## Correlations in the European Circular Economy

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## Why did we select this research?

The circular economy records higher economic benefits, but with minimal consumption of resources and less harmful to the environment. This paper takes as a starting point a theoretical approach, the authors create a model with various variables (for energy sector, using GDP per capita, the share of renewable energy, gas emissions and unemployment rate in relation to the active population), showing the related link for Europe, over the 2007-2015 period, using panel analysis.

## Key findings:

- The strongest link for European countries is between GDP and unemployment rate, and the link is inverse, as we find in economic theory. Between unemployment rate and share of renewable energy there is an inverse link, the lower the share, the higher the unemployment rate.
- For circular economy, when increase the renewable energy, the GDP increases, too and the unemployment rate and the level of the gas emissions decrease.
- In the circular economy, the growth of renewable energy conduce to GDP growth, and unemployment rate and the level of gas emissions to decrease.
- Much of the total energy consumption is used in the manufacturing industries, with a large gap between energy demand and energy supply. The solution is energy conservation and renewable energy.

Reference:
Mihai, M., Manea, D., Titan, E., & Vasile, V. (2018). CORRELATIONS IN THE EUROPEAN CIRCULAR
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