

Effects of Sustainability Efforts on Organic Growth in a Multinational Company: A Case Study of Procter and Gamble

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Abstract—The Paris agreement on climate change establishes guidelines for the performance of companies in relation to emissions reduction, governance, and disclosure through the Climate Action 100+ Net Zero Company Benchmark. As a result, companies in all signatory countries are obliged to reduce their emissions and consumption of non-renewable forms of energy by 2050. Since this accord affects all companies from all industries globally, every company needs to establish their own internal procedures to achieve established targets. Securing new forms of energy supplies results is a new challenge for companies and results in uncertainty and additional transaction costs with potential effects on profitability and thus shareholder value. As a method to maintain shareholder value, companies have therefore sought to offset resulting higher costs with organic sales growth. Therefore, we investigate the link between organic sales growth in a large publicly traded multinational Procter & Gamble as a result of its implementation of renewable energy policies and increased utilisation of renewable energies in production. We use time-series data from 2002 to 2022.

Keywords—renewable energies, sustainable development goals, organic growth, organic sales growth, corporate social responsibility, risk management, emissions reduction, Procter & Gamble (P&G)

I. INTRODUCTION

Sustainability has become a critical perspective in managing firms via a holistic approach by considering economic, environmental, and social dimensions of firms (Kuramochi *et al.*, 2020). With the rising significance of sustainable development, the theories of sustainability in firms have evolved during the past six decades. This article offers a critical review of the evolving theories linking sustainability to firms and discusses their implications for

future renewable energy research. The relationships among different theories are critically analysed, and the directions for future research are discussed. Cho & Li (2019) argue that the main theories linking sustainability to firms, in chronological order, are: (1) Corporate Social Responsibility, (2) Stakeholder Theory, (3) Corporate Sustainability, and (4) Green Economics. Various new approaches and theories have emerged, all of which include three directions, namely (1) shifting from “what” to “how”, (2) growing use of interdisciplinary approach, and (3) broader systems. These approaches include renewable energy studies associated with firms and future research opportunities in this area, which our research is aiming to address through a study on corporate sustainability, namely organic organisational growth through the use of renewable energy. Our research provides an empirical analysis of longitudinal data at company level using data from P&G and explaining the company’s renewable energy strategy. The motivation for our research is to examine the result on company-level strategy as a result of Sustainable Development Goals (SDGs) and climate-change goals established at multilateral levels.

II. LITERATURE REVIEW

The concept of sustainable development has increasingly been applied in the context of Corporate Sustainability (CS) (Cho *et al.*, 2019; Kuramochi, *et al.*, 2020; Steurer *et al.*, 2005). Most literature has included environmental sustainability as a component of Corporate Social Responsibility (CSR) and later within CS, rather than as separate category or variable. Therefore, it is important to first understand the connection between CSR and corporate performance to derive a framework for

environmental sustainability and corporate performance. The literature has generally analysed the relationship between corporate financial performance and CSR outcomes using single indicators, such as revenue growth, Return on Assets (ROA), and Tobin's Q (Steurer *et al.*, 2005). Steurer *et al.* (2005) also examined the relationship between financial performance (profitability), corporate value, and sales growth as a result of CSR, with the goal of understanding how CSR outcomes influence ROA is a measure of the overall profitability of the firm (Steurer *et al.*, 2005). Bowen (1953) developed a definition of social responsibility as the pursuit of the right policy in terms of social goals or values, describing it as the duty of businesspeople to follow such decisions and actions. Since then, many definitions have been suggested, with no single unique definition of CSR. Because discussions about CSR are broad and comprehensive, it can be defined from many different approaches and perspectives (Kim and Hoskisson, 2010; Lee, Lee, & Park, 2009). According to Steurer *et al.* (2005), these definitions all emphasise the importance of meeting stakeholders' needs while balancing economic, environmental, and social dimensions of corporate performance, which Steurer *et al.* (2005) more narrowly define as Corporate Sustainability (CS) operationalising it through the Triple Bottom Line (TBL), a concept developed by Elkington (2013). TBL includes three dimensions: social, environmental, and financial. Therefore, the concept of TBL adds two more "bottom lines" for organisations in reporting, i.e. social and environmental bottom lines, which is different from conventional reporting frameworks (Steurer *et al.*, 2005; Elkington, 2013).

The TBL approach has gained traction since. For example, Adeola *et al.*, (2019), Høgevd *et al.*, (2015), and Flanagan & Goods (2022) suggest that an organisation can facilitate its movement toward sustainable development with a management approach that integrates the two additional bottom lines, including the environmental bottom line. Pushpakumara *et al.*, (2019) provide evidence to support environmental aspects can improve an organisation's competitive advantage. According to Kim & Lui (2015), Sustainable Business Models (SBM) are those models which incorporate the TBL approach and consider various stakeholder interests. It is widely recognised that CSR and CS are closely related. Antolín-López *et al.*, (2016) and Zinenko *et al.*, (2015) conducted an extensive review to specifically investigate the evolution of the concepts of CSR and CS. Their studies showed that management literature uses both CSR and CS to refer to social and environmental management issues, and the conceptualisations and measures of CSR and CS are converging, providing evidence that the role of environmental factors in the overall approach to CSR is increasing. Barton, Schaefer, & Canavati (2018) and Foxon, Bale *et al.*, (2015) proposed frameworks to analyse transitions to a low-carbon economy. They identified five key co-evolving systems, which include business strategies, ecosystems, technologies, institutions, and users. Similarly, Geels (2014), Köhler *et al.*, (2019), and

Markard, Geels, & Raven (2020) argue that firms face selection pressures from two kinds of environments, namely the socio-political environment which selects firms for social legitimacy, and the economic environment which selects firms based on economic competitiveness. Therefore, economic and socio-political environments can exert selection pressure on firms. It is reasonable to investigate the effects of environmental sustainability and organic growth further.

III. INSTITUTIONAL FACTORS IMPACTING CLIMATE ACTION AT COMPANY LEVEL

A. Metrics and Targets

All organisations should describe their key climate-related targets such as those related to GHG emissions, water usage, energy usage, etc., in line with the Climate Action 100+ Net Zero Company Benchmark a result of COP21 in Paris in 2015. Other goals may include efficiency or financial goals, financial loss tolerances, avoided GHG emissions through the entire product life cycle, or net revenue goals for products and services designed for a lower-carbon economy.

B. P&G Framework

P&G is one of the companies that plans to reduce their environmental footprint with this previously stated framework. Four categories are used by P&G in the following manner:

1) Governance

- Follow recommendations from the Climate Action 100+ Net Zero Benchmark
- Align with the 1.5 °C ambition by individually analysing all global proposals to contribute the most to their reduction of Greenhouse Gas (GHG) emissions
- Established a Global Government Relations organisation to guarantee honesty in policy related activities, which works under P&G Corporate Climate Council detailing their climate policies
- Have a Chief of Sustainability Officer, Virginie Helios

2) Strategy

There are multiple examples in P&G's Climate Transition Action Plan such as building long-term partnerships to use renewable electricity, strategically improving energy efficiency to reduce costs and GHG emissions, analysing the supply chain to distinguish and impulse towards efficiency developments in transportation.

3) Risk Management

P&G's Climate Transition Action Plan discusses how certain future climate-related actions could potentially cause uncertainty and alteration to their plans and timelines towards becoming a carbon-zero organisation.

4) Metrics and Targets

According to Table I, every annual citizenship/sustainability report states P&G's goals and current

progress in reducing GHG emissions (all 3 scopes), water usage, and energy consumption is prepared.

TABLE I. EXAMPLES OF P&G'S CLIMATE-RELATED RISK MANAGEMENT

Climate-Related Risk	Impacts	Solutions
Finding renewable thermal energy	These sources are not available at a bigger scale as of today	Combined Heat and Power (CHP) facility powered by biomass located in Georgia, United States
Measuring Scope 3 emissions	Improving the measurement of Scope 3 emissions can affect P&G's plans and timelines	Partnering with suppliers to enhance the collection of Scope 3 data
Acquiring businesses	Purchase of other businesses in a different state can affect P&G's plans and timelines	Transparency of accomplishments and impediments towards carbon net zero

Source: Authors' analysis of data from P&G Annual Reports 2013–2022.

C. Renewable Energy (RE)

Renewable Energy (RE) is considered as “energy derived from natural sources that are replenished at a higher rate than they are consumed” as per the definition of the United Nations (2023). The European Union includes as part of renewable energy concept “wind power, solar power (thermal, photovoltaic and concentrated), hydro power, tidal power, geothermal energy, ambient heat captured by heat pumps, biofuels and the renewable part of waste” (United Nations, 2023).

IV. DATA COLLECTION

The data gathered for this research was collected from a total of 23 annual, 16 sustainability, and 7 citizenship reports from Procter & Gamble's public archives from 2002–2022.

As can be seen in Fig. 1, an ascending trend in RE usage was noticed starting from 2019 from less than 20% to almost 100% in 2022. On the other hand, in chart II a sustained increase in OSG was shown from 1% in 2018 to 7% in 2022. As a way to understand if there was a cause-effect relationship between %RE usage and %OSG during this 5-year period (Fig. 2). P&G annual reports from 2018–2022 were reviewed. Important to mention is that P&G launched an aggressive initiative to achieve 0% carbon neutral by 2040.

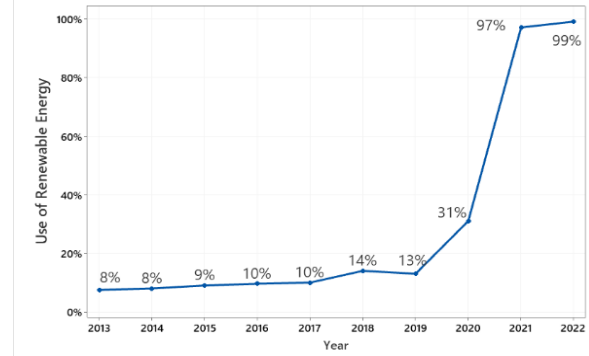


Fig. 1. P&G's % of renewable energy usage per year. (Source: Authors' analysis of data from P&G Annual Reports 2013–2022.)

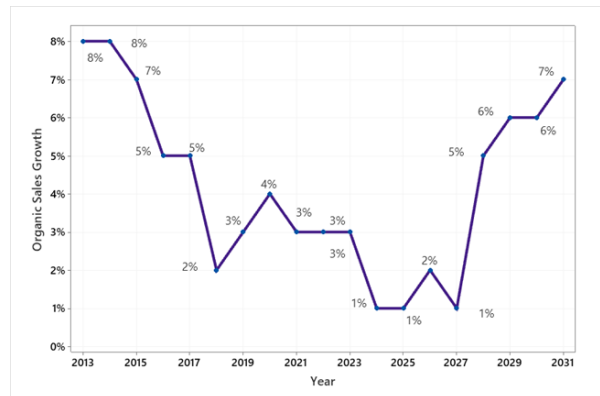


Fig. 2. P&G's % of organic sales increase per year. (Source: Authors' analysis of data from P&G Annual Reports 2004–2022.)

A. Air Emissions

Before an analysis of air emissions can be completed, it is important to understand what each of the three scopes we are analysing represent. Scope 1 symbolises the direct emissions from the company, Scope 2 signifies the indirect emissions from the company with the purchase of energy, and Scope 3 represents all other indirect emissions from the company's supply chain (Agility, 2023). P&G's Scope 1–3 emissions are shown in Figs. 3–5, respectively.

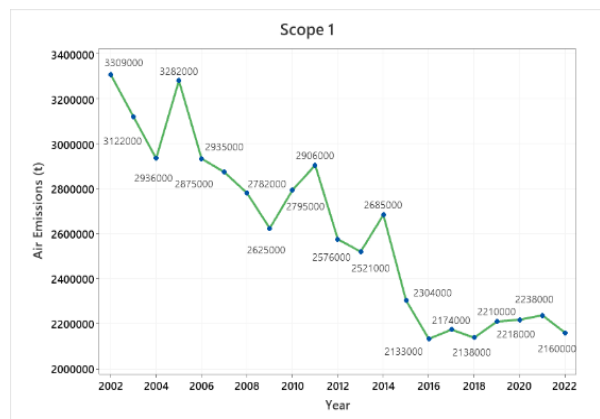


Fig. 3. P&G's scope 1 emissions per year. (Source: Authors' analysis of data from P&G annual reports 2002–2022.)

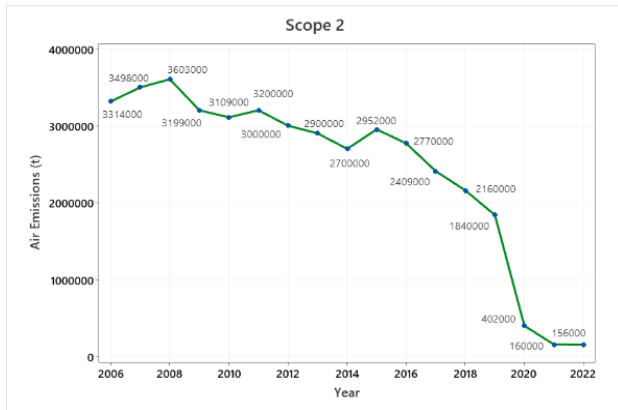


Fig. 4. P&G's scope 2 emissions per year. (Source: Authors' analysis of data from P&G annual reports 2006–2022.)

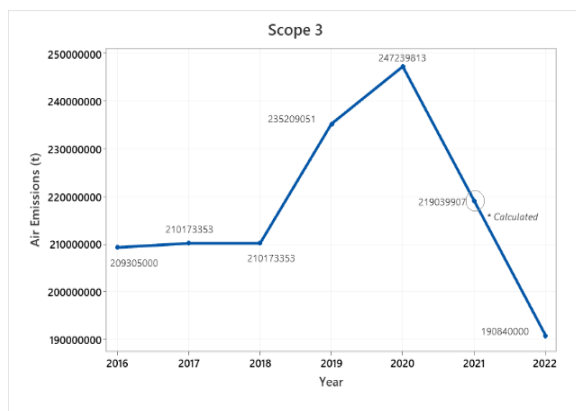


Fig. 5. P&G's scope 3 emissions per year. (Source: Authors' analysis of data from P&G annual reports 2016–2022.)

V. CONCLUSION

It can be seen that P&G has fully committed to reducing its carbon footprint in all its processes. The use of renewable energy has significantly increased. Between 2019 and 2022, the share of renewable energy utilised in P&G's value chain processes doubled. The company's yearly Scope 1–3 emissions decreased accordingly. Scopes 2 and 3 showed the largest declines. In addition, processes in P&G have become more energy efficient in general. The company has also managed to reduce its overall energy consumption between 2000 and 2018 significantly. With regard to organic sales growth, which can be influenced by firm-level, industry-level, as well as external factors, the data has shown that the rate of growth has been positive, albeit at smaller rates. However, organic sales growth is projected to enter a steep upward trajectory in 2027. It is to be expected given the costs of investment diversion of resources to reconfiguring the energy supply of the company globally. Therefore, it is reasonable that commensurate positive effects on sales growth can be expected to occur with a time delay, but they are certain to occur.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Alexander Wollenberg led the project and contributed to the research methodology, literature review, writing, editing of the final article; Gizela Nicol Olivares Rodríguez contributed to the collection of data, empirical analysis, and writing; José Guadalupe Octavio Cabrera Lazarini contributed to the quantitative analysis, research, and writing; Juan José Cabrera Lazarini contributed to the analysis of P&G policies and writing. All authors had approved the final version.

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