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# Is It Time for a Multilateral Voluntary Carbon Offset Regulatory Agency?

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## **Author's contribution**

*The sole author designed, analyzed and interpreted and prepared the manuscript.*

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## **ABSTRACT**

The aim of this paper is to identify the problem of dubious or fake Offset projects in the voluntary carbon market. Using primary data gotten from questionnaires sent out to 190 respondents in 2016, with the aid of descriptive analysis the results show overwhelmingly evidence that the issue of dubious Offsets is a real impediment to the deepening of the voluntary carbon market for which urgent action is needed. The paper recommends a multilateral type public regulator to sanitize the role of existing private regulators (auditors). This was supported by the views of the respondents, as it will strengthen the business motive – environmental sustainability model for a market approach towards reducing global Green House Gases emission levels.

*Keywords: Voluntary carbon market; dubious offsets; regulation; information asymmetry; standards.*

**JEL classification:** L51, Q54, Q58.

## **1. INTRODUCTION**

That nations need to reduce Green House Gases (GHGs) according to overwhelming scientific

findings cannot be overemphasized [1]. This demand urgent action as evidences abound of rising starvation, migrations and even wars due to toxic fresh drinking water sources and arable

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lands [2]. Galvanizing consensus by the developed world on mandatory carbon dioxide (CO<sub>2</sub>) targets to less than 2 degrees Celsius (or less than 1990 levels) has remained elusive for more than two decades since Kyoto. Reports have even shown that CO<sub>2</sub> levels have even increased during this period of long horse-trading [3]. In justifying this lack of consensus, some have even argued that first world countries like the U.S and Canada are right in their stands not to ratify existing protocols because emerging countries like China and India has overtime grown to become heavy polluters as well for which any agreeable targets must include them [4].

Seemingly, apart from this ratification protecting the environment, it also has consequences on national economic growth and development. While others worry that the over 'commodification' of CO<sub>2</sub> into credits and complex financial instruments like derivatives, futures and swaps will again slip through the fingers of regulators like the incidence of the 2008 Great Recession or even manipulated like the London interbank offered rate [5]. Others fear the surreptitious role of big financial corporations and multinationals because their heavy influence on lobbyists and political parties will continue to stall its global political support process if carbon mitigation is left in their hands. Notwithstanding, can the world afford more carbon mitigation conferences with all its motions and no tangible movement? It is time global leaders strengthen and take seriously voluntary carbon mitigation models especially in carbon offsetting – which is a way to setup projects (often in a different location) to reduce GHG emissions of the initial polluting activity. Its projects range from forest renewal projects to providing social amenities and household appliances that uses renewable energy e.g. solar electricity, fuel-efficient cooking stoves and the likes.

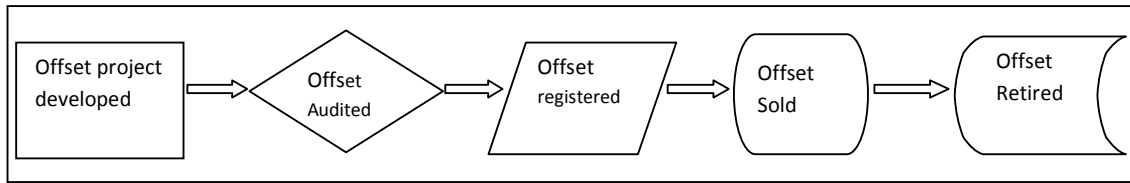
### 1.1 A Budding Industry

According to Forest Trends Ecosystem Market Place [6] report, cumulative expenditures in voluntary offset projects in the last decade were US\$4.6 billion (about 0.99 BtCO<sub>2</sub>e volumes) in solutions outside the UN frameworks. The current voluntary carbon offset (VCO) verification, auditing and validation is controlled by third-party Standard and certification outfits (hereafter called Standards) a type of private

sector solution for which they developed 98% of Carbon Offsets transacted in 2015 because buyers demanded certification as a prerequisite to making a purchase [6]. An illustration is given in Fig. 1 of the linkages or value chain of the global Carbon Offset industry. It shows the transition from Offset project development to its retirement after an effective sale. However, this global VCO value chain system is not without its early stage problems. A major problem is that buyers who wish to use the services of these Standards complain of a lack of trust, legitimacy issues and even point to evidences of perverse incentives [7]. Furthermore, conflict of interest arises being that Standards can approve and certify dubious Offsets, after all it is the same project developers that pay them [8]. Furthermore, there are risks in domiciling registries with Standards making tracking and reporting of carbon activities difficult in the present due to fragmented registries and in the future, as these private outfits may cease to be a 'going concern' or windup. This creates serious problem whereby accessing historical data is almost nonexistent for global warming research. Again, there is the grave risk of multiple trades and double counting of Offset projects due to a lack of central clearinghouse for registries.

### 1.2 The Problem

The above listed anomalies chronicle the incidence of 'fake' or 'dubious' Offsets in the market. This creates enormous transaction costs for offset buyers in differentiating fake from genuine Offsets. Of recent, this transaction costs is the more reason the offset market has been a monopsony [9,6]. Dubious Offsets though drive down the market prices of carbon will hamper liquidity in the market by increasing unsold portfolios. Thus, too low a price does not penalize emitters instead it aggravates CO<sub>2</sub> emissions levels. Consequently, in seeking to establish a public sector regulator care should be taken not to stifle the progress achieved thus far by adding a layer of transaction cost. It should be noted that the VCO market has created a niche for new and micro projects not covered in the mandatory markets or would have been too cumbersome to standardize using compliance methodologies. So far, Standards have shown to develop expertise by being project and location specific. This experimentation and innovation are what ought to be preserved.



**Fig. 1. A flowchart of voluntary carbon offset industry**

## 2. RELATED LITERATURE

The debate for or against regulation is an age long one. Initially, the traditional approach towards business regulation was about sanctioning prices and market entry criteria often called economic regulation. In recent times, government regulation has evolved towards setting production procedures and minimum product standards. Still this is not without criticism as regulation is seen to court red tape, become inflexible to technological advancement and overtime to be easily hijacked by special interests [10]. Tengs et al. [11] examined the cost effectiveness of regulation on key US agencies in what they called median cost per life saved and found that US Environmental Protection Agency costs estimate was 330 times that of the least cost agency – Federal Aviation Administration.

Though regulation can be enormously expensive however it has contributed to environmental quality and economic prosperity in the longrun in the case of environment regulation. Overtime, policymakers have appreciated this linkage. The role played by Standards in the VCO market is analogous to Best Western Motels (hospitality industry) and Underwriters Laboratories (electrical equipment industry) in the U.S [12]. This then was a market type solution towards the asymmetry information problem (market failure). Notwithstanding, this approach does not guarantee that buyers cannot be cheated or transactions rigged thereby creating a potential role for government.

## 3. METHODOLOGY

The instrument consisted of survey questionnaires which were used to interview 100 respondents via email in a nominal data type according to existing literature. To get sufficient participation from the 4 categories of respondents, only 6 main questions were asked and emails were sent out by February 2016 with persistent reminders until final results were collated by November 2016. Apart from the long timeframe given to answer questions,

respondents were assured of classified identity, which greatly contributed in their participation in the survey. In all, 80 respondents successfully returned their questionnaires; this resulted in a participation rate of 80%. The study was limited to participants in the global VCO industry that had a verified email and a snowball sampling was used to identify participants.

A descriptive type analysis was used involving percentages and frequencies to focus on the answers or choices of the categories.

## 4. DISCUSSION OF RESULTS

The full breakdown of the frequency distribution of the respondents and summary of survey results can be found in the Appendix. Four categories of respondents were surveyed namely; Offset developers, brokers, buyers and Standards. After results from the questionnaires were collated and analyzed, as shown in Fig. 2 it was found overwhelmingly that 90% of offset developers, 95% of offset brokers (middlemen) and 100% of offset buyers all alluded to the fact that they made or received complaints of offset projects being dubious or fictitious. Only when Standards were interviewed did about 50% agree to receiving complaints of dubious Offsets while 40% of the respondents disagreed.

Going further into the issue of mistrusts in the market, respondents were asked if they were complaints that the market could be rigged to the disadvantage of buyers; 80% of Offset developers, 90% of brokers and 90% of buyers respectively asserted to this fact as shown in Fig. 3. While for the Standards, the reply was not so emphatic being only half of the respondents that agreed.

When asked the type of public sector regulation they favored, 95% of Offset developers, 80% of Offset brokers, 80% of Offset buyers and 30% of auditors want a multilateral agency type regulator respectively. The results in Fig. 4. shows why a regional or national regulator will not be useful because the voluntary carbon market is global in

nature whereby most Offset projects are sited in the Global South (developing countries) while their buyers are in the Global North (developed

countries) and the markets there are well developed complete with trading floors and exchanges.

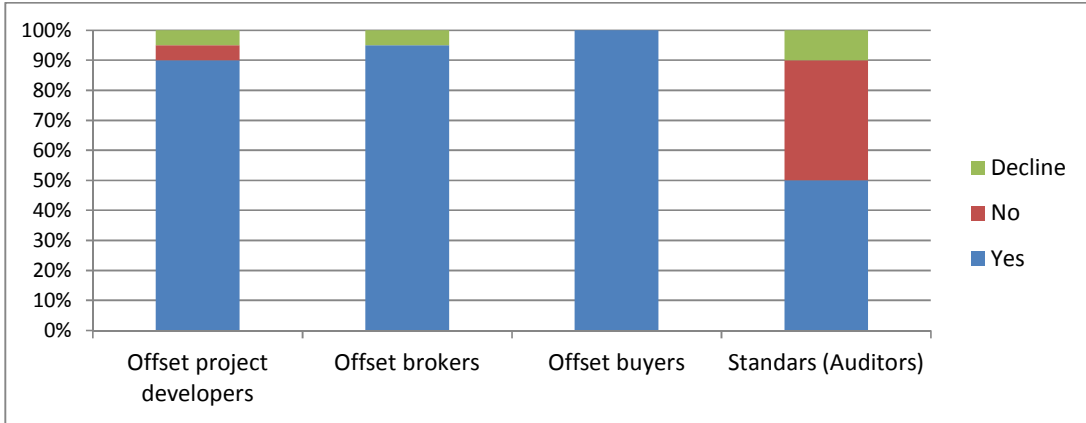


Fig. 2. Complaints of offset projects being dubious

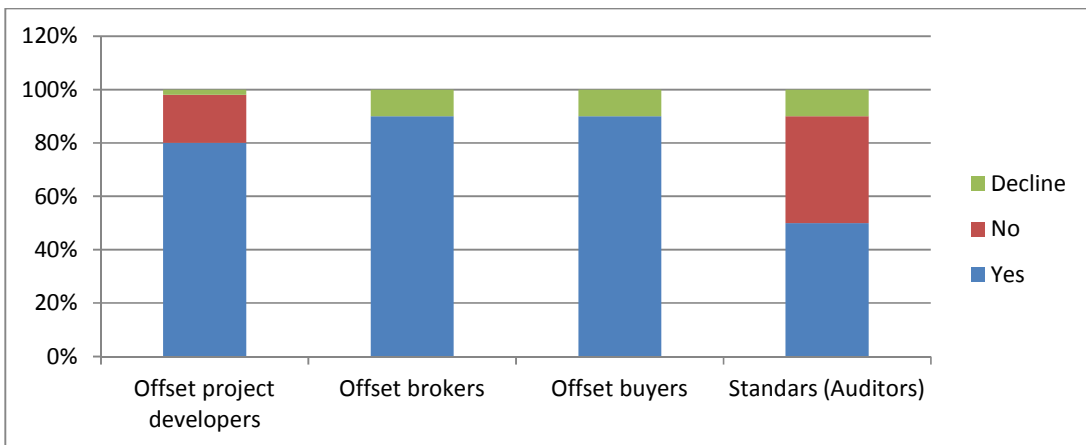


Fig. 3. Complaint of rigged market

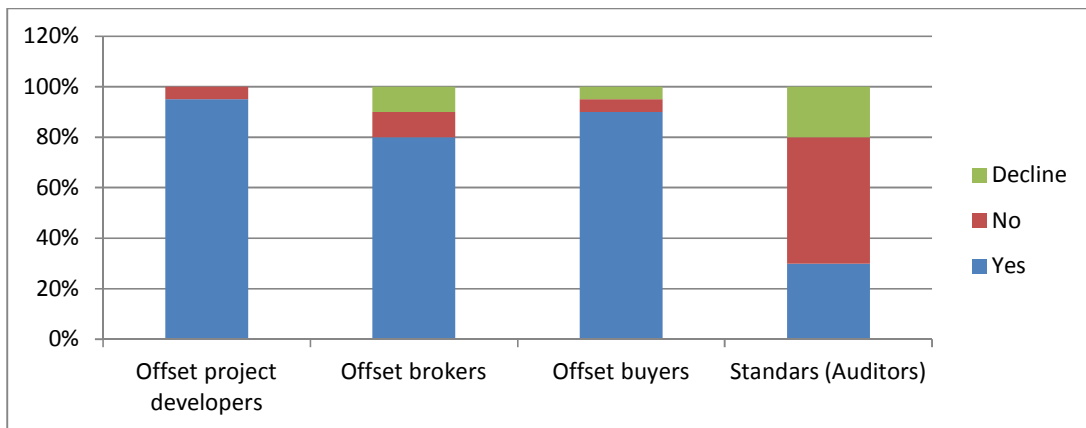
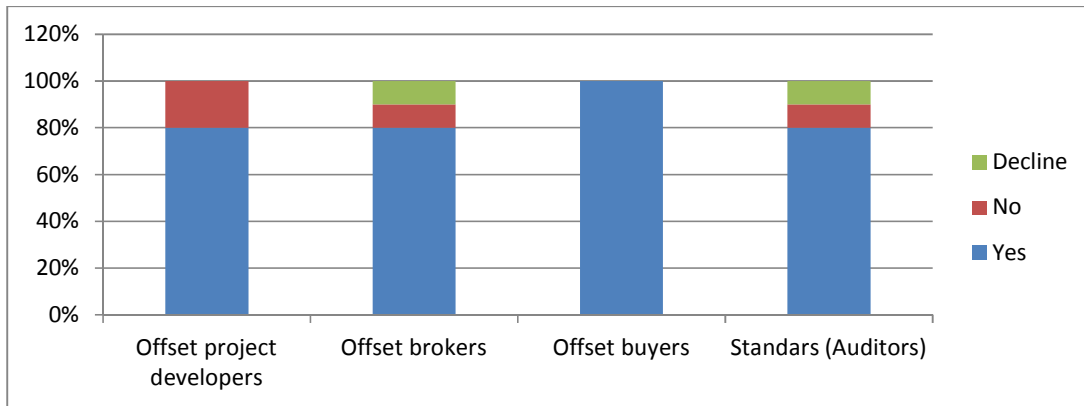


Fig. 4. In favor of a multilateral regulator



**Fig. 5. Complaint of offset quality affecting sales**

The issue of a public layer of regulation cannot be overemphasized as it will further deepen the market as agreed by respondents that the current situation whereby Offset developers have amassed project portfolios waiting to be offloaded can be reduced if more trust is built into the market. 80% of developers, auditors and brokers all supply-siders, respectively all agreed to this assertion as indicated in Fig. 5. Meanwhile, Offset buyers were 100% in support that regulation will boost purchases.

## 5. POLICY RECOMMENDATIONS

To this end, since there is overwhelming acceptance of a global agency, its objectives should include:

- 1) To approve and certify Standards. Before Standards are allowed to operate, they must be given a clean bill of approval by the agency that they have the requisite resources to operate as auditors. This justifies that an approved certificate of operation gives credence to whatsoever the Standard claims to audit. This must not be seen as a layer of transaction cost, therefore the certificate must be free of charge.
- 2) To draft a code of ethics/conducts to be signed by all existing Standards whereby auditors are investigated on complaints of dubious projects. If found wanting the agency will heavily sanction and fine those that contravene best practices.
- 3) Working with all existing registries (private and public) to track and document issued and retired Offsets. This is important in the case that if any existing registry ceases operation, its data should not cease with it. It also aids centralization of information.

It is imperative that this agency's work has to be thorough and technically based; therefore, it must be manned by relevant experts complete with modern equipments. In no time, it is believed that the work of this regulator will become popular among consumers, as individuals will also see the need to own offsets. It is the hope that the renewed trust in the industry will cause an explosion in the demand for Offsets by businesses especially as a marketing tool to get an edge over competitors and garner consumer goodwill, as businesses know what it is to lose consumers goodwill. This recommendation will take the business and environmental relationship from a mere corporate social responsibility to a serious investment decision.

## 6. CONCLUSION

There is no need perturbing whether investment or production can be decoupled from environment conservation as seen on the lack of consensus among rich countries. The right policies like setting up a multilateral VCO regulatory agency can make business motives be tandem with environmental sustainability. The business motive – environmental sustainability model (exemplified by the VCO industry) certainly proves that the power for real change still resides in the ordinary people who flock markets and malls and in their shopping preferences buy products that support VCOs. In these ordinary people lay the power to shape humanity's future and eventually protect mother earth. This power must not be taken for granted.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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**APPENDIX**

**Frequency Distribution from Survey**

<b>Questions:</b>	<b>Respondents; Offset project developers</b>
Do brokers and buyers complain of offset projects not being real or dubious?	Yes – 90% No – 5% Decline – 5%
Do buyers complain that the market could be rigged to their disadvantage?	Yes – 80% No – 18 % Decline – 2%
Is there currently a method to sanction erring Standards?	Yes – 0% No – 100% Decline – 0%
Would you favour a multilateral industry regulatory agency?	Yes – 95% No – 5% Decline – 0%
Would you favour a national or regional industry regulatory agency?	Yes – 5% No – 90 % Decline – 5%
Do you think the complaints about the quality of offsets might affect the volume of offset projects sales?	Yes – 80% No – 20% Decline – 0%
<b>Questions:</b>	<b>Respondents; offset brokers</b>
Do buyers complain of offset projects not being real or dubious?	Yes – 95% No – 0% Decline – 5%
Do buyers complain that the market could be rigged to their disadvantage?	Yes – 90% No – 0% Decline – 10%
Is there currently a method to sanction erring Standards?	Yes – 0% No – 90% Decline – 10%
Would you favour a multilateral industry regulatory agency?	Yes – 80% No – 10% Decline – 10%
Would you favour a national or regional industry regulatory agency?	Yes – 10% No – 90% Decline – 0%
Do you think the complaints about the quality of offsets might affect the volume of offset projects sales?	Yes – 80% No – 10% Decline – 10%
<b>Questions:</b>	<b>Respondents; offset buyers</b>
Have you ever had cause to worry of offset projects not being real or dubious?	Yes – 100% No – 0% Decline – 0%
Do you worry that the market could be rigged to you disadvantage?	Yes – 90% No – 0% Decline – 10%
Is there currently a method to sanction erring Standards?	Yes – 0% No – 50% Decline – 50%
Would you favour a multilateral industry regulatory agency?	Yes – 90% No – 5% Decline – 5%

Would you favour a national or regional industry regulatory agency?	Yes – 10% No – 80% Decline – 10%
Do you think the complaints about the quality of offsets might affect the volume of offset projects sales?	Yes – 100% No – 0% Decline – 0%
<b>Questions:</b>	<b>Respondents; Offset standards auditors</b>
Do buyers complain of offset projects not being real or dubious?	Yes – 50% No – 40% Decline – 10%
Do buyers complain that the market could be rigged to their disadvantage?	Yes – 50% No – 40% Decline – 10%
Is there currently a method to sanction erring Standards?	Yes – 0% No – 60% Decline – 40%
Would you favour a multilateral industry regulatory agency?	Yes – 30% No – 50% Decline – 20%
Would you favour a national or regional industry regulatory agency?	Yes – 50% No – 50% Decline – 0%
Do you think the complaints about the quality of offsets might affect the volume of offset projects sales?	Yes – 80% No – 10% Decline – 10%

Source: Author's Questionnaire, 2016

#### Distribution of respondents

Offset project developers	North America - 15, South America - 7, Asia – 5, Africa - 3, Europe - 10	Total – 40
Offset brokers	North America - 9, South America - 5, Asia – 5, Africa - 3, Europe - 8	Total – 30
Offset buyers	North America - 5, South America - 4, Asia – 4, Africa - 2, Europe - 5	Total – 20
Offset standards	Global - 10	Total – 10
<b>Grand Total</b>		<b>100</b>

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