Appendix 1 Evaluation index system of regional industrialization

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| Dimension | Index | Calculation method | Unit | Meaning | Index type |
| Quantity expansion | Assets per unit of industrial enterprises | X1=Total assets of industrial enterprises above designated size/Number of industrial enterprises | 104yuan/unit | Reflecting the asset expansion of industrial enterprise  | positive |
| Output per unit of industrial enterprises | X2= Industrial added value of industrial enterprises above designated size /Number of industrial enterprises | 104yuan/unit | Reflecting the output increase of industrial enterprise  | positive |
| Ratio of added value in industry to GDP | X3=(Industrial added value of industrial enterprises above designated size/GDP)×100% | % | Reflecting the level of industry to gross regional production | positive |
| Quality improvement | Overall Labor Productivity | X4=Industrial added value of industrial enterprises above designated size/Annual average employees | 104yuan/person | Reflecting employment quality | positive |
| Full-time Equivalent of R&D Personnel | X5=number of full-time staff+number of part-time staff converted by workload | person year | Reflecting the technology R&D level | positive |
| Ratio of Total Assets to Industrial Output Value | X6=((total profit + total taxes + interest expense)/average total assets)×100% | % | Reflecting the profitability of enterprises | positive |

Note: All indexes adopt the statistical caliber of industrial enterprises above designated size.

Appendix 2 Evaluation index system of regional energy security

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| Dimension | Metric | Index | Calculation method | Unit | Index type |
| Supply security | Regional independent production capacity | Energy production per capita | X1=Primary energy production/number of resident population | Tons of standard coal equivalent/person | positive |
| Elasticity of energy production | X2= Growth rate of energy production /Growth rate of the national economy | % | positive |
| Fluctuations in energy supply prices | Relative change in producer price index of petroleum processing, coking and nuclear fuel processing  | X3= Producer price index for petroleum processing, coking and nuclear fuel processing /producer price index for industrial products | % | negative |
| Relative change in producer price index of production and supply of electricity and heat | X4= Producer price index of production and supply of electric and heat/producer price index for industrial products | % | negative |
| Relative change in producer price index of production and supply of gas | X5= Producer price index of production and supply of gas/producer price index for industrial products | % | negative |
| Energy supply diversity | Shannon-Wiener index of energy supply | X6=$-\sum\_{k}^{}s\_{k}lns\_{k}$,where $s\_{k}$ indicates the ratio of the k-th energy supply to the total supply | % | positive |
| Energy industry profitability | Energy industry asset profit rate | X7=Industrial profits of petroleum processing, coking and nuclear fuel processing, production and supply of electricity, heat, and gas /average assets of the above industries | % | positive |
| Consumption security | Energy consumption | Energy consumption per capita | X8=Total energy consumption/ number of resident population | Tons of standard coal equivalent/person | negative |
| Energy consumption intensity | X9=Total energy consumption/GDP | Tons of standard coal equivalent/ten thousand yuan | negative |
| Elasticity of energy consumption | X10= Growth rate of energy consumption /Growth rate of the national economy | % | negative |
| Energy consumption diversity | Shannon-Wiener index of energy consumption | X11=$-\sum\_{k}^{}c\_{k}lnc\_{k}$,where $c\_{k}$ indicates the ratio of the k-th energy consumption to the total supply | % | positive |
| Matching security | Energy self-sufficiency level  | Energy self-sufficiency rate | X12= Primary energy production/total energy consumption | % | positive |
| Energy import dependence | Percentage of net imports in available energy for consumption | X13= Net energy import/energy available for consumption | % | negative |
| Energy dependence outside of the province | Proportion of net transfer from other provinces in available energy consumption  | X14= Net energy transfer from other provinces/available energy consumption | % | negative |
| Environmental impact of energy supply and demand | Sulfur dioxide emission | X15=Sulfur dioxide concentration in the air of provincial capital city | μg/m3 | negative |
| Nitrogen dioxide emission | X16=Nitrogen dioxide concentration in the air of provincial capital city | μg/m3 | negative |
| Concentration of PM10  in the air | X17=Average concentration of PM10 of provincial capital city | μg/m3 | negative |
| Proportion of good weather | X18=Proportion of days of air quality equal to or above grade 2 of provincial capital city in one year | % | positive |