

## Chapter 37

# Sustainable Energy and the Growth of Small and Medium Enterprises in Ghana

**Ruby Melody Agbola**

*Central University Business School, Ghana*

**Evans Sokro**

*Central University Business School, Ghana*

### ABSTRACT

*The chronic shortage of petroleum fuels, especially gasoline and LPG, and the prolonged and indiscriminate power outages coupled with the recent increment in fuel prices appear to be taking their toll on Ghanaian businesses; hence, some have questioned the degree of security, reliability, and long-term sustainability of the country's energy need. The chapter assesses the impact of the recent power outages on the growth and profitability of Small and Medium Enterprises (SMEs). The study employed a survey design consisting of structured questionnaires involving a total of 190 SMEs across the country. An eight item Likert scale used to assess the impact of the energy crisis on three key measures of business growth revealed a strong positive correlation between the power outages and reduced profitability but a weak correlation with business expansion by way of market development and a statistically insignificant relationship between the power outages and growth in number of employees.*

### INTRODUCTION

The economy of Ghana has been growing steadily over the last few years reaching its highest growth rate of 14% in 2011 following the exploration and export of crude oil raising the hopes of most Ghanaians and the international community that the fortunes of the country will be positively transformed if this growth can be

sustained. However, protracted shortage of power supply and continued reliance on unsustainable energy sources make one wonders if this dream can be realised because there can be no sustained development without sustainable energy. Over 60% of Ghanaians especially those in the rural areas still rely on charcoal and firewood to fuel their business transactions as well as for cooking and other domestic activities. The recent power

DOI: 10.4018/978-1-4666-9814-7.ch037

outages in Ghana due to load shedding exercise undertaken by the Electricity Company of Ghana (ECG) as a result of the breakdown in the West African Gas Pipeline from Nigeria, lack of funds to import light crude oil to power thermal plants and government interference in energy pricing has led to untold hardship and disruption of commercial activities of most businesses in the country especially Small and Medium Enterprises (SME) which constitute more than 70% of all business enterprises in Ghana offering employment to some 60% of the workforce; and seen as the key engine for growth of the economy.

Following steady economic growth over the last decade, the country has since the mid-1990s launched two long-term development plans aimed at transforming its low-income developing status into an upper middle-income one by the year 2020. Ghana was declared a lower middle-income country in 2010 having attained the US\$ 1,000 per capita mark. With an expanding economy and a growing population, Ghana faces major challenges in providing the required energy in a reliable and sustainable manner to power the rapidly growing economy. As the nation's need for economic growth increases, it also triggers the need for the production of more goods and services, and the need to reduce unemployment. Small and medium enterprises (SMEs) have been identified as the key to promoting and sustaining the growth and development of the economy. The ability of SMEs to secure regular and affordable sources of fuel and electricity to power the production and distribution of goods and services, and create jobs is crucial to achieving the development goals of the country.

According to Amenu (2012), "Petroleum is the major index that drives businesses, manufacturing and transportation of goods and services to serve a competitive nation's economy and the world at large" ([www.ghanabusinessnews.com](http://www.ghanabusinessnews.com)). The Power Systems Energy Consulting report also observes that "Electricity is a key infrastructural

element for economic growth. It is a versatile energy currency that underpins a wide range of products and services that improve quality of life, increase worker productivity and encourage entrepreneurial activity" (PSEC, 2010: 72). Thus, a reliable and accessible electricity system, as well as adequate supply of affordable petroleum fuels is critical in enabling Ghana to meet its long term economic development goals.

It is now an undeniable fact that SMEs are the backbone of every economy even in advanced countries. SMEs are the main source of employment in developed and developing countries alike and due to their wide spread in number, the impact of SMEs is easily recognised (OECD Development Centre, 2011). In Africa, SMEs are known to comprise over 90 percent of African business operations and contribute to over 50 percent of employment and GDP. SMEs in South Africa provided more than 55 per cent of total employment and 22 per cent of GDP in 2003 (African Economic Outlook 2004-2005). While SMEs in Nigeria account for some 95 per cent of formal manufacturing activity and 70 per cent of industrial jobs (TradeMark Southern Africa, 2010), SMEs in Ghana provide about 85% of manufacturing employment, contribute 70% to the country's GDP and account for 92% of businesses (Abor & Quartey, 2010; OECD Development Centre, 2011). Besides, data from the Social Security & National Insurance Trust (SSNIT 2004) indicates that, 90% of companies in the Ghanaian private sector employ less than 20 persons, making SMEs the dominant players in the Ghanaian business landscape.

Unfortunately, the country has been experiencing serious and prolonged power outages since the first quarter of 2012. The recent power rationing whereby electricity supply is rotated among cities and communities to the extent that power could go out for a whole day or in some instances, several times a day causing damage to electrical equipments, machines and appliances

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/sustainable-energy-and-the-growth-of-small-and-medium-enterprises-in-ghana/147884](http://www.igi-global.com/chapter/sustainable-energy-and-the-growth-of-small-and-medium-enterprises-in-ghana/147884)

## Related Content

---

### Mobile Financial Sectoral System of Innovation: What Latin America Can Learn from India

Heather C. Webb (2016). *Business Development Opportunities and Market Entry Challenges in Latin America* (pp. 107-126).

[www.irma-international.org/chapter/mobile-financial-sectoral-system-of-innovation/138762](http://www.irma-international.org/chapter/mobile-financial-sectoral-system-of-innovation/138762)

### Application of Fuzzy Cognitive Maps in IT Management and Risk Analysis

Masoud Mohammadian (2011). *Electronic Globalized Business and Sustainable Development Through IT Management: Strategies and Perspectives* (pp. 90-99).

[www.irma-international.org/chapter/application-fuzzy-cognitive-maps-management/45353](http://www.irma-international.org/chapter/application-fuzzy-cognitive-maps-management/45353)

### Japan-India Trade Relations: History, Catalysts, and Challenges

S. Jobayear Ahmed (2022). *Evaluating Trade and Economic Relations Between India and Southeast Asia* (pp. 249-281).

[www.irma-international.org/chapter/japan-india-trade-relations/292158](http://www.irma-international.org/chapter/japan-india-trade-relations/292158)

### Recruiters' Preferences for B-School Campus Placement: An Indian Perspective

S. Maheswaranand R. K. Jena (2012). *International Journal of Asian Business and Information Management* (pp. 21-28).

[www.irma-international.org/article/recruiters-preferences-school-campus-placement/64231](http://www.irma-international.org/article/recruiters-preferences-school-campus-placement/64231)

### Family Communication Patterns and Influence of Children in Family Purchase Decisions

Shefali and Vijita Singh Aggarwal (2019). *International Journal of Asian Business and Information Management* (pp. 1-20).

[www.irma-international.org/article/family-communication-patterns-and-influence-of-children-in-family-purchase-decisions/234304](http://www.irma-international.org/article/family-communication-patterns-and-influence-of-children-in-family-purchase-decisions/234304)