

## **Title**

### IDENTIFICATION AND USE OF STATISTICAL DATA SETS IN CLIMATE CHANGE MEASUREMENT

Theme proposed by: the National Institute of Statistics

## **Director:**

Professor Dragoş Huru, PhD

## **Purpose:**

Analyzing the effectiveness of addressing environmental objectives through government policy, especially environmental taxes, and different instruments, such as the use of renewable energy, real productivity, employment rate, taking into account the level of economic development and the GINI coefficient.

## **Objectives:**

The main objectives are the identification and analysis of key trends for the analysis of the impact of climate change in the implementation of economic policies and the evaluation of the general framework of the specialized literature. Also, identifying potential domestic and international shocks, but also testing the relationships between climate change and economic activity.

## **Design/Methodology/Approach:**

Using the GINI coefficient and designing a panel data regression analysis on a group of developing EU member states that have GDP/capita at purchasing power parity less than 80% of the EU average. Our empirical analysis focuses on two important economic sectors, industry and trade.

## **Results/originality:**

Based on the analysis, the creation of a set of representative indices for the characterization of the evolution of the Romanian economy by analyzing and using the methodology to substantiate economic policy strategies.

## **Impact on the society:**

Climate change is having a profound impact on the environment, health, and economy, amplifying social inequalities and geopolitical tensions. Vulnerable communities suffer the most, facing displacement and food insecurity. These effects underline the need for international cooperation to reduce emissions and adapt to new climate conditions.