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**THE EFFICIENCY OF SOUTH AFRICAN MINING COMPANIES TO CREATE  
SHAREHOLDER AND STAKEHOLDER VALUE FROM ENVIRONMENTAL  
EXPLOITATION**

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**Abstract.** The aim of the study is to estimate the relative efficiency of nine South African mining companies in converting their environmental impact into shareholders' gains and stakeholders' gains. A data envelopment analysis model was used to estimate the relative technical efficiency of the companies in converting environmental impact factors (greenhouse gas emissions, water usage and energy usage) into shareholder gains (EBITDA, dividends and reinvestments). Another model was used to estimate how these environmental impact factors are converted into stakeholders' gains (number of employees, taxes, donations and payments to suppliers of goods and services). The study found that all the companies in the selected sample perform relatively more efficiently in creating stakeholder gains than shareholder gains from the exploitation of the environment.

**JEL Classification:** C61, M41, Q50

**Keywords:** dividends, EBITDA, energy usage, greenhouse gas emissions, reinvestments, taxes, water usage

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