

CLIMATE CHANGE AND GLOBAL WARMING

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Abstract

An increase in the concentration of CO₂ in the atmosphere is one of the major causes of air pollution. Scientists believe that an increase in the amount of CO₂ and mélange gases are the two main contributors to global warming. Global warming refers to the unnatural increase in the Earth's surface temperature. This concept can be checked by green house effect. the thickening to earth atmosphere because of presence of increased CO₂ and other green house gases is called green house effects. Carbon dioxide, (CO₂), a colourless gas having a faint sharp odour and a sour taste. Exposure to CO₂ can produce a variety of health effects. These include headache, dizziness, restlessness, a tingling or pins or needles feeling, difficult breathing, sweating, tiredness, increased heart rate, elevated blood pressure, Coma, asphyxia and convulsion. Carbon dioxide (CO₂) is an important heat-trapping gas, or green house gas, that comes from the extraction and burning of fossil fuels (such as coal, oil and natural gas), from wildfires, and from natural processess like volcanic eruptions. Carbon dioxide in the atmosphere warms the planet, causing climate change. Human activities have raised the atmosphere's carbon dioxide content by 50% in less than 200 years. By adding more carbon dioxide to the atmosphere, people are supercharging the natural greenhouse effect, cauing global temperature to rise. Rising carbon dioxide concentrtraions increase plant growth. The carbon removal methods include. (a) Natural strategies like tree restoration and agricultural soil managment. (b) High-tech strategies like direct air capture and enhanced mineralization. (c) Hybrid strategies like enhanced root crops, bioenergy with carbon capture and storage, and ocean-based carbon removal.

Keyword: Climate change, Global warning, Green house effect, Environmental innovations and Ecological standard

Citation of article: Ndulue, L. A (2023). Climate Change and Estate Management International Journal of Public administration (IJOPAD), 2(1): 184-

Date submitted: 19/12/2022 Date accepted: January 23/02/ 2023 Date published: February 202

Introduction

Global warming and its ultimate consequence Climate Change (CC) today is a challenge that represents a dangerous environment for man, ecosystems and various species of this planet, which makes life difficult and endangers the planet. For this reason, it is urgent that urgent and precise measures be taken to combat this global phenomenon.

Several agreements and attempts are recognized at international level, to reduce their impacts, however, it is necessary that the efforts cover all geographical areas. Although, the hard work that is carried out from session to session in the field of environmental care should be recognized, the challenge of executing concrete measures for the different meetings at international level remains pending.

Climate change can be understood from an economic perspective, as the consequence of a global negative externality that is inherent to the current development style and that puts at risk a global public good such as the climate. Economic activities as a whole cause the emission of greenhouse gases into the atmosphere without this incurring any economic cost for those responsible for such emissions. This has generated the current phenomenon of global warming and, in turn, has created the United Nations Framework Convention on Climate Change to coordinate an international response action.

Climate change

There are several dates on climate change proposed by international entities. In this sense, the Euro-Mediterranean Center on Climate Change (2013) defines climate change as the “climate change attributed directly or indirectly to human activities that alter the composition of the world atmosphere, and which is added to the natural variability of the climate observed during comparable periods of time ». The Intergovernmental Panel on Climate Change (s.f.) - IPCC, defines it as:

Climate change, as understood in relation to the observations made, is due to internal changes in the climate system or the interaction between its components, or changes in external forcing due to natural causes or human activities.

In general, it is not possible to clearly determine to what extent each of these causes influences. In the IPCC climate change projections, the influence exerted on the climate by anthropogenic

increases in greenhouse gases and other factors related to human beings is usually taken into account. Next, the gases that generate the greenhouse effect are describe

Table 1. Greenhouse gases (GHG)

Gas description	Molecular formula
Carbon dioxide	CO ₂
Methane	CH ₄
Nitrous oxide	N ₂ O
Hydrofluorocarbons	HFC
Perfluorocarbons	PFC
Sulfur hexafluoride	SF ₆

Source: United Nations Organization (1998)

As a corollary, Vega (2008) states:

The economic system becomes one of the most powerful forces of those hidden behind the apparent rationality of our current civilization, but where environmental deterioration is increasingly evident and logically has a common origin: the relationship between civilization and the balance of the earth (p. 27).

Main entities and international agreements related to climate change

The tragic consequences of climate change - such as global warming, the increase in natural disasters, crop losses, the emergence of new pests and diseases, among others - resulted in increased awareness by non-governmental organizations, society, international organizations and governments. Given this situation, we can highlight the following entities and agreements:

United Nations Environment Program (UNEP)

This is a United Nations organization whose mission is to provide leadership and promote partnership in the care of the environment, through inspiration and information it allows peoples and nations to improve their quality of life without compromising that of future generations. Similarly, "it provides guidance and advice to governments in reducing greenhouse gas emissions

and preparing for the consequences of a changing climate" It also helped develop international agreements on climate change and conducts specialized studies on the global environmental issue.

World Meteorological Organization (WMO)

It is a specialized agency of the United Nations and is the authorized spokesperson for the state and behavior of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. WMO has 191 Member States and Territories (since January 1, 2013).

WMO (s.f.) states: *As time, climate and the water cycle do not know national boundaries, international cooperation worldwide is essential for the development of meteorology and operational hydrology, as well as for collecting the benefits derived from its application. WMO provides the framework in which this international cooperation takes place.*

Intergovernmental Panel on Climate Change

It is "a intergovernmental group of experts on climate change jointly established by the World Meteorological Organization (WMO) and the United Nations Environment Program" (UNEP) in 1988. It was ratified by the United Nations General Assembly through resolution 43/53. Its mission is to provide comprehensive scientific assessments of current scientific, technical and socio-economic information on the risk of climate change caused by human activities, its potential environmental and socio-economic consequences, and the possible options to adapt to these consequences or mitigate its effects.

Thousands of scientists and experts contribute voluntarily by writing and reviewing reports, which are in turn reviewed by representatives of all governments.

World Resources Institute

The World Resources Institute, known by its acronym in English as (WRI), is an independent, non-profit organization established in 1982. It has offices in the United States (Washington) and China (Bei-jing). The WRI focuses on the intersection of the environment and socio-economic development. The institution goes beyond research to put ideas into action. Based on this, it works globally with governments, businesses and civil society to create transformative solutions that protect the land and improve people's quality of life. Its main objectives are oriented to climate change, energy, food, forests, water and cities and transport

Montreal Protocol

According to the Kyoto Protocol of 1998, the Montreal Protocol is understood as the international treaty designed to protect the ozone layer, by reducing the production and consumption of numerous substances that have been studied that react with the Ozone and are believed to be responsible for the depletion of the layer. This was approved in Montreal on September 16, 1987 and subsequently adjusted and amended. Thereafter, it entered into force on January 1, 1989. The first meeting of the parties was held in Helsinki in May 1989.

Since then, the document has been revised several times, in 1990 (London), in 1991 (Nairobi), in 1992 (Copenhagen), in 1993 (Bangkok), in 1995 (Vienna), in 1997 (Montreal) and in 1999 (Beijing). It is believed that if all countries met the objectives proposed within the treaty, the ozone layer could be recovered by 2050 (United Nations Organization, 1998).

Kyoto Protocol on Climate Change

The Kyoto Protocol "on climate change is a protocol of the United Nations Framework Convention on Climate Change (UNFCCC), and an international agreement that aims to reduce the emissions of six greenhouse gases" (Organization of the United Nations, 1998, p. 3). Article 3 of the Kyoto Protocol established that

The Parties included in Annex I shall ensure, individually or jointly, that their aggregate anthropogenic emissions, expressed in carbon dioxide equivalent, of the greenhouse gases listed in Annex A do not exceed the amounts attributed to them, calculated on the basis of the quantified commitments to limit and reduce the emissions recorded for them in Annex B and in accordance with the provisions of this article, with a view to reducing the total of their emissions of these gases to a lower level in no less than 5% to 1990 in the commitment period between 2008 and 2012 (United Nations Organization, 1998, p. 3).

The protocol was initially adopted on December 11, 1997 in Kyoto, Japan, but did not enter into force until February 16, 2005 (United Nations Organization, 1998).

Climate change, natural disasters and economic losses

Climate change exerts direct and indirect influence on the macroeconomic indicators of the countries. According to Artica et al. (2010)

The increase in temperatures and the rise in sea level would cause flooding in different regions of the planet such as the small islands of the Caribbean and the Pacific, and in large coastal cities

such as Tokyo, New York, Cairo and London. In the same way, droughts can occur due to extreme changes in microclimates and these accentuate losses in agricultural productions, as well as increase the displacement of people, reduce GDP and increase poverty in the affected region (p. 26) .

This is a reality that has been taking place gradually. However, politicians in industrialized nations and their populations have become more sensitized, and have taken more determined actions to solve the problem.

Table 2. Sample of disasters and accumulated economic losses

Name of disaster	City and / or country	Estimated losses (USD)	Year happened
Hurricane Katrina	New Orleans (USA)	60 billion	2005
Earthquake	Pisco (Peru)	1300 million	2007
Earthquake	Santiago, Chile)	30.00 billion	2010
Tsunami	Sri Lanka	13 billion	2004
Earthquake	Haiti	8000 million	2010
Drought	(Argentina)	500 million	2012-2013

According to the Office of the Strategy for Disaster Reduction (2013), a UN agency, in 2012, economic losses due to disasters were the highest in history: they reached US \$ 138 billion. The “most affected region was America, which registered 63% of these damages, mainly due to Hurricane Sandy and droughts” (Office of the Strategy for Disaster Reduction, 2013).

Regarding the Andean Community of Nations, it maintains, with respect to the impact of climate change in the subregion, that «by 2025, economic damage in the countries of the Andean Community would mean an approximate loss of 30,000 million dollars a year equivalent to 4.5% of GDP, being able to compromise the development potential of all countries in the region »(2008, p. 22). These figures are alarming and deserve, from now on, to be considered individually and collectively by member countries, since it is much more effective to design prevention strategies than to face a decline in the GDP of the countries of the subregion, which produces an increase in poverty levels.

Climate change from the point of view of consumers

In general, the perception and awareness of consumers about the effects of climate change on the lives of humanity are closely correlated with the level of economic and social development achieved by each country. For example, Prochile takes into account the development of sales of organic products in Germany and, from that, mentions that "Currently Germany has established itself as the most developed market with the greatest increase in demand for this sector with a 27% share of total sales of organic products in Europe »(2007, p. 6). This goes hand in hand with the fact that European consumers are especially sensitive to the impact that the products they consume have on the environment. In the Eurobarometer survey, it was shown that a little more than 8 out of 10 EU citizens consider that the impact of a product on the environment is an important element when deciding which products to buy (34% "very important" and 49% "quite important »), Only 4% said that this is not important at all (2009, p. 5).

In a specific sense, and according to Kahle: "People frequently buy products that benefit the fulfillment of their values" (Kahle & Kennedy, 1989, p. 9). Regarding this, Rokeach (1973) states that values are beliefs that have a strong motivational component such as cognitive, affective and behavioral components. Instrumental values are motivating because idealized modes of behavior are related to those perceived to be instruments towards achieving the desired final objectives.

These last two authors help us to outline in a general way the behavior of the consumer. In this context, Mohd Suki (2013) argues that "The ecological behavior of consumers is related to consumer sensitivity, awareness and response to ecological concerns, environmental groups and ecologically healthy products such as organic food" (p .725).

From another angle, considering the case of Romanian consumers, Lubieniechi (2002) indicates that

The mentality of Romanian consumers has not been (deliberately) educated and directed towards the consumption of organic products, however, for different reasons, there is such a tendency, and certain aspects that make us believe that this trend can be successfully developed. Among the reasons for this behavior, they can talk about the awareness of the need to consume healthy, safe and quality products, the imitation of consumer behavior in the member countries of the European Community protects against the consequences of problems such as the disease called bovine

spongiform encephalopathy (mad cow disease). This position implies that education about the consumption of eco-logical products directly affects consumer behavior (p. 343).

In this sense, Tilikidou (2013) expresses that the environmental protection undoubtedly affects the quality of life. Understanding the behavior of consumers provides the necessary basis for the strategies of socially responsible companies. Public officials in charge of environmental protection programs need to increase the locus of control (a person's emotion about what determines the course of their life) and redefine people's attitudes, while eliminating their indifference towards environmental issues (p. 17).

From this, the author highlights the need to understand the effects of the environment on people's lives; On the part of companies, the priority of understanding consumer behavior and that politicians become aware of the environmental issue (Tilikidou, 2013). Around this issue, Riefer and Hamm (2011) argue that *considering the price of organic products, marketing strategies should include measures to remove price barriers for young consumers*. An experimental proposal for this could be the category of sweet products. For example, producers and traders could calculate relatively low margins for organic sweets that young people buy themselves, mainly (for example, chewing gum, jellies). Comparatively, higher margins could be planned for products that parents buy for their children (and themselves) when making their weekly purchases, such as breakfast cereals or spreads. In contrast to this, sweets that are mainly bought or bought by adults (for example, grandparents) and function as gifts for children for special occasions (for example, chocolate bars, Christmas products) could be positioned in the price segment more high.

All this implies a clear definition of the profile of the target audience and a deep knowledge of the consumer's motivation to buy. Gurau and Ranchhod (2005, p. 555) propose an interesting two-dimensional structure to measure the general attraction that ecological markets produce abroad.

Climate change from a business approach

Zutshi and Sohal (2003) point out that in the last decade we have witnessed that the meaning of the word environment acquires a new meaning and definition, incorporating the crucial eco-logical aspects. Thanks to the growing awareness of the community about accidents and environmental catastrophes and media coverage of issues such as Chernobyl, the Bhopal tragedy or simply the pollution generated by the manufacturing plants of our doors. Organizations have been forced to develop and implement 'natural resource saving strategies' if they want to survive in the market in

the long term. This trend can be found in all industrial sectors and countries, without exception (p. 133).

Now, large companies annually present their annual reports of social responsibility and sustainability, in which the importance of the environmental issue in business strategy is demonstrated. In the specific case of the world of private business, they can identify industrial production, services, commerce and mixed activities. Especially, industrial production or manufacturing is one of the activities most directly linked to climate change. On this point, Gutberlet (2000) argues that industrial production has contributed to the improvement of our quality of life. It is hard for most of us to imagine not having access to consumer goods that range from electronics, textiles, food and beverages to sophisticated means of transportation and communication. However, while consumption does not usually recognize the environmental costs involved because they are outsourced. The already disadvantaged public and private sectors of society have to bear the consequences of pollution and the loss of biodiversity, natural landscapes and cultural heritage. Manufacturing still depends mainly on the extraction of natural resources and much less on the use of recycled materials, is based on the availability of energy and water and frequently requires space, atmosphere, rivers and seas to absorb the waste that produce (p. 225).

On the other hand, Gilpin (2003, p. 201) gives us a good example of economic losses due to air pollution, under the following description:

- Costs for medical treatment of diseases due to contamination
- Decrease in income due to absenteeism
- Reduction of labor productivity
- Increased distribution costs due to low visibility
- Increase in artificial lighting costs
- Repair of damage to buildings and other structures
- Higher asset cleaning costs
- Losses due to damage to crops and ornamental vegetation
- Losses due to injuries to animals of economic importance
- Decrease in property value
- Additional manufacturing costs due to contamination from external sources
- Losses due to poor combustion of hydrocarbons

Duran (2007) argues that the approach of companies to environmental issues has been conditioned, above all, by the obligation to comply with environmental regulations and by the demand that companies have received from their immediate environment from the so-called pressure groups or stakeholders (p. 82).

This is confirmed by Robbins and Coulter (2010), who state that, as companies become 'greener', they often publish detailed reports on their environmental performance. Around 1500 companies around the world voluntarily report their efforts to promote environmental sustainability, with the guidelines developed by the Global Reporting Initiative (GRI) (p. 98).

In this context, in the face of regulation and environmental pollution, companies can adopt four possible positions:

a) Reactive posture. It refers to that company that faces environmental problems, without having planned them before, which demonstrates a zero sensitivity to environmental issues. In this case, the company could qualify as an organization with a socially non-responsible approach. An applicable example is reflected in the growth of informal mining in the Peruvian jungle, led by unscrupulous and anti-environmentalist characters.

b) Accommodative posture. It includes those companies that make decisions to comply with the legal regulations related to the environmental issue. Under this approach, companies show little environmental responsibility, as they aim to comply with laws, regulations, resolutions and other devices that are strictly legal in nature. An example of this approach is that the fulfillment of some ISO 14000 norm, due to the international market requirement.

c) Stance of the stakeholders. In this case, the company is oriented to meet the environmental demands of internal and external interest groups, such as employees, suppliers, consumers, among others. An example is the Hewlett Packard company, which develops various corporate environmental programs in its supply chain (suppliers), product design and recycling (customers and society), and work activities (employees and community).

d) Proactive posture. It refers to the situation in which the company anticipates or plans the environmental problems that could arise in its internal and external environment, through the implementation of actions that prevent its occurrence. Managers plan, organize, direct and control activities to actively promote environmental responsibility to the fullest extent. A good example is the Belgian company Ecover, manufacturer of ecological cleaning products in facilities, which has practically zero emissions and is considered as the first totally ecological factory in the world.

Evidently, assuming or adopting a particular environmental position is directly related to the values and organizational culture of companies.

Analyzing the context of how to assess the general attractiveness of ecological markets abroad, Gurau and Ranchhod (2005, p. 555) considered a Car-Tesian plane with two dimensions. On the axis of the abscissa, they put the ecological standards; and, in the axis of the ordinates, they placed the levels of demand. From this, they formulated four quadrants that guide decision making.

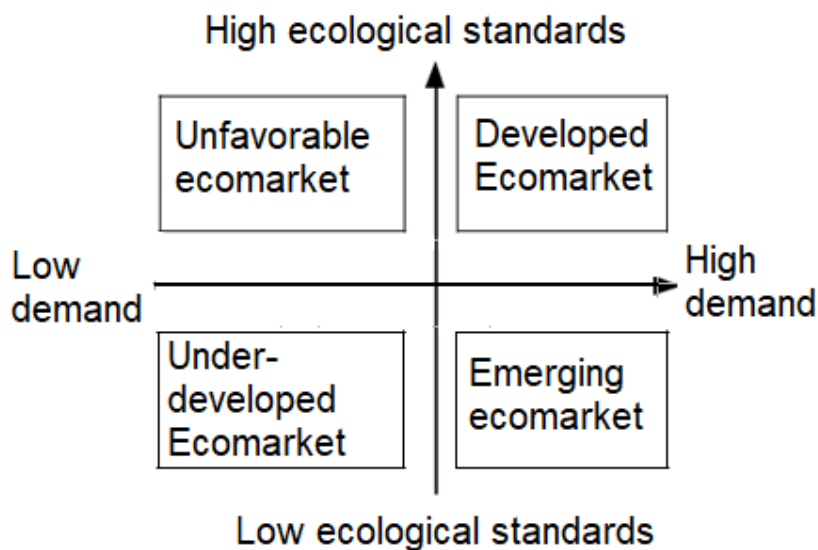


FIGURE 1. Two-dimensional structure to assess the general attractiveness of foreign ecological markets

SOURCE: Gurau and Ranchhod (2005).

Obviously, the most attractive markets are the developed ecological markets, because they combine the variables of high levels of demand with high ecological standards, which force companies to permanently improve their competitiveness. The only complicated thing could be a high intensity of competition. A good opportunity, too, is the emerging ecological markets, where low ecological standards are required and there are high levels of demand. It should be noted that unfavorable ecological markets are the least attractive due to the high level of environmental standards or norms that create income barriers and there are low levels of demand. A big question is underdeveloped markets, since there are low levels of demand and low ecological standards; This would require a lot of investment in sales and advertising, and low rates of return on investment could be obtained. The Management of a company can use, as part of its strategy, the selection of the eco-emergent market to place its products, given the existing potential.

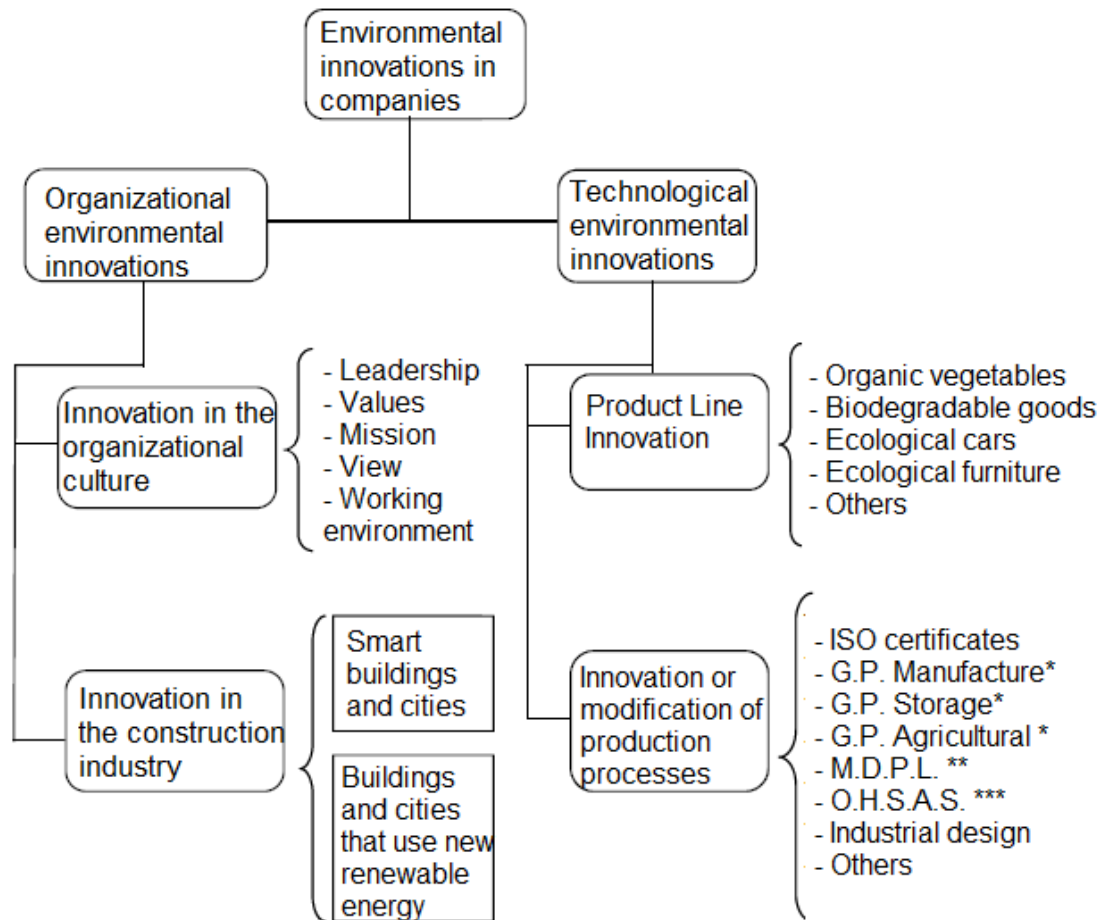
Environmental innovations in companies

Every company can plan, organize, implement and control environmental innovations. In this scheme, innovation is understood as the practical application of creativity that can be developed by members of senior management, middle management and other staff. Accordingly, Leszczynska (2002) states

The managers of the most developed countries are more aware of the needs of the organization area related to the protection of the environment in the company. These are, to a greater extent, support for ecological education and the formation of ecological teams, regardless of the verification of ecological performance (p. 1244).

This demonstrates the proactive attitude necessary in dealing with ecological business issues and favors the design of deliberate and emerging strategies.

From this, it follows the complexity that environmental innovations present; However, their implementation will contribute to mitigate global warming and foster entrepreneurship in new fields, which in turn supports the generation of jobs and the preservation of our planet in the long term. In this context, we can mention that the prioritization of environmental innovations can be part of a differentiation strategy to properly compete in the markets.



(*) GP = Good practices

(**) MDPL = Clean production mechanism

(***) OHSAS = Occupational Health and Safety Assessment Series

SOURCE: Adapted from Durán, 2007.

In parallel, environmental innovations should be correlated with the marketing approach. Along these lines, Paul and Rana (2012) explain marketers are willing to sell organic products, with the growing recognition of aspects such as the environment, naturopathy and the green world. Environmentally friendly products are gaining popularity among consumers because they are already more aware of the protection of their health and the environment. Marketers involved in sales of organic products have to segment their market scientifically to maximize market share (p. 412).

Environmental innovations can contribute to strengthening customer loyalty over time.

Relationship between international trade and climate change

Effects of trade on climate change According to Hill (2011),

In the last quarter of the century we witness accelerated changes in the world economy. Obstacles to the free movement of goods, services and capitals collapsed. The volume of international trade grew faster than world production, indicating that national economies were more closely integrated into a single and interdependent world economic system (p. 24).

Following that same line, Gligo (2001) states that The countries of the region seem to have fallen into a race to intensify their incorporation into world trade, through much larger international trade in both physical volumes and financial resources. All countries in the region have adopted this strategy as the basic pillar to propel their productive transformations. But it is necessary to review everything that this intensification implies, from the point of view of the environment and natural resources (p. 222).

In this context, the WTO report and UNEP (2009) show that climate change threatens to disturb the conditions in which a great variety of goods and services are produced and consumed that are important for economic well-being. Trade can increase the vulnerability of some countries to climate change by forcing them to specialize in products in which they have a comparative advantage and to resort to imports to meet their needs for other goods and services. These countries may become vulnerable if climate change causes a disruption of the supply of the goods and services that matter. On the other hand, trade can also be a way to bridge the differences between supply and demand conditions, so that if climate change causes shortages of certain goods and services in a country, it can resort to the countries where these goods and services are still available. Therefore, apart from its mitigation effects, trade can contribute to helping humanity adapt to the consequences of a warmer future (p. 68).

However, this situation that appears to be relatively positive involves other uncontrollable variables that can produce negative impacts. In this sense, politicians play an important role as proactive planners and decision makers, in the face of climate change that is generally unpredictable and affects the level of well-being of the population. It should be added that, according to the aforementioned report, economists specialized in the commercial theme devised a conceptual framework to examine the consequences of trade opening on the environment. Within this framework, they proposed three effects generated by the impact of trade opening:

a) Scale effect. It refers to the possibility of increasing GHG emissions as a result of increased economic activity (WTO & UNEP, 2009). This would imply that there is a direct relationship between the increase in international trade transactions and the amount of GHG emissions. In other words, an increase in world exports and imports would produce a higher GHG emission if the other variables remain constant.

b) Composition effect. According to the WTO and UNEP report (2009), this refers to the influence of greater trade and price fluctuations on the participation of industry, commerce and services in the gross domestic product of the countries. All of this relates to greenhouse gases. This implies that the factor endowment of each country and the level of industrialization of the economy should be considered.

c) Effect of technology. It refers to the possibility of importing, from other countries, modern and cutting-edge technology to reduce the emission levels of manufacturing processes in industry and service activities that have a manufacturing component (WTO & UNEP, 2009). In this way, international trade can help to face climate change.

As indicated in the WTO and UNEP report (2009), we could say that it is extremely complex to establish previously the effect of the increase in trade in the level of pollution generated by a country. However, governments - through the design and implementation of their commercial, fiscal, industrial and social policies - play a vital role in trying to mitigate and solve pollution problems, with a view to developing environmentalist economies.

By relating international trade to transport and GHG emissions, they can analyze the following table, which shows the amount in grams of carbon dioxide, per metric ton of weight or kilometer away, that are emitted. In this scheme, the different means of transport used to move the goods from the warehouses of the exporters to those of the importers in the country of destination are taken into account.

Conclusions

Climate change has modified the international economic environment, which has caused great losses to the economy of the countries and has contributed to companies adopting new business strategies to stay in the market.

Consumer behavior, on a global level, is not standardized and depends fundamentally on the role of educational institutions, environmental policies of governments and marketing strategies of private businesses.

International trade has been influenced by climate change, but it also influences it, from the supply of inputs, production, transport, sale, consumption of products and how waste is recycled.

Environmental innovations can promote the growth of economies in terms of trade balance, GDP, employment, associativity, entrepreneurship and the implementation of differentiation strategies at the enterprise level.

The carbon footprint is a relevant indicator to measure the generation of greenhouse gases and is part of the social responsibility strategies that seek to facilitate access to new markets, loyalty to customers, boost profitability and improve the corporate image.

The methodologies for measuring the carbon footprint are still dispersed and have not been homogenized, which constitutes an obstacle for the understanding of socially responsible consumers and for the design of growth strategies for small and medium enterprises.

References

- Artica, Nelson, Gisselle Mendoza, María Pino, Ricardo Ramírez & José Sano (2010). Environmental sector in Peru: regulatory framework, actors and business opportunities. Lima: ESAN University.
- Balch, Oliver (2013). Corporate Responsibility cheat sheet. Ethical Corporation. Issue, october, 1-36.
- Bolwig, Simon (2009). Product carbon footprinting. Global Forum on Trade «Trade and Climate Change», OECD Conference Centre. Paris, 9-10, june.
- Daniels, John, Lee Radebough & Daniel Sullivan (2010). International business: environments and operations (12th edition).: Pearson Education.
- Duran, Gemma (2007). Business and environment: environmental management policies. Pyramid Press.
- Eurobarometer (2009). Europeans attitudes towards the issue of sustainable competition and production. Bruselas: The Gallup Organisation.

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- Gilpin, Alan (2003). *Environmental economics: a critical analysis.* : Alpha and Omega Press.
- Gligo, Nicolo (2001). *The environmental dimension in the development of Latin America.* Santiago de Chile: Cepal.
- Gurau, Calin & Ashok Ranchhod (2005). *International Green Marketing: A Comparative Study of Brit-ish and Romanian Firms.* *International Marketing Review*, 22(5), 547-561.
- Gutberlet, Jutta (2000). *Sustainability: a new paradigm for industrial production.* *International Journal of Sus-tainability in Higher Education*, 1(3), 225-236.
- Hill, Charles (2011). *International business: competition in the global market (8th edition).* Mexico D.F .: McGraw-Hill.
- Intergovernmental Panel on Climate Change (s.f.). *Fifth Assessment Report (AR5).* Intergovernmental Panel on Climate Change. <http://www.ipcc.ch>
- International Organization for Standarization (s.f.). *International Organization for Standarization.* <http://www.iso.org>. Fecha de consulta: 16 October 2013.
- Kahle, Lynn & Patricia Kennedy (1989). *Using the List of Values (LOV) to Understand Consumers.* *The Journal of Consumer Marketing*, 6(3), 5-12.
- Leszczynska, Agnieszka (2002). *Managers' Attitude Toward Environment.* *Industrial Management & Data*, 110(8), 1234-1250.
- Lubieniechi, Simona Antoaneta (2002). *Romanian Consumer 'Behavior Regarding Organic Food.* *British Food Journal*, 104 (3/4/5), 337-344.
- Paul, Justin & Jyoti Rana (2012). *Consumer Behaviour and Purchase Intention for Organic Food.* *Journal of consumer Marketing*, 29(6), 412-422.
- Riefer, Angelika & Ulrich Hamm (2011). *Organic Food Consumption in Families with Juvenile Children.* *British Food Journal* ,113(6), 797-808.
- Robbins, Stephen & Mary Coulter (2010). *Administration (10th edition).*: Pearson Education.
- Rokeach, Milton (1973). *The nature of human values.* New York: The Free Press.
- Tilikidou, Irene (2013). *Evolutions in the Ecologically Conscious Consumer Behavior in Greece.* *Emerald Journal of Business*, 8(1), 17-35.

International Journal of Public Administration (IJOPAD)

2 (1)(February, 2023): 184-201

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United Nations Organization (1998). Kyoto Protocol to the United Nations Framework Convention on Climate Change. Kyoto: United Nations Organization.

United Nations Organization (2013). UN News Center. [http://www.un.org/News/ story](http://www.un.org/News/story).

Vega, Leonel (2008). Environmental management (2nd edition). Routledge Press.

World Economic Forum (s.f.). Home - World Economic Forum. <http://www.weforum.org>. Fecha de consulta:- 16 October 2013.

World Resources Institute (s.f.). Home - World Resources Institute. <http://www.wri.org>. Fecha de consulta: 16 October 2013.

World Trade Organization (s.f.). World Trade Organization. <http://www.wto.org>

World Wide Fund for Nature (s.f.). WWF – Home. [http:// www.wwf.org](http://www.wwf.org).

Zutshi, Ambika & Amrik Sohal (2003). Stakeholder Involvement in the EMS Adoption Process. *Business Process Management Journal*, 9(2), 133-148.