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| Main Variables | Variable Symbol | Variable Name | Definitions and Measurements |
| Explained variable | GTFP | Green economy efficiency | EBM-GML, indicator system |
| Core explanatory variables | AI | Artificial Intelligence | Entropy weight method, indicator system |
| Mediating variables | ECS | Energy Consumption Structure | Share of clean energy consumption in total energy consumption |
| EFF | Energy Efficiency | Ratio of GDP to total energy consumption |
| Moderating variables | ISU | Industrial Structure Upgrading | Ratio of tertiary to secondary industry output |
| TI | Technological Innovation Level | Number of domestic patent applications received |
| Control variable | REG | Environmental Regulation | Ratio of investment in industrial pollution control to industry value-added |
| URB | Urbanisation Rate | Share of urban population in total population at the end of the year |
| HC | Human Capital | Average number of students enrolled in higher education per 100,000 population |
| OPE | International Openness | Import/export trade to GDP ratio |
| EDU | Education Investment | Education expenditure to GDP ratio |
| INF | Infrastructure Level | Ratio of road and railway mileage to regional administrative area |
| FIS | Government Financial Autonomy | the proportion of environmental protection expenditure within local finance's general budget |
| FDI | Foreign Direct Investment | the ratio of foreign direct investment to GDP |
| FIN | Regional Financial Development | the ratio of year-end deposit and loan balances to regional GDP |
| Instrumental Variable | PAP | Level of technical output | Publication of scientific and technical papers on scientific and technical activities in higher educational institutions |
| Substitution of variables | AI2 | Artificial Intelligence | Combination of entropy weight method and topsis method, indicator system |
| GTFP2 | Green economy efficiency | SBM-DDF-GML, indicator system |