

ÖZGEÇMİŞ

1. **Adı Soyadı:** Kemal SARICA
2. **Doğum Tarihi:** 01 Kasım 1979
3. **Unvanı:** Yrd. Doç. Dr.
4. **Öğrenim Durumu:** Doktora

Derece	Alan	Üniversite	Yıl
Lisans	Makine Mühendisliği	Boğaziçi Üniversitesi	2001
Y. Lisans	Endüstri Mühendisliği	Boğaziçi Üniversitesi	2004
Doktora	Endüstri Mühendisliği	Boğaziçi Üniversitesi	2010

5. Akademik Unvanlar:

Yardımcı Doçentlik Tarihi : 2013
Doçentlik Tarihi :
Profesörlük Tarihi :

6. Yönetilen Yüksek Lisans ve Doktora Tezleri

6.1. Yüksek Lisans Tezleri

Esin Tetik, "Turkish Electricity Sector: Buttom-Up Approach", Işık Üniversitesi, devam ediyor.

6.2. Doktora Tezleri

7. Yayınlar

7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)

- O'Rear, E. G., **K. Sarica**, and W. E. Tyner "Analysis of impacts of alternative policies aimed at increasing US energy independence and reducing GHG emissions", *Transport Policy*, Vol.37, pp121-133, 2015.
- O'Rear, E. G. , **K. Sarica** , P. L. Paarlberg , W. E. Tyner, "The Impacts of the Rebound Effect on U.S. CAFE Standards for Light-Duty Vehicles" , *Transportation Research Part A: Policy and Practice*, 2012 (under review).
- **Sarica, K.** and W. E. Tyner, "Alternative Policy Impacts on US GHG Emissions and Energy Security: A Hybrid Modeling Approach", *Energy Economics*, Vol.40, pp.40-50, 2013.
- **Sarica, K.** and W. E. Tyner, "Analysis of US Renewable Fuels Policies Using a Modified MARKAL Model", *Renewable Energy*, Volume 50, Pages 701-709, February 2013.
- **Sarica K.**, Kumbaroğlu G., Or I., Modeling and analysis of a decentralized electricity market: An integrated simulation/optimization approach, *Energy*, Volume 44, Issue 1, Pages 830-852, August 2012.
- **Sarica K.** and I. Or, "Efficiency Assessment of Turkish Power Plants using Data Envelopment Analysis", *Energy*, Vol.32, No.8, pp. 1484-1499, August 2007.

7.2. Uluslararası diğer hakemli dergilerde yayınlanan makaleler

- Yang, Lin., W. E. Tyner and **Sarica, K.**, "Evaluation of the economics of conversion to compressed natural gas for a municipal bus fleet", *Energy Science & Engineering*, 2013, (<http://dx.doi.org/10.1002/ese3.14>).

7.3. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler

- O'Rear, E. G. , **K. Sarica** , and Tyner, W.E., " The Impacts of Switching from a Volumetric Fuel Tax to a Mileage Tax", Agricultural and Applied Economics Association AAEA & WAEA Joint Annual Meeting, July 26-28, San Francisco, California, 2015.

- **Sarica, K.** and Tyner W. E. (2012) “Alternative Policy Impacts on US GHG Emissions and Energy Security: A Hybrid Modeling Approach”, *31th USAEE/IAEE North American Conference*, Austin, November 4-7, 2012.
- **Sarica, K.**, W.E. Tyner, “Comparison of Current and Proposed U.S. Energy Policies with an Equivalent Carbon Tax”, *INFORMS Annual Meeting*, Phoenix , October 14-17, 2012.
- O’Rear, E. G. , **K. Sarica** , P. L. Paarlberg , W. E. Tyner, “The Impacts of the Rebound Effect on U.S. CAFE Standards for Light-Duty Vehicles”, *INFORMS Annual Meeting*, Phoenix , October 14-17, 2012.
- **Sarica, K.** and W. E. Tyner (2012), “Comparison of a Clean Energy Standard and a Carbon Tax”, *2012 ASSA Annual Meeting, Chicago*, January 6-8, 2012.
- **Sarica, K.**, Chen Y. and Liu A. (2011), “Long-run Analyses of Combining Climate Policies in the United States using MARKAL”, *INFORMS Annual Meeting*, Charlotte , November 13-16, 2011.
- **Sarica, K.** and W. E. Tyner (2011), “Analysis of U.S. Renewable Fuels Policies Using Modified Markal and Gtap-Bio Models”, *30th USAEE/IAEE North American Conference*, Washington D.C., October 9-12, 2011.
- **Sarica, K.** and W. E. Tyner (2011), “Analysis of US Renewable Fuels Policies Using a Modified MARKAL Model”, *34th IAEE International Conference*, Stockholm, Sweden, June 19-23, 2011.
- **Sarica, K.** and W. E. Tyner (2011), “Analysis of US Renewable Fuels Policies Using a Modified MARKAL Model”, *14th Annual Conference on Global Economic Analysis*, Venice, Italy, June 16-18, 2011. ISSN 2160-2115.
- **Sarica, K.** and W. E. Tyner (2011), “Analysis of US Renewable Fuels Policies Using a Modified MARKAL Model”, *Biofuels LUC Workshop*, Chicago, March 25, 2011.
- Or, I., **K. Sarica** and G. Kumbaroğlu (2010), “Integrated Simulation/Optimization Modeling and Analysis of a Decentralized Electricity Market”, *33rd IAEE International Conference, International Society for Energy Economics*, Rio de Janeiro, 6-9 June, 2010.
- **Sarica, K.**, I. Or, and G. Kumbaroğlu (2009), “Modeling and Analysis of A Decentralized Electricity Market: Integrated Simulation/Optimization”, *10th IAEE European Conference*, Vienna, Austria, September 7-10, 2009 (<http://www.aee.at/2009-IAEE/>).
- **Sarica, K.**, I. Or, and G. Kumbaroğlu (2009), “An Integrated Simulation/Optimization Approach to the Modeling and Analysis of the Decentralized Turkish Market”, *32nd IAEE International Conference*, San Francisco, USA, June 21-24, 2009 (www.usaee.org/usaee2009/).
- **Sarica, K.** and N. Karali (2008), “Modeling of the Interactions between Sectoral CO₂ Missions and Energy Efficiency under CO₂ Emission Restriction Policies”, *Proceedings of the 26th International Conference of the System Dynamics Society*, Athens, Greece, July 20 – 24, 2008. **ISBN 978-1-935056-01-0**.
- Karali, N. and **K. Sarica** (2008), “Diffusion Potential of New Energy Efficient Technologies under an Uncertain Environment”, *International Conference on Policy Modeling- EcoMod2008*, Berlin, Germany, July 2-4, 2008.
- **Sarica, K.** and N. Karali (2008), “Modeling of the Interactions between Sectoral CO₂ Emissions and Energy Efficiency under Emission Restriction Policies”, *31st IAEE International Conference*, Bridging Energy Supply and Demand: Logistics, Competition and Environment, Istanbul-Turkey, June 18-20, 2008.
- **Sarica, K.** and N. Karali (2007), “Cost Based Sectoral Analysis of CER/ERU Emission Certificate Trading”, *22nd European Conference on Operational Research*, University of Economics Prague, Prague-Czech Republic, July 8-11, 2007.
- **Sarica, K.** and G. Kumbaroğlu (2007), “Power Plant Efficiency Assessment: Case of Turkey”, *9th IAEE European Energy Conference*, Energy Markets and Sustainability in a Larger Europe, Florence-Italy, June 10-13, 2007.

- **Sarica, K.** and Y. Barlas (2006), “Verifying System Dynamics Simulation Results by Analytical Phase Plane Tools”, *the 24th International Conference of the System Dynamics Society*, Nijmegen, The Netherlands, July 23-27, 2006. **ISBN 978-0-9745329-4-3**.
- **Sarica, K.** and G. Kumbaroğlu (2006), “Efficiency Assessment of Turkish Power Plants Using DEA”, *19th Mini EURO Conference on Operational Research Models and Methods in the Energy Sector (ORMMES’06)*, University of Coimbra, Portugal, September 6-8, 2006.

7.4. Yazılan uluslararası kitaplar veya kitaplarda bölümler

Kitap Bölümü, "Shale gas boom, trade and environmental policies: Global economic and environmental analyses in a multidisciplinary modeling framework", *Royal Society of Chemistry*, 2014.

7.5. Ulusal hakemli dergilerde yayınlanan makaleler

7.6. Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

- **Sarica K.**, I. Or, and G. Kumbaroğlu (2007), “Elektrik Üretim Tesislerinin Çok Yönlü Karşılaştırılmalı Değerlendirilmesi”, Uluslararası Doğal Gaz Kongresi ve Sergisi, TMMOB Makina Mühendisleri Odası, Ankara-Türkiye, 3-5 Mayıs, 2007.
- **Sarica, K.** and I. Or (2004), “Efficiency Assessment of Electrical Energy Generation Plants Using Data Envelopment Analysis”, Yöneylem Araştırması/Endüstri Mühendisliği 24. Ulusal Kongresi- YA/EM’ 2004, Adana-Türkiye, 15-18 Haziran, 2004.

7.7. Diğer yayınlar

- **Sarica, K.** and Y. Barlas (2005), *Analytical & Numerical Tools for Phase Plane Analysis of System Dynamics Models*, Working Paper No: FBE-IE-09/2005-14, Boğaziçi University, 2005.
- **Sarica, K.** and I. Or (2004), *Efficiency Analysis of Power Generation Plants in Turkey Using Data Envelopment Analysis*, Working Paper No: FBE-IE-09/2004-12, Boğaziçi University, 2004.
- **Sarica, K.** and I. Or (2004), *Türkiye'deki Elektrik Üretim Tesislerinin Veri Zarflama Analizi ile Verimlilik İncelemesi*, Teknik Rapor No: FBE-IE-12/2004-17, Boğaziçi University, 2004.

7.8. Uluslararası atıflar: 53 (Web of Science)

8. Ulusal & Uluslararası Projeler

Analysis of Policies Aimed at Increasing Use of Natural Gas in the Transportation System, Nextrans Center / USDOT, Project Project No: DTRT12-G-UTC05.

Analysis of the Global Impacts of Second Generation Biofuels in the Context of Other Energy Technologies and Alternative Economic and Climate Change Policy Options, Joint Biomass Research and Development Initiative (DOE and USDA).

Analysis of Effects on Turkish Economy due to Emission Restrictions parallel to KYOTO Protocol, State Planning Organization (DPT) (in close collaboration with AEA Technologies, www.aeat.co.uk).

Analysis of Possible Effects on Turkish Energy Industry due to Emission Restrictions parallel to KYOTO Protocol using MARKAL Model, Scientific Research Council (BAP), Project No: 09A303P (Main model developer).

An Integrated Simulation/Optimization Approach to the Modeling and Analysis of the Decentralized Turkish Electricity Market, Scientific Research Council (BAP), Project No: 07A301D.

Environmental Consultancy of Electricity Production Facilities for the Privatization, Republic Of Turkey, Prime Ministry, Privatization Administration (ÖİB) (Green House Gases Working Group, Expert).

Business Opportunities for CDM Project Development in the Mediterranean, National Technical University of Athens (Coordinator) and the European Commission, Project Synergy No: 4.1041/D/02-003, 10/2003-04/2005. (Project Member).

Sustainable Clean Development Options for Turkey: Assessment of Prospects for the Diffusion Potential of Renewable Energy Technologies, and Development of Projects to Utilize International Funds and Flexibility Mechanisms, Scientific and Technical Research Council of Turkey, Project No: 104M291, 04/2005-04/2007. (Project Member).

Petroleum Products Demand Forecasting, Petrol Ofisi Co., 2007. (Project Member).

Bottom-Up Electricity Demand Forecasting for Turkey, Fraunhofer Institute for System and Innovation Research, 2007 (Project Member).

9. İdari Görevler

MÜDEK Koordinatörü, Endüstri Mühendisliği Bölümü, Işık Üniversitesi

10. Bilimsel ve Mesleki Kuruluşlara Üyelikler

IAEE (Üye)

Enerji Ekonomisi Derneği (Kurucu Üye)

11. Ödüller

En iyi makale ödülü, Best Paper Award “Commitment for sustainable development” for Outstanding Contribution during 2006/2007, June 12, Florence, 2007.

12. Son iki yılda verdiğiniz lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu doldurunuz.

Akademik Yıl	Dönem	Dersin Kodu ve Adı	Kredi ve haftalık saat				Öğrenci Sayısı
			K	T	U	L	
2014-15	Bahar	IE443.01 – Engineering Investment Decisions	3	3	0	0	26
		IE486.01–Energy Policy, Planning and Markets	3	3	0	0	16
		IE583.01-Multi Criteria Optimization and Performance Assessment	3	3	0	0	5
	Güz	IE321.01 – Industrial Production Systems	3	3	0	0	51
		IE321.02 – Industrial Production Systems	3	3	0	0	58
		IE301.02 – Operations Research	4	3	2	0	44
2013-14	Bahar	IE321.01– Industrial Production Systems	3	3	0	0	64
		IE486.01–Energy Policy, Planning and Markets	3	3	0	0	46
		IE583.01-Multi Criteria Optimization and Performance Assessment	3	3	0	0	11
	Güz	IE321.01 – Industrial Production Systems	3	3	0	0	51
		IE321.02 – Industrial Production Systems	3	3	0	0	45