



### NURİ BERK BÜYÜKER

Kadir Has University, Industrial Engineering, BSc, 2017  
Bringing our energy needs under a correct economic model and becoming prosumers as individuals are the most important challenges of our future.

### ARDA ÇANAKÇIOĞLU

Istanbul Aydın University, Mechanical Engineering, BSc, 2017  
I have always had a strong desire to be innovative and create value in our society through breakthroughs that help humanity. KHAS is a hub for diligent, innovative, dedicated students, and I feel fortunate to be a member of the CESD community.



### ELİF GÜNEY

Boğaziçi University, Political Science and International Relations, BA, 2017  
Friedrich Naumann Stiftung, Program Officer  
Since energy is a multidisciplinary area, it's a unique opportunity to experience different perspectives with this program.

### GÖZDE NUR KARAGÖZ

Adnan Menderes University, International Trade, BA, 2017  
ESD is an interdisciplinary program with professional academicians where you can meet people from different cultures. It is a great opportunity for those who want to improve their knowledge on energy.

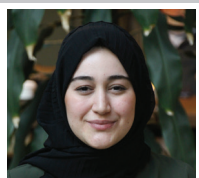


### BURAK ŞUŞOĞLU

Kadir Has University, International Trade and Finance, BA, 2017  
Energy has shaped the world in the last centuries and no doubt it will shape the future. This is a comprehensive program which covers world history and promising energy policies and their applications for the future.

### MUSA ENES USLU

Marmara University, Political Science and International Relations, BA, 2017  
The ESD program not only increased my academic knowledge of the issue of energy, but also helped us change our lives and understand the consequences of what we do.

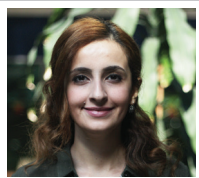


### MELİKE EKEN

Bilkent University, International Relations, BA, 2016  
Kadir Has University's Energy and Sustainable Development Program stands out by assisting its students to embrace an interdisciplinary approach to energy issues. I am so glad to have studied at this leading master's program in Turkey.

### ELİF EZER

Istanbul Kültür University, Civil Engineering, BSc, 2016  
Optimal Project Management, Cost Control and Planning Engineer  
The Energy and Sustainable Development master program in Kadir Has University is unique for its interdisciplinary curriculum and having really one of the best specialists in their fields.



### HAZAL MENĞİ DİNÇER

Istanbul Kültür University, International Relations, BA, 2015  
KHAS CESD, Administrative Assistant  
The Energy and Sustainable Development Master's Program is a proper choice for my interest in examining energy policies of states and exploring energy's impact on human life.

### NEHİR GÜNDÜZ

Kadir Has University, International Relations, BA, 2015  
Türkiye İş Bankası, Officer  
The program offers a great opportunity to study in interdisciplinary fields such as geopolitics, economics and engineering. Kadir Has University enables its students to specialize in such a complex field of energy and sustainable development.



### MESUT CAN YILMAZ

Istanbul Aydın University, International Trade, BA, 2015  
Yasa Shipping, Purchasing Department Officer  
The Energy and Sustainable Development master program in Kadir Has University is unique for its interdisciplinary curriculum and having really one of the best specialists in their fields.



### EMAN ABUSAADA

Islamic University of Gaza (IUG), Civil Engineering, BSc, 2013  
I was searching for a full program in terms of sustainable energy courses. I have found this in Kadir Has University as it offers a wide range of unique courses in energy technology and sustainable development.



### BATUHAN ALKAN

Kadir Has University, Industrial Engineering, BSc, 2013  
TRANSPET, Logistics Specialist  
I work for an oil trade and transport company, and strongly believe that this master's program will change many things in my life in a positive way.



### VİLDAN DEMİRKİRAN

Izmir University of Economics, International Relations and European Union, BA, 2013  
I preferred the ESD program because it is part of School of Graduate Studies and I'm coming from a bachelor degree in international relations. I'm very satisfied with the ESD program.



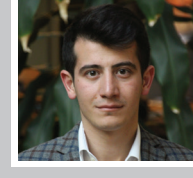
### TUNA ALPER SEZGİN

Uludağ University, Environmental Engineering, BSc, 2007  
TÜV Rheinland, Business Development Manager  
Besides the academic areas, the program focuses on industry and the energy sectors, which make it an excellent choice for those hoping to be professionals in energy business.



### BAŞAR YILMAZ

Ankara University, Labour Economy and Industrial Relations, BA' 2006 / DenizLeasing, Project Finance Department  
This program is a unique resource to reflect both the historical background of the subject and shed light on the future. We have the opportunity to learn a great deal of information for our careers and our intellectual and academic enrichment.



### Center for Energy and Sustainable Development (CESD)

Hazal Menği Dinçer [hazal.mengi@khas.edu.tr](mailto: hazal.mengi@khas.edu.tr)  
90 (212) 533 6532, Ext. 4944

School of Graduate Studies: [sgs@khas.edu.tr](mailto: sgs@khas.edu.tr)

For International Applications: [international@khas.edu.tr](mailto: international@khas.edu.tr)

### Web Page:

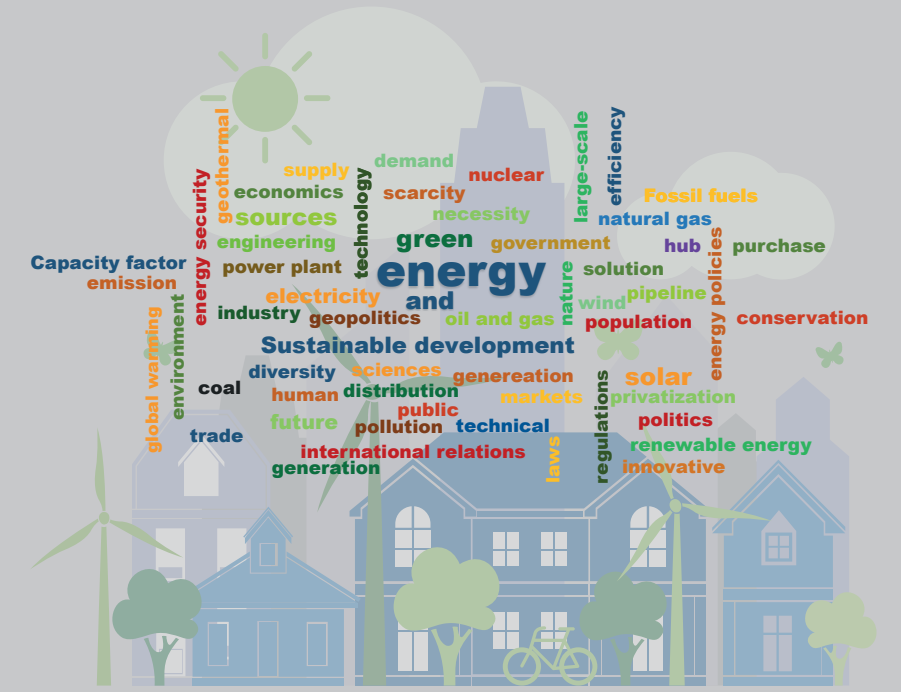
<https://sgs.khas.edu.tr/en/programs/master-degree-programmes/energy-and-sustainable-development/about-the-program>

[facebook.com/Khasedutr](https://facebook.com/Khasedutr)



[twitter.com/Khasedutr](https://twitter.com/Khasedutr)

# KADİR HAS UNIVERSITY ENERGY AND SUSTAINABLE DEVELOPMENT MASTER'S PROGRAM



## SCHOOL OF GRADUATE STUDIES

## CENTER FOR ENERGY AND SUSTAINABLE DEVELOPMENT



## Prof. Dr. Volkan Ş. Ediger Program Director



As a vital input of the economy, energy underpins the economic development of nations. Yet fossil fuels still constitute roughly 90 percent of the world energy system, a reality that is unsustainable in the long term due to resource scarcity, local environmental problems, and global climate change. At the same time, demand for natural gas, the world's cleanest fossil fuel, is growing due to its role as a transition fuel on the path towards a low-carbon energy system, and geopolitical rivalry surrounding gas will continue to deepen among major gas producers and consumers. This rivalry will, in turn, accelerate the struggle for energy resources and cause global economic and political destabilization.

These challenges are harder to tackle in developing countries than in the industrialized world. As one of the world's most important emerging markets, the Turkish energy system can be used as an example to other developing countries. Turkey requires considerable supplies of energy to support its rapid economic development, but it cannot meet this demand from domestic sources and has to import roughly three quarters of its energy from abroad. This dependence on foreign sources threatens Turkey's energy security and, in the process, its national security. In the twenty-first century, no economy is sustainable under such high level of energy-import dependence.

In recent years, a number of graduate programs on energy have been launched in various countries, but these fall short of meeting the needs of the sector due to their contextual and structural features. Specifically, they generally focus on a certain aspect of energy, whether it be in geological engineering or policy, and therefore neglecting energy's interdisciplinary nature. The Energy and Sustainable Development (ESD) Thesis/Non-Thesis Master's Program was launched in the 2016-2017 academic year at Kadir Has University (KHAS) in Istanbul to address this gap. The program brings together several disciplines in social sciences, physical sciences and engineering to allow students to make connections across different fields and learn to adapt to this constantly evolving field. Students benefit not only from their classroom studies, but also through the program's coordination with the Center for Energy and Sustainable Development (CESD), which further encourages interdisciplinary research and practice.

The Energy and Sustainable Development Master's Program enables international students to specialize in various areas of energy. Students can choose from a wide range of departmental and non-departmental elective courses in addition to the compulsory courses in four main areas: energy science and engineering, energy finance and economics, management and policies of sustainable development, and energy security and geopolitics. In addition to the theoretical knowledge provided by the courses, students gain real-life experience through seminars given by experts in the field.

## ADVISORY COMMITTEE

**Dr. Selahattin Anaç**, Former General Manager, Turkish Coal Enterprises  
**Değer Boden**, Boden Law Office

**Prof. Dr. İskender Gökalp**, Director of CNRS-ICARE, France

**Mete Göknel**, Energy Analyst

**Prof. Dr. Baha Karan**, Hacettepe Uni., Faculty of Economics and Administrative Sciences

**Dr. Volkan Özdemir**, Director of EPPEN

**Prof. Dr. İskender Gökalp**, Director of CNRS-ICARE, France

**Necdet Pamir**, Bilkent University

**Dr. Uygur Özdesmi**, Founder of Good4Trust

**Dr. Değer Saygın**, Director of SHURA

**Dr. Okan Yardımcı**, EMRA, Energy Expert

## ACADEMIC STAFF



Prof. Dr. Mitat Çelikpala, Department of International Relations

Prof. Dr. Meltem Ş. Ucal, Department of Economics

Assoc. Prof. Dr. A. Deniz Yücekaya, Department of Industrial Engineering

Assoc. Prof. Dr. Gökhan Kirkil, Department of Industrial Engineering

Assoc. Prof. Dr. Cem Özen, Bioinformatics and Genetics Department

Asst. Prof. Dr. Emre Çelebi, Department of Industrial Engineering

Asst. Prof. Dr. Hamid Akın Ünver, Department of International Relations

Asst. Prof. Dr. Oğuzhan Ceylan, Department of Management Information Systems

Dr. Uygur Özdesmi, Good4Trust, Part-time Instructor

Dr. John Bowlus, Visiting Scientist, KHAS, Part-time Instructor

Değer Boden, Lawyer, Part-time Instructor

L. Umut Feyzioğlu, Project Finance Manager, Türkiye İş Bankası, Part-time Instructor

## CURRICULUM

The Energy and Sustainable Development Master's Program, which was designed by taking the interdisciplinary nature of energy field into consideration, enables students to specialize in one of the four major tracks, including economy and markets, policy and geopolitics, sustainability and environment, and engineering and efficiency. The most important advantage of the program, which is open to students with bachelor degrees from different disciplines, is the opportunity provided to acquire expertise in energy and sustainable development, whose importance is continuously increasing. The program is designed to be conducted completely in English to increase the competitiveness of students in the careers they will pursue whether in Turkey or abroad. The program has the thesis and non-thesis options to fulfil the varying needs of the students.

The Energy and Sustainable Development Master's Program inculcates an interdisciplinary approach to the study of energy and sustainable development, whose importance in global affairs will only continue to grow. It enables students to specialize in one of the four major tracks - (1) economy and markets, (2) policy and geopolitics, (3) sustainability and environment, or (4) engineering and efficiency - while taking advantage of a host of elective courses. It is open to students with bachelor degrees from different disciplines and is conducted completely in English to increase the competitiveness of students in their subsequent careers, whether they choose to pursue them in Turkey or abroad.

For the thesis track, students are required to complete 120 ECTS course credits and complete their master's thesis in accordance with the procedures indicated in the university's regulations and directives. Students earn 60 out of their 120 credits from compulsory and elective courses and 60 from the thesis. On the other hand, for the non-thesis track, students are required to complete 90 ECTS course credits, 75 of which from compulsory and elective courses and 15 from graduation project.

## Departmental Elective Courses

- ESD 510 Energy Science and Engineering
- ESD 511 Advanced Renewable Energy Technologies
- ESD 512 Energy Modelling, Simulation, and Optimization
- ESD 513 Computational Tools in Energy Science and Engineering
- ESD 514 Advanced Wind Energy
- ESD 520 Energy Markets and Economy
- ESD 521 Energy Project Development and Financing
- ESD 522 Energy Exchange Markets
- ESD 523 Turkish Energy System
- ESD 524 Energy Project Management and Law
- ESD 525 Econometric Modelling for Energy Policy Evaluation
- ESD 530 Sustainable Energy Policies and Management
- ESD 531 Energy Efficiency Management
- ESD 532 Sustainable Energy and Society
- ESD 533 Carbon Economy and Markets
- ESD 540 Energy Security and Geopolitics
- ESD 541 Energy Security of Turkey
- ESD 542 Energy Transportation and Logistics
- ESD 543 Oil and Gas Pipelines
- ESD 544 International Energy Policies
- ESD 550 Special Energy Topics

## Departmental Compulsory Courses

- GSS 501 Research Methods
- GSS 580 Graduation Project
- GSS 598 Seminar
- GSS 599 Thesis

## Non-Departmental Elective Courses

- IE 502 Engineering Project Management
- IE 503 Engineering Optimization and Applications
- IE 506 Financial Management
- MIS 513 Project Management
- IR 545 Energy Politics
- IR 546 Eurasian Security and Geopolitics
- IR 548 Middle Eastern Politics
- IR 645 Energy Politics
- IR 646 Geopolitics of Eurasia
- EC 522 Political Economy of Development
- EC 526 International Economy
- EC 531 Applied Econometrics
- EC 540 Public Finance
- EC 625 Economy of Growth
- CE 514 Data Mining
- FE 525 Financial Modelling

## SCHOLARSHIP AND TUITION FEES

KHAS has an extensive scholarship program to support well-qualified national and international students in their studies at KHAS. Tuition waiver scholarships are available for all qualified applicants up to 100%. The details are explained on the following websites:

<https://sgs.khas.edu.tr/>

<https://international.khas.edu.tr/tuition-fees>

## APPLICATION REQUIREMENTS

Criteria and requirements for graduate programs at Kadir Has University are stated comprehensively at:

<https://sgs.khas.edu.tr/>

<https://international.khas.edu.tr/application-requirements>