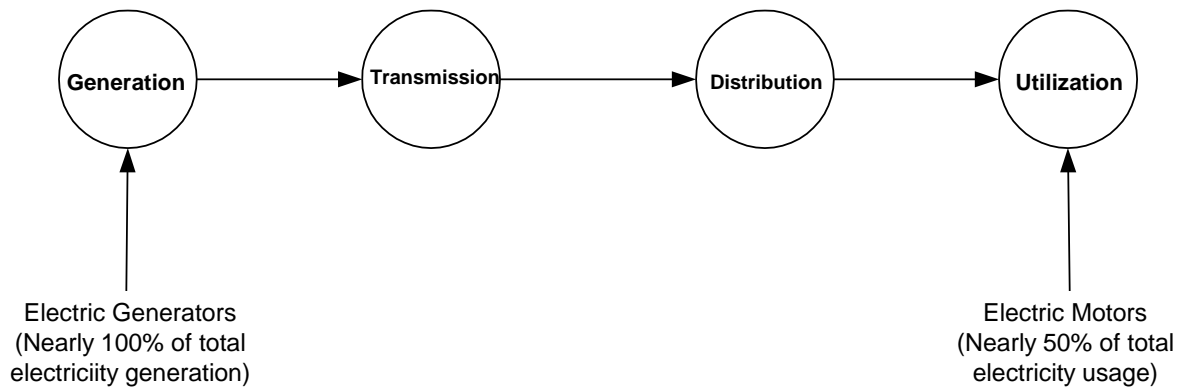


An Overview of Turkish Electricity System - 2018

Total Installed Generation Capacity:	87 GW (middle of 2018) - ETKB (5th rank in Europe)
Peak Demand:	48 GW (Year 2018)
Annual Electricity Generation:	~ 300 TWh (Year 2018, 6th rank in Europe)
Domestic Usage:	30%
Industrial Usage:	70%
Per Capita Electricity Consumption:	~ 4200 kWh (Year 2018)
Annual Volume of Electricity Market:	nearly 100 Billion TL (Year: 2016)
Electricity Generation Capacity on the Basis of Primary Sources (Year 2018):	
	21.4 % coal
	26.4 % natural gas
	32 % hydroelectric
	7.4 % wind
	5.4 % solar
	1.3% geothermal
	5.8 % others
O/H Line Infrastructure of Turkish Electricity Transmission System:	66285 km (Year 2018) (1st rank in Europe)

ELE 361 Electric Machines I

This course deals with the principles of electromechanical energy conversion and devices used for this purpose.



Although transformer is not an electromechanical energy conversion device, it is an important auxiliary in the overall electromechanical energy conversion process.

In Turkish Electricity System (at the beginning of year 2017):

No. of 400 kV Transformer Stations:	105 (301 transformers)
No. of 220 kV Transformer Stations:	1 (2 transformers)
No. of 154 kV Transformer Stations:	603 (1337 transformers)
No. of 66 kV Transformer Stations:	9 (35 transformers)
No. of HV Transformer Substations in the Transmission System:	718 (1675 transformers)
No. of MV Distribution Transformers:	more than 400 000
No of Converter Transformers:	thousands