



# The implications of the proposed carbon tax in South Africa's tourism industry

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## Abstract

The paper investigates the potential implications of the proposed carbon tax in the South African context. Against this background, qualitative and quantitative research methods were employed in an endeavour to understand the implications of the proposed carbon tax in South Africa's tourism economy. Both primary and secondary data were utilised to better comprehend this phenomenon. An exploratory research design was utilised for the purpose of the study. Furthermore, a purposive random sampling technique was utilised. Additionally, such findings will strive to hopefully make a meaningful contribution to enable policy makers, government, researchers and academics to further explore the suitability of implementing a carbon tax. The findings of the study indicate that 70% of the respondents expressed their dissatisfaction about the proposed carbon tax. The study therefore seeks to enrich the stakeholders' knowledge of carbon taxation. Overall, the foregoing discussion in this paper will further stimulate discussion on carbon tax which is largely an under-researched area in the context of South Africa.

**Keywords:** Carbon Tax, Tourism, South Africa, Emissions, Economy

## Introduction

The tourism industry has been identified as a key growth sector because of its contribution to the South African Gross Domestic Product (GDP). The Industrial Policy Action Plan, National Development Plan, National Tourism Sector Strategy, New Growth Path all reiterate this position. This is notwithstanding the fact that South Africa (SA) is amongst the world's most carbon-intensive economies across the global spectrum. An abundance of coal resources and subsidised coal-fired electricity has led to over reliance on energy-intensive mining. The tourism industry has been viewed as a historical driver of economic development in the context of South Africa as a developing economy. Consequently, the South African government has recently targeted ambitious reductions in greenhouse gas emissions. As such, the South African government is contemplating introducing carbon tax as one of the mechanisms to combat pollution. However, the unintended outcomes are likely to affect the tourism sector.

Carbon tax is classified as *Pigovian* tax, which is one applied to activities that result in negative consequences where the responsible parties previously had no obligation to pay any form of compensation for damage caused. This form of tax is designed to encourage industry to reduce their carbon emissions in order to lessen the effects of global warming. South Africa's emission targets are in line with the United Nations directives and the target is to reduce it by 34 per cent by year 2020 and 45 per cent by 2025. Carbon tax according to (Vorster, Winkler & Jooste, 2011) is being introduced world-wide and is levied on carbon founded in fossil fuels. South Africa is no



exception it is a signatory to a number of climate change agreements, including the Vienna Convention for the Protection of the Ozone Layer. Nonetheless, the implementation of carbon tax has implications to the tourism industry of SA. In order for this form of tax to be implemented effectively relevant stakeholders must be consulted to ensure transparency and commitment by South African government.

The South African government also adopted the White Paper on Renewable Energy in 2003, the National Climate Change Response Strategy in 2004, and hosted the National Climate Change Conference in 2005. All these efforts seek to eliminate (or at least serious reduce) greenhouse gas (GHG) emissions and address climate change issues (Steyn, 2012). In July 2008, the Long Term Mitigation Scenarios (LTMS) were introduced. Accordingly, Steyn (2012) that this necessitated a move to regulate state action, and to promote the economic development through taxes (including a carbon tax and a tax on air travel) and incentives for companies seeking energy efficiency. The National Department of Tourism (NDT)'s 2012 budget speech clearly highlighted that South Africa's core markets which are Europe and Asia are the country's major source of long-haul tourists (Schalywk, 2012). It should be noted that these tourists are using air transport in order to reach SA. However, the National Treasury's discussion paper on carbon taxes states that SA is ranked among the top 20 countries measured by absolute CO<sub>2</sub> emissions (National Treasury, 2010). Furthermore, government of South Africa underscores that there is a need to reduce GHG while working to ensure economic growth, increase employment and reduce poverty and inequality through promoting the tourism industry. SA is one of the most unequal countries in the world. The country's Gini Coefficient is currently standing at 0,66 to 0,77 (World Bank, 2016).

South Africa is in the process of fulfilling its promise made during 2009 Copenhagen climate change negotiations where it voluntarily announced that it would act to reduce domestic GHG emissions by 34 per cent by 2020 and 42 per cent by 2025 (Steyn, 2012). Furthermore, government seeks to emulate what has been implemented by Europe in 2012 in response to CO<sub>2</sub> emissions. For instance, the European Union announced a carbon tax of R139 per ton on CO<sub>2</sub> emitted by airlines, which started in January 2012. In a similar vein, South Africa's location, according to the chief executive of the International Air Transport Association, makes it a high a CO<sub>2</sub> emission destination. Tol (2007) asserts that transport is responsible for a large portion of CO<sub>2</sub> emission, and its emissions are growing faster than those from other sources. Moreover, emission reduction appears to be more difficult and more expensive in transport than it is in other sectors, particularly power generation. The exorbitant costs bring about challenges to the transport as an aspect of tourism and tourism business operators.

### **Carbon Tax and Tourism**

Sheik (2012) avers that a carbon tax designed to improve the environment may be bad for the economy if implemented poorly. Similarly, implementation of carbon tax designed to improve economy would be good for the environment. Gale (2013) explains that a tax on carbon has an enormous amount to offer to both the economy and environment. This paper focuses on demystifying the economic implications of implementing carbon tax. Of importance, it needs to be borne in mind is that SA is a developing country and tourism plays a pivotal role in its development. The Industrial Policy Action Plan document acknowledges that the tourism industry is amongst priority sectors in SA because of this potential to create employment. Winkler (2012) asserts that South Africa's path to a carbon tax has been in comparison to Australia. When SA hosted the United Nations climate change summit (popular known as COP17) in 2011, the cabinet signed off

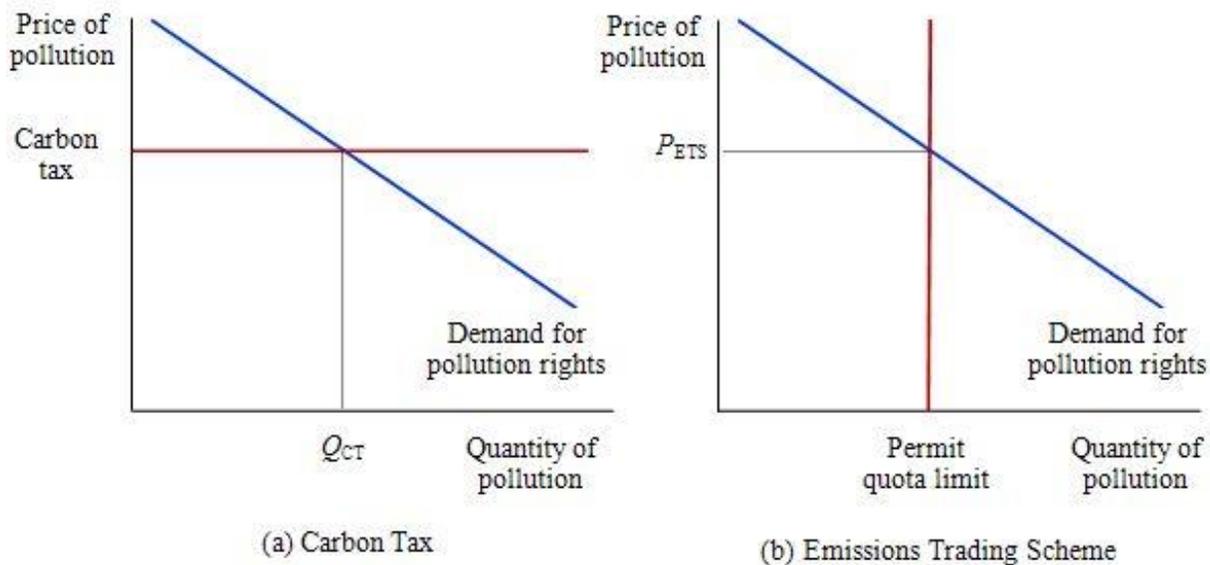


on the formal climate policy (or white paper). This includes references to the carbon tax, but also sets national emission targets. Furthermore, it seeks to establish that sector carbon targets (or budgets) need to be defined and starts to put in place the measure needed to report and verify emissions.

Accordingly, Thurlow (2011) suggests that SA is one of the world's largest GHG emitters. As such implementing carbon tax is viewed as one of mechanisms to raise funding and curb pollution. In 2007, SA ranked 13<sup>th</sup> amongst all countries in terms of its overall emissions from burning fossil fuels. Its per capita emissions were twice the global average. Undoubtedly, there is pressure for SA to lower emissions.

The government has committed to a two-fifths reduction by 2025 (from a baseline "business as usual" projection). This will pose a serious challenge as SA's economic development has long been reliant on mining and heavy industry, supported by cheap coal-fired electricity. Reducing the country's carbon intensity will therefore require a substantial economic transformation with clear winners and losers (especially during the transition period). SA is considering how best to contribute its fair share to the global effort to mitigate climate change. It is in this context that carbon tax is gaining momentum as an industry that can change the tourism landscape. Figure 1. below depicts a Carbon tax model. Many countries such as China, United States of America and United Kingdom are using models such as the one shown in Figure 1 to calculate the impact of Carbon tax.

**Figure 1: Carbon Tax model**



**Source: Economic outlook**

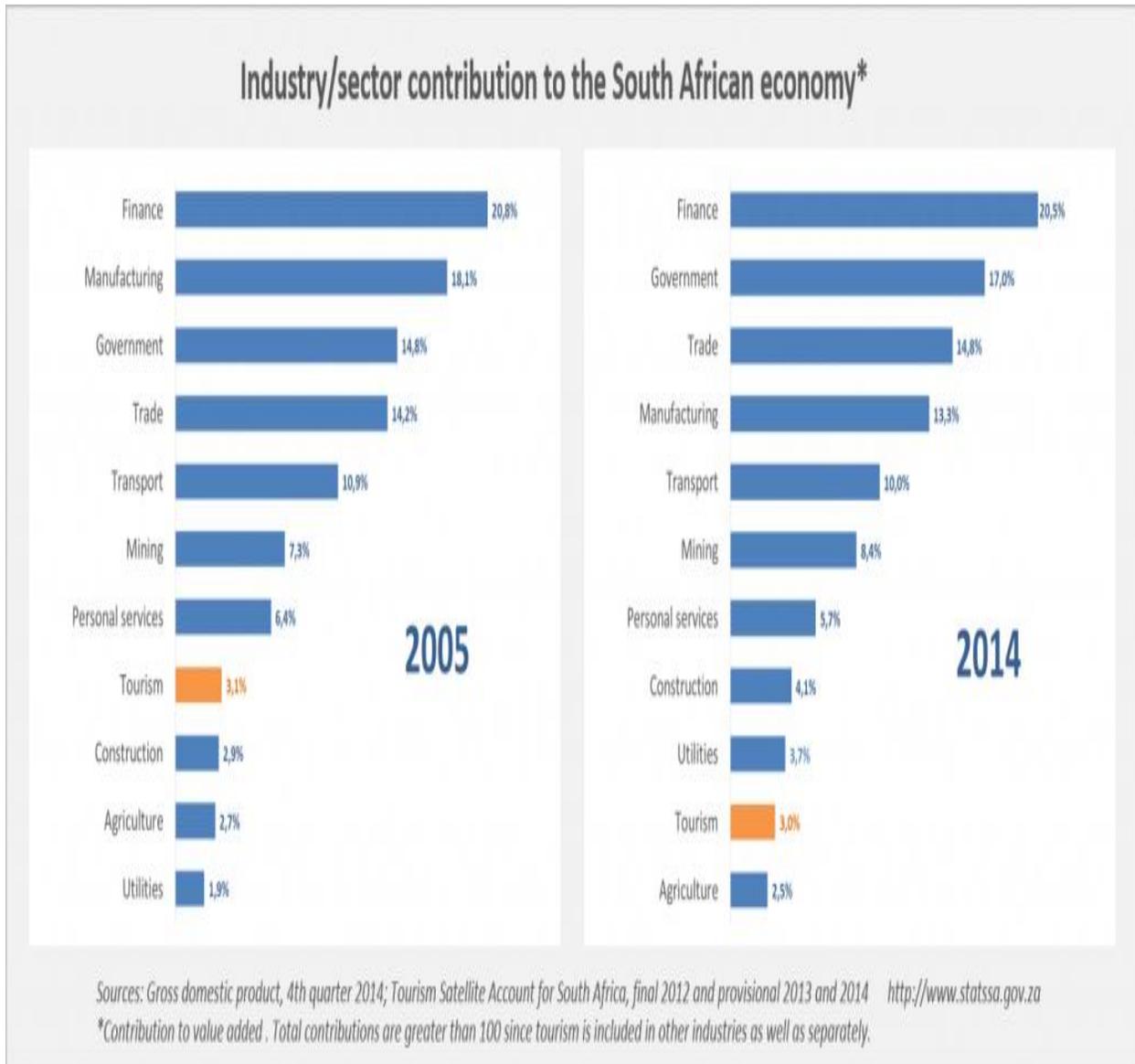
### **The role of the tourism industry in SA**

Much has been said about the importance of tourism, particularly of its role in economic growth, employment and attracting foreign exchange. The Tourism Satellite Account for SA report



provides an overview of the tourism contribution in terms of spending, employment and its impact on GDP (Statistics South Africa, 2016). Roux (2016) contends that SA is already regarded as a popular destination and the government has placed an emphasis on developing the tourism industry.

**Figure 2: Industry contribution to the South African economy compared to tourism**



**Source: Statistics South Africa**

As clearly depicted in Figure 2 in 2014, tourism contributed 3,0% to the South African economy, higher than all other industries. Tourism’s contribution of 3,0% is only slightly smaller than the 3,1% recorded for 2005



Tourism Levy South Africa (2015) underscores that the contribution of tourism has almost doubled in 15 years. The sector's total direct and indirect contribution to South African economy has almost doubled from 4.9% in 1994 to an expected 7.95% in 2009. According to Hanekom (2014), domestic tourism has grown. The tourism industry is the new gold, directly employing 617 000 people or 4.6% of the total workforce in 2012. This is far more than the number of those employed in the mining sector (Hanekom, 2014). If direct employment is added, it exceeds 1.4 million people, approximately 10% of the total workforce. This represents an impressive annual growth rate of 4.7% over the past 20 years.

Roux (2016) acknowledges that while tourist numbers fell slightly in 2015, tourism is regarded as a growing industry in SA for the following reasons:

- In December 2013, a record number of 937 222 tourists entered SA;
- In the first quarter of 2016, the total number of international arrivals was up by 19%;
- Between 2005 and 2014, the number of people employed in the tourism sector increased from 475 664 to 680 817 (an increase of 43%); and
- Between 2005 and 2014, SA's tourism trade balance was positive, meaning that more money came into the country as a result of tourism than what flowed from the country due to tourism;

The National Tourism Sector Strategy (2011) emphasises that the tourism is one of the largest sources of employment in SA and has a very high usage of unskilled labour. This sector has grown considerably since the first democratic elections in 1994. The tourism sector is not only a multifaceted industry that contributes to a variety of economic sectors but also as a labour-intensive industry with the capacity to create jobs (National Tourism Sector Strategy, 2011).

### **Tourism indicators**

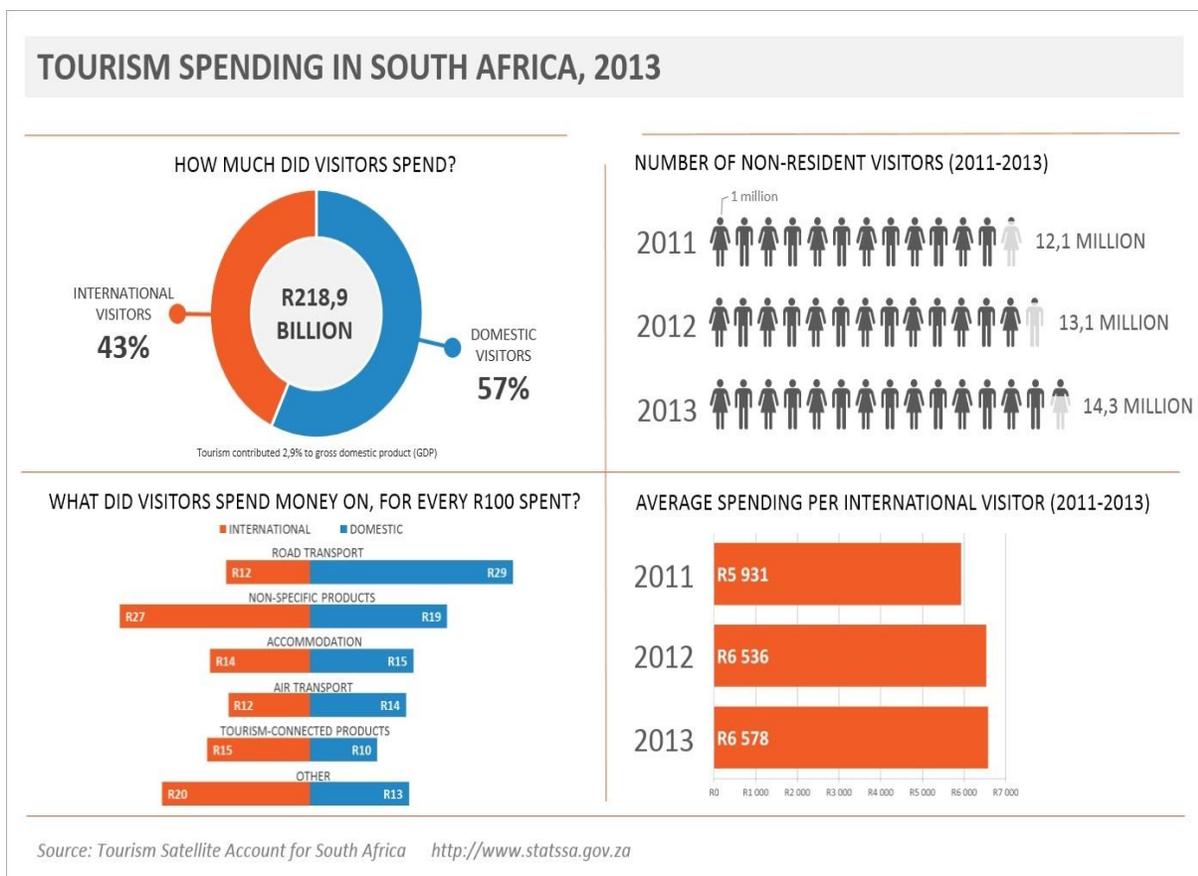
Due to its contribution to the economy as aforementioned, it is essential to outline the tourism indicators. The main indicators include:

- Number of foreign arrivals;
- Number of domestic trips taken;
- Amount spend per foreign tourist; and
- Amount spend per domestic tourist

However, there are other indirect variables that drive tourism for both domestic and foreign purposes. Interestingly, research has indicated that tourism has matured as an important contributor to SA economy over the past decade. Most importantly, domestic tourism remains the largest contributor to the economic value of tourism in the South African economy. The New Growth Plan (National Tourism Sector Strategy, 2011) identifies tourism as one of the core pillars of growth. The South African government acknowledges the value of tourism as an important contributor of economic development. Consequently, the Ministry of Tourism was established in 2009 as stand-alone ministry to administer and prioritise the tourism industry. This indicates that the industry has grown in stature and is being taken seriously by government. SA maintained the highest growth in tourism's GDP contribution, at 13%, compared to Australia's 12% despite that country's low tourist volumes Tourism Levy South Africa (2015).



**Figure 3: Tourism spending**



Source: Statistics South Africa

Figure 3 shows tourism spending in SA and as clearly depicted the sector plays a pivotal role in the country's development. As clearly depicted, domestic visitors contributed 57% (124,7 billion) of total tourism spend in 2013 while international visitors contributed 43% (R94,2 billion). Total tourism spend in 2013 was R218,9 billion, a rise of 9,7 billion in 2012 (Statistics South Africa, 2015).

### The Carbon tax conundrum: Response of the other countries

Various countries have introduced carbon tax and these include China, Japan, India, Australia, South Korea, Taiwan and Finland (Styan, 2011). The intention was to curb the pollution and GHG. The Ministry of Finance in China has proposed to introduce a carbon tax from 2012 or 2013, based on carbon dioxide output from hydrocarbon fuel sources such as oil and coal. On the other hand, Japan introduced carbon tax in October 2012 with the goal to take action on mitigating dangerous climate change. The Japanese government plans to use the revenues generated from this tax to finance clean energy and energy saving projects.

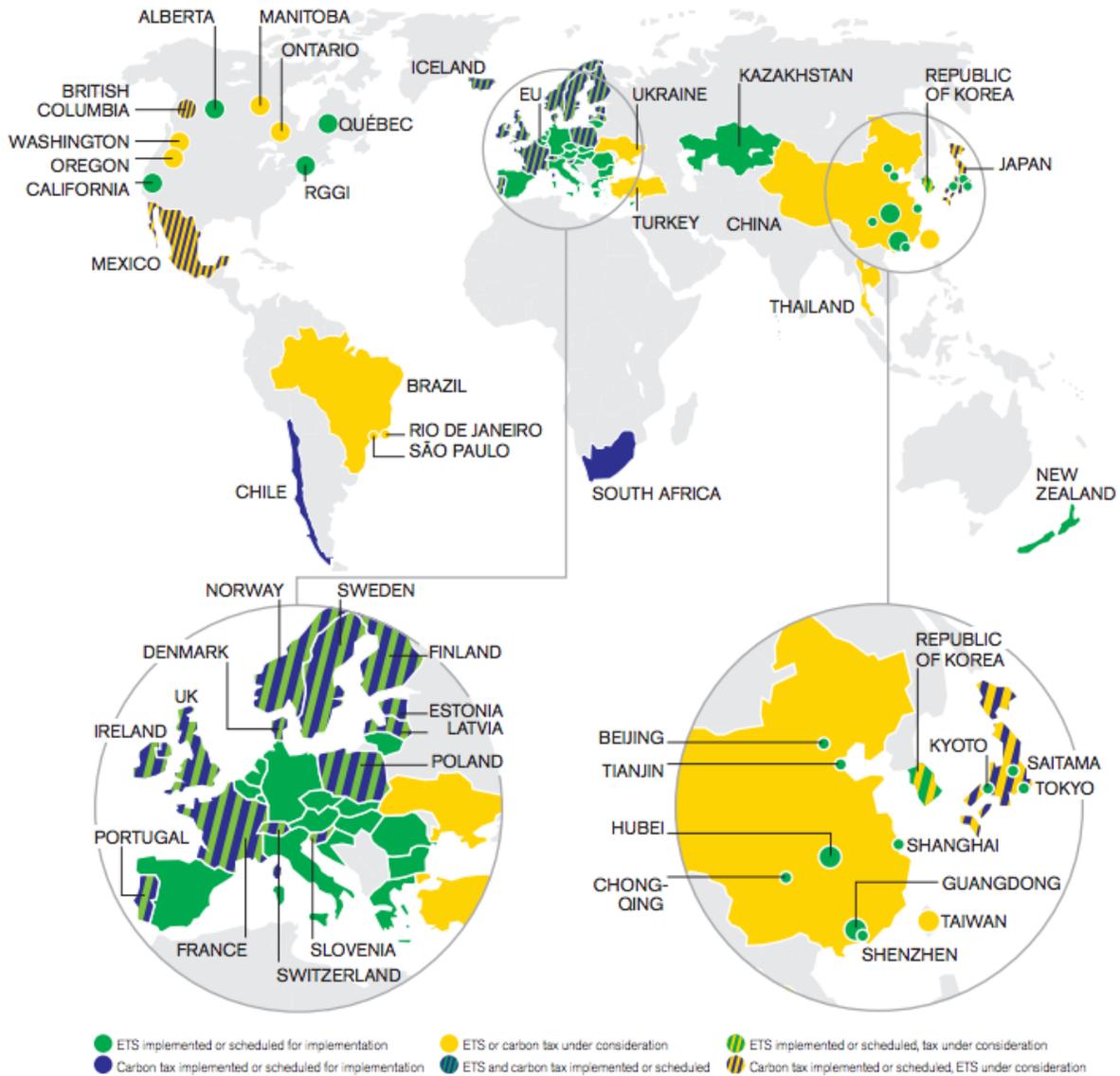
In July 2010, India introduced a nationwide carbon tax of 50 rupees (R10.31) per metric tonne of coal both produced and imported into India. In a budget speech in 2014, the Finance Minister,



Arun Jaitley increased the price to 100 rupees (R20.61) per metric tonne. In India coal is used to power more than half of the country's electricity generation. In Australia, for instance carbon tax was scrapped as it was deemed as an instrument taking government backwards. Furthermore, in Canada a debate ensues with government because citizens want this form of tax to be eliminated.

#### Figure 4: Where is Carbon Taxed?

Figure 4 Overview of existing, emerging, and potential regional, national, and subnational carbon pricing instruments (ETS and tax)



Source: World Bank

Figure 4 shows different countries of the world where carbon tax is implemented. On the other



hand, it shows countries that are still contemplating on introducing it.

## **Methodology**

The research design used for the study was exploratory research. According to Veal (2006) exploratory research seeks to discover, describe or map patterns of behaviour in areas or activities which have not previously been studied. The author advocates that explanation of what is discovered, described or mapped is often left until later or to other researchers. Similarly, Dietterich (2007) highlights that the aim of exploratory research is to identify new tasks - tasks that cannot be solved by existing methods. Trochim (2006) stresses that research design provides the glue that holds the research project together. The author further outlines that a design is used to structure the research, show how all of the major parts of the research project that is the samples or groups, measures, treatments or programs, and methods of assignment, work together to try to address the central research questions.

## **Sampling**

A closed and open-ended questionnaire was designed and companies were randomly selected. Additionally, the sampling method used for the study was probability sampling. Reinard (1998) suggests that in any field of scholarly research, researchers must set up a process that assures different members of a population have an equal chance of selection. This allows researchers to draw some general conclusions beyond those people included in the study. Another reason for probability sampling is the need to eliminate any possible research bias.

## **Population**

Polit and Hungler (1999) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this paper the population comprised of South African companies that were directly indirectly affected by carbon tax.

## **Questionnaire**

Questionnaires were used to as the primary source of data, as they assisted the researcher in getting a larger number of responses. The questionnaire comprised of both close/restricted questions and open/unrestricted questions. Close questions sought objective responses and this has been confirmed by Lovell and Lawson (1970) where they showed that close questions keep a participant on the subject matter or focused.

## **Pilot study**

Thomas (2004) explains that pilot study forms an integral part of the research process. Its function is the exact formulation of the research problem and a tentative planning of the modus operandi and range of the investigation. On the other hand, New Dictionary of Social Work (1995) in Thomas (2004) defines a pilot study as the process whereby the research design for a prospective survey is tested.



In the case of this research, the pilot study was intended to pre-test questionnaires, and which was done. Its purpose was to:

- Assess the questionnaires' relevance and completeness; and
- Check the feasibility of the investigation by looking at subjects or participants available for interview and their willingness to participate.

The pilot study helped to prepare well for data collection. Furthermore, it helped to review some of the questions that were asked by which later had to be rectified.

### **Primary data sources**

Primary data sources according to Rojo (2007) are considered as the collection of facts that are gathered from the original sources and are collected especially for the research problem. Quantitative research, which covers the information collected directly from people through questionnaires or qualitative research, which covers the information collected directly from people through interviews. In this study, interviews were conducted so as to get first-hand information from organisations that are either directly or indirectly affected by the proposed carbon tax.

### **Secondary data sources**

Rojo (2007) defines secondary data as those sources which were written or used by other writers. In this case, secondary data sources such as books, published research works, newspaper reports were used. Journal articles, maps and internet were used as well. All the information gathered on web pages were also considered as secondary data. As for this study, more data was collected through the use of journal article, policy briefs, monographs etc.

### **Validity and Reliability**

Validity is defined as a measure of truth or falsity of the data obtained through using the research instrument. It is classified as internal and external validity of the measuring instrument (Burns & Grove, 2001). In this study validity refers to the companies that were interviewed in order to find out about the implications of the proposed carbon tax. In a similar vein, Polit and Hungler, (1999), describe reliability as the degree of consistency with which the instrument measures an attribute. It further refers to the extent to which independent administration of the same instrument yields the same results under comparable conditions (De Vos, 1998). In ensuring reliability in this study the responses obtained through the companies interviewed analyzed, they were then scored independently to check correlation.

### **Discussion based on the research results**

Understanding carbon tax is important for countries that intend to implement it. This will enable countries to weigh the advantages and disadvantages of implementing carbon tax. Approximately, 86% of the companies have an understanding of what carbon tax is. However, most (70%) did not agree with government's plans of going ahead with the carbon tax. 60% of companies were satisfied with the consultation process they were not in favour of implementing carbon tax. Contrary, there seems to be an overwhelming feeling that should carbon tax be implemented, it could potentially hamper the tourism industry. It was interesting to note that, 28%



respondents were aware that SA needs to implement carbon tax because of its climate change commitments. From the results presented, it is evident that the SA government has to devise other alternatives instead of proceeding with this form of tax. After having investigated as to what companies think would be the implications of carbon tax. The result showed that 70% of the respondents were not satisfied with the proposed carbon tax. Seemingly, the findings suggest that South African government must not proceed with the implementation of carbon tax. The study further elucidates that the stakeholders are not in favour of implementing this type of tax. Furthermore, as a developing country SA cannot afford to impose other forms taxes, while there are triple threat challenges: unemployment, poverty and inequality. As mentioned earlier, SA is one of the most unequal countries in the world.

## **Recommendations**

This paper provides a solid foundation whereby the study could be used by both the tourism industry (national, provincial and local) and for further research on carbon tax. This would create the relevance in the context SA where there is a dearth of research in the area carbon tax. Implementation of carbon tax is one of SA's government commitments in alleviating climate change. As such, it has to be borne in mind that the tourism sector in SA is a priority sector. The NDT must engage with relevant stakeholders with a view that tourism plays an influential role in enhancing the country's GDP. The tourism sector must be aware that should this form be implemented, the industry adverse effect resulting in job losses. As aforementioned, there is paucity of information regarding carbon tax in SA. Therefore, it is recommended that further research be conducted in order to better comprehend the dynamics of carbon tax within the context of tourism developing economy. Furthermore, this will enable researchers to conduct longitudinal studies, including those in the tourism industry. The Government of SA also needs to go on a fact-finding mission to uncover why carbon tax failed in countries such as Australia and how this could possibly affect SA. Additionally, the government must ask itself that if carbon tax failed in Australia, is SA ready for it considering the fact that there are other socio-economic challenges the country is facing which include but not limited to unemployment, poverty and inequality. These challenges could potentially increase the Gini-coefficient within the South African context as a developing country.

## **Conclusion**

As one of the most world's most unequal countries in the world, SA needs to focus on key priorities. These include alleviating poverty, unemployment and inequality. It is therefore important for South African government to be mindful of its priorities. Tourism is a priority in South Africa. Moreover, it has been a missed opportunity hence government has to ensure nothing has an adverse impact in the sector. As aforementioned, this form of tax failed in Australia and Canada is contemplating eliminating it. A tax of this magnitude in a developing country like SA will not take the country forward. Government must be cognisant that of tourism sector's contribution to employment.



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