# THE CURRENT SUSTAINABLE DEVELOPMENT PRACTICES OF FINANCIAL SECTOR IN UAE: The Case of Insurance Industry

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To achieve sustainable development in the financial sector, such as banks, insurance firms, investment companies, accounting firms, etc., is of critical given their role in economic development of countries. The objective of this research is to investigate the current sustainable development practices of the financial sector in UAE. Originally, the banking and insurance sectors were targeted but only insurance responded positively. Therefore, the focus was on the sustainable development practices of insurance sector of UAE. The methodology used in this study was designing a survey questionnaire that included questions related to: Awareness of insurance companies to environmental issues; Environmental Leadership; Internal Environmental Practices; Climate Change, Global Worming and Environmental Concerns; Strategies to Mitigate Environmental Effects; Engagement with External Stakeholders; Improving Business Opportunities; and Potential Stewardship Role. The survey targeted 60 UAE insurance companies and 56 responded. The results indicate that there was increased awareness of insurance companies to environmental issues, who showed energy saving culture and proper water usage. Legislation, environmental groups and advances in technology were found as most important environmental awareness drivers. In addition, insurance companies showed that they are more proactive when it comes to environmental concerns. Insurance firms are yet to endorse the UNEP Statement that would benefit the organization. The majority fear global climate change and believe that its consequences might create new concerns.

Keywords: Sustainable Development, Financial sector, Insurance companies, UAE

## 1. Introduction

The increasing debate about sustainable development and its contribution to economic growth and recovery today cannot be over-emphasized (Goldstein, 2001; Mezher, 2006). It is widely accepted that banks as well as other monetary institutions are the backbone for economic stability and growth. It is based on this premise that financial institutions lend themselves to be active players in the drive towards sustainable development (Mezher et al., 2002). This drive is underpinned by corporate social responsibility, evidenced by useful practices and principles, aimed at facilitating long-term business concerns, reinforcing political longevity, and cementing the faith and trust of investors. The fact that almost all corporate bodies need to safe guard their goods, and services, pre-empts the role of insurance as well as the insured. Either there is risk or otherwise, the security of insurance firms needs further investigations based on implementation of sustainable development, applicable to all other financial institutions (Carnicer & Peñuelas, 2012).

Insurance institutions, known to support financial and other institutions in reducing investment risks, are also challenged with how to play a role towards sustainable development strategies. Insurance companies, although focused on profit, have convinced clients that goods, services and properties are protected. Yet they have numerous concerns particularly during difficult times (Linnerooth-Bayer et al., 2001). When natural disasters occur, insurance industry is financially burdened, and business operations, goods, and services are halted, in addition to property destructions (Leggett, 1993). Sustainable development practices have been given attentions in many parts of the developed world but not in developing regions such as GCC. The main objective of this study is the try to understand the current sustainable development practices of the financial sector in UAE, mainly the insurance industry.

## 2. Literature Review

Sustainable development is widely defined as an organizing principle of nature and all that it embodies. It ties together all entities of the nature such as economic, political and social dimensions. The Brundtland Commission Report of 1987 with theme ‘Our Common Future’ defines sustainable development as (United Nations, 1987): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The debate with respect to sustainable development has increased and has implications to all sectors of the economy. Importantly, the financial sector contributes to the economic growth and can influence the direction of sustainable development of any given country. However, it provides the financial resources as well as ample risk coverage for economic development projects (Carnicer & Peñuelas, 2012). There are three significant features to be considered in order to relate the financial sector with sustainable development. Firstly, the financial sector may influence sustainability and environmental impacts on various financed projects. Secondly, the financial sector need to adhere to national and international environmental regulations to ensure risk mitigation associated with negative sustainable development implications. Thirdly, additional pressure created by stakeholders or investors result in several financial risks. Thus, how investor relates with the company may greatly influence the financial measures taken (Schmidheiney, 2008). The recent global financial crunch exemplified financial sectors' capacity, which necessitated emergency plans to react on those situations. There are evidences that environmental sustainability efforts are boosted by adequate financial resources through continuous assessment in corporate social aspects of business organizations so that revenues are properly utilized, mirrored by sustainable fields such as Cranach's approach (Ottosson & Samuelsson, 2008). At the corporate levels especially the financial sector, the concept of sustainability can be expressed based on environmental, social and economic performance. The immediate community and other business establishments need to be beneficiaries if they are to ascertain how adequate the measure of sustainability has become in real time. Sustainable development therefore might be able to provide adequate information to support government agenda for example, green economy initiative (Moon, 2007). The insurance sectors have become more globalized over the last few years, fairly small n number of global participants. An insurance company provides protection for the insured people or company when a loss is incurred in their life or business so that the risk can be managed effectively. The Insurance industries are capable to support global and sustainable disputes. Insurance have numerous concerns on their customers or society during their difficult times. It could be an individual loss or any losses through natural calamities. The insurance industries' corporate social responsibility is an important role as the losses may be occurs anytime unexpectedly and unpredictably. Insurer is a group of common insurance system which protects the insured entity from the risks enforced by any legal issues and litigations (Stromberg, 2013).

The key principles of Insurance industry in relation to climate change are identified and reported by the Insurance work Program of United Nations Environment Programmed Finance Initiative (UNEP-FI) (UNEP, 2012). The key principles include: decision-making on environmental issues, raise awareness of social and governance issues, work together with governments and key stakeholders to promote widespread action, demonstrate accountability and transparency in regularly disclosing publicly our progress. It also discusses UNEP's aspiration towards sustainable insurance (UNEP, 2010; Mezher et al., 2011). Insurance is one of a wide scope of risk management approach that can assist alteration to climate change and shoreline up sustainable development. In particular, the insurance industry can sustain revision efforts through understanding of the climate changes, weather influences. The study is enhanced by risk studies that are focused on insurance companies that are related on climate damages. There are very advanced financial, scientific and statistical studies that use remote sensing and techniques are developed by insurance firms that are focused on risk assessment related to climate and weather changes (Deering, 1993). The world banks and other organization have been actively implicated increasing in sustainable development that prominence pastoral risk management including early warning systems and risk retention actions, to access to supplementary feed (Popov, 1999; Jamali et al., 2006).

## 3. Methodology

### *3.1 Design of Survey*

The key areas of environmental concerns and sustainable practices of insurance companies were developed from synthesis of relevant literature. A survey questionnaire was design to collect data from insurance companies in UAE. The questions that constituted the questionnaire were organized in sections, which included: (1) Awareness to Environmental Issues; (2) Environmental leadership; (3) Internal Environmental Practices; (4) Climate Change, Global Warming, and Environmental Concerns; (5) Strategies to mitigate Environmental Effects; (6) Engagement with External Stakeholders; (7) Improving Business Opportunities and (8) Potential Stewardship Role for the insurance firms.

### *3.2 Data Collection Scope of Study*

The survey was distributed to insurance companies throughout the UAE. Most of the respondents were from Abu Dhabi and Dubai. Still, we did get few replies from companies in Ras Al Khaimah, Ajman, Sharjah, and Fujairah. In total, 60 survey questionnaires were distributed and we received 56 surveys back. Out of this number, only twenty-one (33) were national (UAE owned companies), and twenty-three were international insurance firms, indicative of an equal balance of insurance companies on both sides for this study. Fifty five percent of respondents are considered to be of medium size companies (50-500 employees), 25% are considered to be small size (<50 employees), and only 20% are large-size (>500 employees) scale companies. The respondents indicated also that the national companies seemingly dominated both medium and large-size insurance companies, whereas the international companies tend to dominate that of small-size insurance companies of this study. SurveyMonkey® software was used to collect all the data.

## 4. Results and Analysis of Results

### *4.1 Awareness of insurance companies to environmental issues*

The results of Awareness of insurance companies to environmental issues showed that, overall, 84.9% (national 87.5% and International 81%) of all firms are aware of environment issues. This indicates that respondents are in agreement to the fact that increase in environmental awareness has taken place at their respective companies. Results also indicated that Legislation (58.2%), Technology (52.7%) and Environmental Groups (49.1%) are most driving force behind environmental awareness. Consumers (27.3%) and Peer Pressure (23.6) have less influence. In addition, results showed that national firms are slightly more influenced by legislation (66.7%), technology (57.6%) and Environmental Groups (51.5%) as compared to international firms. This suggests that national insurance firms are more likely susceptible to local influence. The result suggest that the foreign insurance corporations might accord equal respect to influences legislation, environmental groups as well as advances in technology than they would do to influences the clients might have on environmental issues. To summarize the results of this section, majority of insurance firms indicated their organizations are well aware of environmental concerns facing the country. In addition, Legislation, Technology, and Environment groups are most important drivers of environmental awareness over consumers and peer pressure.

### *4.2 Environmental Leadership*

The results for the environmental leadership of insurance companies showed that most companies have proactive style (55.6%) then followers (25.9%), leaders (14.8%), and then reactive (13%). Other results indicate that both national and international firms have similar numbers. Results also showed that the majority of firms do have ISO 9001 Total Quality Management certification (73.9%) and only minority of firms have ISO 14000 Environmental Management Systems (EMS) certification (13%). None of the firms have ISO 26000 Social Responsibility and ISO 50000 Energy Management System certifications. Both national and international groups obtained similar results. Regarding the endorsement of the UNEP Statement of Environmental Commitment, results indicated only 14.8 percent of the firms surveyed have endorsed the UNEP Statement. While the majority of the insurance firms (75.5%) agreed that endorsement of the UNEP statement would be beneficial to them. Results also indicated that national and international firms have similar answers. To summarize this section, majority of insurance firms considered their reaction to environmental concerns as proactive and followers. More of ISO 9001 TQM and less of EMS were certifications either achieved or under consideration. Majority of insurance firms had not endorsed the UNEP Statement. Majority also believe that endorsement of the UNEP statement would benefit the organization.

### *4.3 Internal Environmental Practices*

Results for the internal environmental practices of insurance companies indicated that the majority of the companies have internal efficiency strategies in energy (71.4%, in water (60%), and in paper recycling (71.4%). In comparing both national and international firms, it was found that both international (78.3%) and national (66.7%) insurance companies indicated good agreement towards saving energy within their respective corporations. The same would be so with regards to ensuring that water was utilized efficiently with that of international dominating (National 50.0%, and International 73.9%). In addition, the respondents of both international (69.6%) and national (72.7%) insurance companies showed good agreement to promote paper recycling. In summary, the results suggested that both groups of insurance companies viewed energy, appropriate use of water as well as paper recycling as fundamental part contributing to achieving sustainability for their companies.

### *4.4 Climate Change, Global Worming and Environmental Concerns*

Results for Climate Change, Global Worming and Environmental Concerns of insurance companies showed that the majority of insurance companies (73.2%) believe that global warming has caused large capital losses. In addition, results showed that the majority of the firms (87.3%) believe climate change has created new concerns for them. The main concerns that insurance companies have are: the cost of environmental damage (63.8%) and companies will have to study the environmental effects of particular projects before offering insurance services (57.4%). For the rest of the questions, the majority of respondents believe that: there is a change in the world climate (94.5%), climate change has affected insurance industry (64.3%), companies do warm their customers and raise their awareness on the environment (64.3%), prevention strategies are common goals for them (85.7%), insurance companies are coming under scrutiny because of their current practices (59.3%), the ability of companies to remain profitable is being questioned by the insurance industry (63.5%), insurance companies manage the environmental risks in partnership with customers (73.2%), Companies do other recommendations that might mitigate risks (80.4%), and the insurance industry acknowledge their financial loss as a result of environmental damages (80%). Majority of insurance companies (76.4%) indicated that insurance, government agencies, environmental groups and climate scientists generally do not cooperate to study environmental issues. In summary, the majority of insurance firms feared that global climate change might result in large capital losses and believed that consequences of climate change might as well create new concerns. While majority of insurance firms agreed that climate change is real and might have affected the insurance industry, apart from warning clients and avoiding environmental catastrophes, insurance firms try to manage risks, offer clients recommendations, with the knowledge that they are exposed financially. Insurers, government agencies, environmental groups and climate scientists do not cooperate to study environmental issues. Insurers have ground rules that help scrutinize their businesses.

### *4.5 Strategies to Mitigate Environmental Effects*

Results for Strategies to Mitigate Environmental Effects for insurance companies indicated that the majority of the firms are not willing to extend their operating time frame to study the possible future environmental damages and liabilities caused by bad environmental practices (67.9%). The majority of the firms are facing difficulties in planning for more predictable future in an increasingly unpredictable climate (83%). About half of the companies (54.7%) have suggested greenhouse gases mitigation strategies which included better building standard (90%), encourage renewable energy resources (56.7%), and reward customers that improve their environmental practices with lower insurance premiums (50%).

Results show the trend of actions insurance companies aim to undertake in order to limit environmental change. Specifically, the national insurance indicated that there would first lobby government and manufacturing industry for policies that penalize carbon fuel use encouraging development of 'new and renewable' energy resources, before they send market signals about benefits of clean energy by investments and sales, at the same time, send market signals by demanding environmental indicators encourage business to include environmental indicators in financial reports. On the other hand, the international insurance firms indicated that they would first send market signals by demanding environmental indicators that encourages businesses to include environmental indicators in financial reports before they send market signals about benefits of clean energy by investments and sale, after which they would lobby government and manufacturing industry for policies that penalize carbon fuel use encouraging development of 'new and renewable' energy resources. In summary, results indicate that the majority of insurance companies did not attempt to understand the possible future environmental damages and liabilities cause by current practices, the majority of insurance companies are facing difficulties when trying to predict future events in an increasing unpredictable climate, and more than half of the companies have suggestions to curb the GHG emission and mitigate its risk. Half of the companies are taking actions to limit environmental damage.  Finally, the majority of the companies do not have any type of environmental action plan.

### *4.6 Engagement with External Stakeholders*

Results for Engagement with External Stakeholders indicated that 77.8 % of the companies are not influenced by the nature of their work and the regulatory frameworks to be more active vis a vis environmental challenges.  More than half of the companies (52.7%) do not possess sufficient resources to create a fund to send positive signal to the market.  The majority of the companies (66.7%) do not collaborate with banks in order to limits environmental damages. The majority of companies (66%) do not offer environmental advice to new business. Half of the companies (50.9%) are being more active and involved in environmental issues due to:  each sector of the insurance industry is affected by different types of environmental problems (74.1%), the environmental concerns of different insurance sectors might be opposed (11.1%) and the environmental concerns affecting the insurance industry are too diversified to be understood and/or handled by the insurance industry (51.9%). The majority of the companies (70.4%) consider that the insurance industry can play important role vis-à-vis environmental matters by simply consulting and negotiating with customers and without actually being involved in their operations. The reasons for that include: insurance companies have good management techniques and can thus help their customers and advise them on sound management techniques (38.9%), insurance companies can influence players in the market because of their strong financial position (30.6%), and insurance companies usually have more practical knowledge of risks than their customers (88.9%). In comparing both international and national forms, results for the first question indicate that the majority of the firms are aware of prevailing environmental issues. Considering the nature of their work as well as the regulatory framework that guides their operation, they would not prevented from playing a more active role vis-á-vis to prevailing environmental issues. However, about 54.5% of national insurance did not agree that insurance companies, either at UAE or worldwide, possess sufficient resources to signal the markets about environmental. In summary, the nature of work of insurance companies and regulatory framework under which they operate would not prevent insurance acting on environmental problems. Either global or national insurance companies might not have sufficient resources to signal the markets about emerging environmental challenges. Majority of insurance firms do not work with banks to limit environment damages and its consequences to businesses. Majority of insurance firms also neither offer advice nor raise environmental awareness to new markets that seek to get established at UAE. In addition, the highly diversified nature and wide services of insurance firms mighty not necessarily prevent them from being more actively involved in environmental issues.

### *4.7 Improving Business Opportunities*

Results for Improving Business Opportunities indicated that the majority of the companies (80.4%) are considering that environmental problems and challenges could offer business opportunities. The type of opportunities include: getting involved in young companies developing environmental technologies for waste elimination and cleanup (46.7%), in basic business consulting (33.3%), offering help in technology transfer and/or sales, marketing, technology reviews, etc. (22.2%), helping companies with their international technology and marketing strategies (26.7%), and advising insurance clients on how their products can help them decrease their environmental risks (68.9%). In summary, majority of insurance firms considered that environmental problems and challenges could bring about new business opportunities especially advisory roles to clients. Majority also believed that such business opportunities may well secure ‘environmental technology’ market niche for them too.

### *4.8 Potential Stewardship Role*

Results for Potential Stewardship Role of insurance firms showed that the majority of insurance companies (89.1%) need to be publicly active even at the global stage. Also, majority of insurance companies (66.1%) believe that they should have influence to encourage others in the financial community to work for structural changes that will bring about reduction in environmental risks. This is interestingly depicted by more national (72.7%) insurance firms that believed that insurers influence can encourage the financial community pursue structural reforms that could contribute in reducing environmental risks compared to international foreign (56.5%). While not all the insurance companies (50.9%) believed that they have the capacity to lobby and effectively influence public policy compared to other business sectors, majority (61.8%) felt they would not engage in investment projects that did not make economic sense in addition to environmental consequences it may pose. In summary, insurance firms, apart from playing more global role to help resolve environmental concerns, can influence the financial community to effect structural changes that would reduce environmental risks. They can also lobby and effectively influence public policies. In addition, they avoid projects that do not make economic sense, and believe that environmental degradation and man-made catastrophes threaten the insurance industry. Apart from the fact that the global increase and tightening of environmental regulations affect insurance businesses, insurance firms believe that preventive action is economically viable over wait-and-see policy.

## 5. Statistical analysis

Table 1shows that summary of T-tests that were done to compare the overall results of both national and international in all the sections of the survey. In addition, Spearman Correlations was also conducted.  For the awareness of environmental issues as well as leadership towards environmental concerns, there were no significant difference between all companies versus national type, all companies versus international types, as well as national versus international types therefore in this case, we accept the null hypothesis that there is no significant difference between the different population. This will be explained in details next.

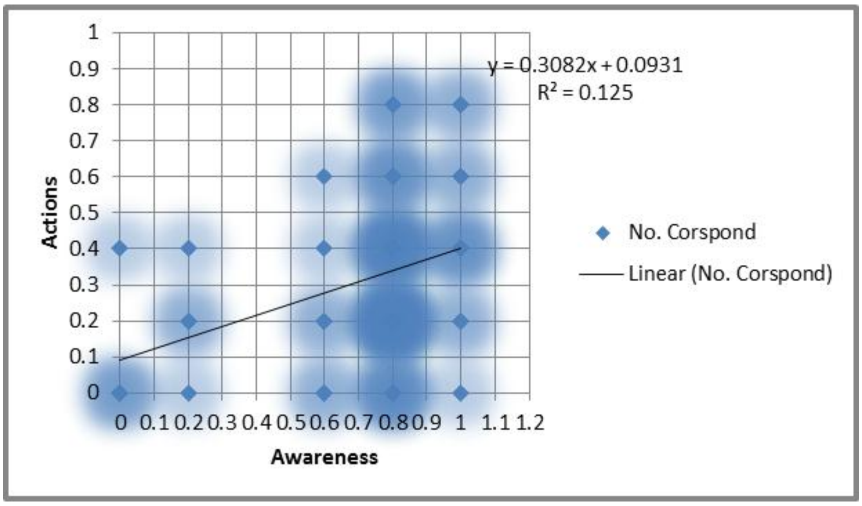
The statistical responses of internal environment practices as well as climate change global warming, and environmental concerns by insurance companies of this study at Table 1, was demonstrated. The internal environment practices found significant differences between all companies versus national type, all companies versus international types, as well as national versus international types. For this reason, we accept the alternative hypothesis even though the box plot of internal environment practices, which suggests that the results were with fairly similar mean levels even though the ranges seemed to widen, and might be accountable for the statistical significance observed. The climate change, global warming and environmental concerns found significant differences but only between all companies versus national type (P-value = 0.952) but not so at all companies versus international types, as well as national versus international types, which is exemplified by the box plot with mean and range values seemingly dissimilar of all companies compared with the national types. For this reason, we accept the alternative hypothesis only for between all companies versus national type for climate change, global warming and environmental concerns, and accept the null between the other comparisons. The statistical responses of strategies to mitigate environmental effects, engagement with external stakeholders, as well as improving business opportunities by insurance companies indicated that strategies to mitigate environmental effects were statistically significant between all companies versus national type (P-value = 0.997), all companies versus international types (P-value = 0.996), as well as national versus international types (P-value = 0.993), depicted by the box plot with seemingly dissimilar mean and range values between all companies. By contrast to the insurance companies that would adopt strategies to mitigate environmental effects, no noticeable statistical significance between how insurance companies engaged with their external stakeholders was found. However, to improve business opportunities, there were obvious differences respectively between all companies versus both national and international types (P-value = 0.854 and = 0.866), as well between national versus international types (P-value = 0.729). The statistical responses of potential stewardship role as well as total score ranking between the insurance companies demonstrated that all insurance companies were similar in the manner at which they exerted their stewardship. Overall, by cumulating all tested variables, there were statistical significance between all companies versus national type (P-value = 0.99), all companies versus international types (P-value = 1.00), as well as national versus international types (P-value = 1.00). The correlations between all companies versus national type, all companies versus international types, as well as national versus international types were positive for all the measured thematic sections.

**Table 1**
**T-Tests and Correlations to Compare Responses Between all Insurance Companies, National, and International Companies**

| Sections | Comparison | P-value | Correlation ( Pearson ) | Accept H0 |
|---|---|---|---|---|
| Awareness to environmental issues | All compaines <> International | 0.871 | 0.984 | Yes |
| | All compaines <> National | 0.923 | 0.996 | Yes |
| | National <> International | 0.798 | 0.964 | Yes |
| Environmental Leadership | All compaines <> International | 0.883 | 0.972 | Yes |
| | All compaines <> National | 0.937 | 0.992 | Yes |
| | National <> International | 0.824 | 0.935 | Yes |
| Internal Environmental Practices | All compaines <> International | 1.000 | 0.946 | Yes |
| | All compaines <> National | 1.000 | 0.939 | Yes |
| | National <> International | 1.000 | 0.777 | Yes |
| Climate Change, Global Warming and Environmental Concerns | All compaines <> International | 0.923 | 0.979 | Yes |
| | All compaines <> National | 0.957 | 0.991 | Yes |
| | National <> International | 0.882 | 0.943 | Yes |
| Strategies to Mitigate Environment Effects | All compaines <> International | 0.996 | 0.941 | Yes |
| | All compaines <> National | 0.997 | 0.974 | Yes |
| | National <> International | 0.993 | 0.841 | Yes |
| Engagement with External Stakeholders | All compaines <> International | 0.854 | 0.971 | Yes |
| | All compaines <> National | 0.866 | 0.978 | Yes |
| | National <> International | 0.729 | 0.901 | Yes |
| Improving Business Opportunities | All compaines <> International | 0.987 | 0.981 | Yes |
| | All compaines <> National | 0.987 | 0.977 | Yes |
| | National <> International | 0.975 | 0.917 | Yes |
| Potential Stewardship Role | All compaines <> International | 0.942 | 0.968 | Yes |
| | All compaines <> National | 0.956 | 0.978 | Yes |
| | National <> International | 0.900 | 0.894 | Yes |
| Total Score | All compaines <> International | 0.978 | 0.96 | Yes |
| | All compaines <> National | 0.976 | 0.98 | Yes |
| | National <> International | 0.954 | 0.886 | Yes |

Some of the questions that were discussed before show some contradiction in the responses. This has triggered additional analysis in order to understand why these contradictions occurred. These questions are related to the perception of the respondents as compared to the actual actions taken by their respective companies as shown in Figure 1. Overall, the present research can be arbitrarily understood by way of two major qualitative viewpoints, that is, viewpoint of ‘Perception’ on one side, and that of ‘Actions’ on the other. ‘Awareness’ simply put, refers to how the insurance companies have demonstrated ‘awareness of the environmental issues’, whereas ‘Actions’ simply put, refers to how the insurance companies have demonstrated ‘actions on environmental issues’. In this context, awareness can include sections such as, for example, ‘Awareness to Environmental Issues; Climate Change, Global Warming and Environmental Concerns; whereas ‘Actions’ can include sections such as, for example, ‘Environmental Leadership; Internal Environmental Practices; Strategies to Mitigate Environmental Effects; Engagement with External Stakeholders; etc. Given that, correlation between the national, international and overall proved not significant and for that reason, we ‘Reject H1’, and ‘Accept H0’, it was therefore necessary to seek whether there could be some relationship between two major ‘Action’ and ‘Awareness’ thematic areas in order to deepen the understanding concerning the relatedness of the research sections vis-à-vis the national, international, and all insurance companies combined.

**Figure 1**
**Correlation comparison between the Awareness and Actions of the Major Research Sections utilized by this Study**




The correlations between the Perceptions and Actions of the contradictory questions are shown in Figure 1. The low R2 value indicates that there is no correlation between the variables. In other words, perception is not resulting in action. So people are reporting that they are aware but are not taking actions. The low slop of the equation also confirms the conclusion. In summary, the statistics and correlations show that both international and national insurance companies did not differ much with regards to their responsibilities of attaining sustainable environment based on the various questions that were posed to the representative personnel that participated of this study.

## 6. Summary of Results and Recommendations

Table 2 below shows that summary of results and recommendations based on the analysis done previously.

**Table 2**
**Summary of Results and Recommendations**

| Sections | Summaries | Recommendation |
|---|---|---|
| **Awareness to environmental issues** | Insurance firms are well aware of environmental concerns. | Insurance firms need to continually strengthen their environmental awareness. |
| | Legislation, Technology, and Environment groups are most important drivers of environmental awareness over consumers and peer pressure. | Consumers and peer pressure should be involved as drivers for environmental awareness. |
| **Environmental Leadership** | Insurance firms are reacting more proactively to environmental concerns. | Insurance firms should continue reacting proactively, in addition, they should take more leadership roles. |
| | Most companies have of ISO 9001 certifications and few have ISO 14000 and none have ISO 26000 and 50000. | All firms should plan to have all the mentioned ISO certifications because having them will give them more knowledge in understanding both their own needs and stakeholders needs in terms of sustainable development. |
| | Majority of insurance firms have not endorsed the UNEP Statement. | All Insurance firms should endorse the UNEP Statement because this will make them more committed to environmental protection. |
| | Insurance firm endorsing the UNEP statement would benefit their organization. | Benefits from endorsing UNEP Statement include:<br>• It shows commitment to sustainable development and support for the precautionary approach to environmental management<br>• It prevents environmental degradation<br>• It promotes public awareness and communication<br>• Gets the signatories involved in international and regional meetings and workshops<br>• It allows collaboration between relevant institutions, government and non-governmental institutions<br>• It allows industry to take a prominent role in discussions about climate change |
| **Internal Environmental Practices** | Most of the firms have internal Energy Efficiency, Water, and Paper Recycling Policies. | This should apply to all organizations in the insurance industry. |
| **Climate change, Global Warming and** | Insurance firms feared that global climate change might result in large capital losses. | Insurance firms should view global climate change as an opportunity. |

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| **Environmental Concerns** | Insurance firms believed that consequences of climate change might as well create new concerns. | Insurance firms should identify the new concerns consequence of climate change. |
| | Insurance firms agreed that climate change is real. | Insurance firms should incorporate climate change in their core business value practices. |
| | Majority believe that Climate change has already affected the insurance industry. | Insurance firms should incorporate climate change in their core business value practices. |
| | Majority of Insurance firms warn their customers and raise their awareness about safety and prevention practices vis-avis the environment. | This should be standard operating practices in all insurance firms. |
| | The majority of firms agreed that avoiding environmental catastrophes before they occur is a common goal. | This should be standard operating practices in all insurance firms. |
| | The majority of Insurance firms try to manage risks. | This should be standard operating practices in all insurance firms. |
| | The majority of Insurance firms offer clients recommendations | This should be standard operating practices in all insurance firms. |
| | The majority of Insurance firms' finances are at an exposed position because of environmental consequences. | Insurance firms should always work to avoid being exposed financially due to environmental consequences. |
| | Insurers, government agencies, environmental groups and climate scientists do not cooperate to study environmental issues. | Insurers, government agencies, environmental groups and climate scientists should always cooperate to study environmental issues. Their relationship should be strengthened. |
| | The majority of Insurers believe that their current ground rules for business are coming under scrutiny because of environmental problems. | All firms need to change their current business practice to avoid scrutiny because of environmental problems. |
| | The majority of Insurance industries are questioning the validity of traditional practices and profitability of insurance businesses. | The whole Insurance industries should persistently question the validity of traditional practices and profitability of the industry. |
| **Strategies to Mitigate Environment Effects** | The majority of Insurance companies do not attempt to understand the possible future environmental damages and liabilities cause by current practices. | This should be standard operating practices in all insurance firms. |
| | The majority of Insurance companies face difficulties when trying to predict future events in an increasing unpredictable climate. | Insurance companies should work with all stakeholders to try to predict future increasing unpredictable climate events so as to reduce the difficulties they face. |
| | More than half of the insurance companies are making suggestions to curb the GHG emissions and help mitigate their risk. | All Insurance companies should continually curb the GHG emissions and mitigate their risks through:<br>• Suggestions about better building standards to reduce energy consumption<br>• Lobbying for the encouragement of renewable energy resources<br>• Encourage reform in the business community by rewarding those who curb energy consumption with lower insurance premiums |

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| | Half of insurance companies are taking actions to limit environmental damage. | All insurance companies should be involved to take actions to limit environmental damage such as:<br>• Lobby governments and the manufacturing industry for policies that penalize the use of carbon fuels and encourage the development of " new and renewable" energy sources (sun, wind, wave, etc.)<br>• Send market signals about the benefits of clean energy, both by investing in it or in companies selling it<br>• Send market signals by demanding environmental indicators and by encouraging businesses to include environmental indicators in their financial reporting |
| | Majority of insurance companies do not have any type of environmental action plan. | Insurance companies should have environmental action plan such as:<br>• Declining insurance to companies that have bad environmental practices<br>• Requiring potential and actual clients to have established and effective Environmental Management Systems<br>• Selecting stocks based on a set of sustainable development categories (eco-efficiency, product stewardship, environmental liabilities, etc.) |
| **Engagement with External Stakeholders** | Majority of firms say that the nature of work of insurance companies and regulatory framework that insurance operate would not prevent them to act on environmental problems. | Insurance firms should strengthen their nature of work of insurance companies and regulatory framework to effectively tackle environmental problems. |
| | More than half of the insurance companies do not have sufficient resources to signal the markets about emerging environmental challenges. | Insurance companies should build their financial resources to sufficiently signal the markets about emerging environmental challenges. |
| | Majority of insurance firms do not work with banks to limit environment damages and its consequences to businesses. | Insurance firms should collaborate with banks to limit environment damages and its consequences to businesses. |
| | Majority of insurance firms also neither offer advice nor raise environmental awareness to new markets that seek to get established at UAE. | Insurance firms should offer advice and raise environmental awareness to new markets that seek to get established at UAE. |
| | Half of the insurance companies think that the highly diversified nature of the industry and the wide variety of its services prevent it from being more active and involved with regards to environmental issues because of several reasons:<br>• Each sector of the insurance industry is affected by different types of environmental problems<br>• The environmental concerns of different insurance sectors might be opposed<br>• The environmental concerns affecting the insurance industry are too diversified to be understood and/or handled by the insurance industry | Insurance companies should strengthen their highly diversified nature and continue to widen their services. |

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|---|---|---|
| | The majority of firms think that the insurance industry can play important vis-à-vis environmental matters by consulting and negotiating with customers without being involved in their operations. The reason for that:<br>• Insurance companies have good management techniques and can thus help their customers and advise them on sound management techniques<br>• Insurance companies can influence players in the market because of their strong financial position<br>• Insurance companies usually have more practical knowledge of risks than their customers | The insurance firms should continually strengthen their nature of operation so as to be more actively involved in environmental issues. |
| **Improving Business Opportunities** | Majority of insurance firms considered that environmental problems and challenges could bring about new business opportunities. | The manner of diversity of insurance approaches to improve business opportunities at UAE needs further investigation. Some of the opportunities are:<br>• Getting involved in young companies developing environmental technologies for waste elimination and cleanup<br>• Basic business consulting<br>• Offering help in technology transfer and/or sales, marketing, technology reviews, etc.<br>• Helping companies with their international technology and marketing strategies<br>• Advising insurance clients on how their products can help them decrease their environmental risks |
| | Majority of firms also believed that such business opportunities may well secure ‘enviro-technology’ market niche. | Insurance companies should make use of such opportunities and secure a niche market. |
| **Potential Stewardship Role** | The majority of Insurance firms mention that they need play more global role to help resolve environmental concerns. | Insurance firms should strengthen their global role to help resolve environmental concerns. |
| | The majority of Insurance firms think that they can influence the financial community to effect structural changes that would reduce environmental risks. | Insurance firms should strengthen their influence on financial community to be more effective on structural changes to reduce environmental risks. |
| | Half of the firms think that they care able to lobby and influence public policies. | Insurance firms should strengthen their lobbying strategies to influence public policies. |
| | The majority of Insurance firms think that investments in projects that are bad for the environment make business sense. | Insurance firms should avoid projects that have negative environmental impacts on the environment even if they make economic sense. |
| | The majority of Insurance firms believe that environmental degradation and man-made catastrophes threaten the insurance industry. | Insurance firms should work to identify issues of environmental degradation and man-made catastrophes that threaten their industry. |
| | The majority of the insurance firms believe that this is a global trend to increase and tightening of environmental regulations which will affect insurance businesses. | Insurance firms should work with stakeholders to soften the global increase and tightening of environmental regulations that affect insurance businesses. |

| | | |
|---|---|---|
| | The majority of the Insurance firms believe that preventive action is economically viable over wait-and-see policy. | Insurance firms should strengthen their preventive action strategies and avoid wait-and-see policy. |

## 7. Conclusions and Recommendations

The awareness, perception, and role of financial institutions, mainly the insurance industry, in the sustainable development of UAE have been investigated. A survey questionnaire was used to collect data on current sustainable development practice of insurance companies in UAE. The survey included both national and international insurance companies operating in the country. Table 3 below shows the general summary of the paper.

**Table 3**
**Summary of Results and Recommendations**

| General Conclusions | Recommendations |
|---|---|
| 1- The majority of insurance companies in UAE are not well educated in terms of sustainable development.<br>2- They don't have current sustainable development practices and this is evident in conflicting answers.<br>3- They lack collaboration and cooperation, and knowledge sharing with all stakeholders (government, customers, other companies, etc.) | 1- They need to conduct more training to understand the consequences of climate change on the insurance industry and how to integrate sustainable development practices in their operations.<br>2- They need to start collaboration and cooperation, and knowledge sharing with all stakeholders in order to develop well established plans to start SD integration in UAE and GCC. |

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