duff	0.600	0.00
	ton	Mining	0.550	0.00
	ton	Elbistan Lignite	0.110	0.00
	ton	Asphaltite	0.430	0.00
	ton	Wood	0.300	0.00
	ton	Animal and Plant Residues	0.230	0.00
	ton	Crude Oil	1.050	0.00
	ton	Fuel Oil No: 4	0.960	0.00
	ton	Fuel Oil No: 5	1.003	0.00
	ton	Fuel Oil No: 6	0.986	0.00
	ton	Diesel Oil	1.020	0.00
	ton	Gasoline	1.040	0.00
	ton	Kerosene	0.829	0.00
	ton	Black Liquor	0.300	0.00
	ton	Naphtha	1.040	0.00
<b>282,900.00</b>	m3	Natural Gas	0.825	233.39
	ton	Coke Oven Gas	0.820	0.00
	m3	Coke Oven Gas	0.403	0.00
	ton	High-Furnace Gas	0.054	0.00
	m3	High-Furnace Gas	0.069	0.00
	m3	Steel Plant Gas	0.150	0.00
	m3	Refinery Gas	0.878	0.00
	m3	Acetylene	1.423	0.00
	m3	Propane	1.020	0.00
	ton	LPG	1.090	0.00
	m3	LPG	2.700	0.00
<b>2,829,451.00</b>	kWh	Electric	0.086	243.33
	kWh	Hydraulic	0.086	0.00
	kWh	Geothermal	0.860	0.00
		<b>TOTAL FUEL CONSUMPTION</b>		<b>476.73</b>

Our University meets 51 percent of its energy needs from electricity and 49 percent from natural gas. A series of measures were taken at the campus to increase energy efficiency. Among these measures are the transformation to LED bulbs for the lighting systems and the transition to class A devices for the heating & cooling systems. This makes it possible to minimize energy consumption, contributing to the sustainability goals.

Our University is leading in energy efficiency and environmental sustainability and is determined to optimize energy consumption and minimize environmental impacts.

The courses given, the events organized, and the projects issued within the organization of our University in connection with this goal are detailed below.

### 13.1. Events

- CCLLAB Seminar Series 2021-2022 Academic Year
  - a. 18 October 2021: Prof. Dr. Christina Voigt, Current Issues of International Climate Law: Paris Agreement and Beyond
  - b. 25 November 2021: Dr. Nilüfer Oral, Climate Change and Sea Level Rise
  - c. 21 December 2021: Cameron Diver, Law in the Service of Climate Justice, Perspectives from the Pacific on One of the Defining Global Issues of the Century
  - d. 27 January 2022: Prof. Dr. Rafael Arcas, Climate Clubs and a Sustainable Future
  - e. 23 February 2022: Dr. Tatiana Falcao Taxing Carbon to Tackle Climate Change
  - f. 21 March 2022: Prof. Dr. Sam Frankhausen, Trends in Climate Change Legislation
  - g. 27 April 2022 Kate Mackintosh, Ecocide
  - h. 23 November 2022 Tim Crosland'i, "Climate breakdown, the right to life, and the right to rebel."
- Sustainability and Law Symposium in the Memory of Prof. Dr. Rona Serozan (October 26, 2022)
- Communication during Natural Disasters: Online Panel 13 January 2022 – 15.00. Webinar organized by UTMK Communication Specialization Committee

### 13.2. Courses

The historical development of the context of industrialization and the environmental impacts thereof are discussed as one of the focal points of the course. Environmental damage created by industrialization is addressed within the scope of a historical aspect.

- **KHAS 101 Origins and Consequences:** This course analyzes the valuable consequences of inventions in the different scientific fields for people, and the modules called Astronomy, Quantum Technologies, and Role of Chemistry in Medicine motivate the students to think of what to do to maintain the impact of people on the climate at a sustainable level. The students do research homework in any field of their choice, analyzing the topic thoroughly.

- **KHAS 105 Universal Values and Ethics:** The module on Ecologic Crisis and Coexistence of Species helps the students to develop a critical point of view about the climate crisis and climate justice in the context of ecological crisis and questions the possibilities of climate actions at national, regional and international scales.
- **Core Program course:** Climate Change Policy and Legislation in the EU (Asst. Prof. Gizem Arslan and Dr. Esra Ünal)

### 13.3. Projects

- Project 3005 has been accepted but not signed yet by TÜBİTAK (Assistant. Prof. Gizem Arslan). Title: Comparison of the Sufficiency of the Urban Transformation Practices Legislation in Turkey with respect to Anti-Climate Change considering the European Union Legislation and French Regulations, and Identification of the Legal Arrangements as Needed