

**CLIMATE SECURITY - A BUNDLE OF MYELINATED
STRATEGIC AND NON-STRATEGIC ALTERNATIVES**

(Felix Dodds, Andrew Highman, Richard Sherman, (eds.), *Climate Change and Energy Insecurity - The Challenge For Peace, Security And Development*, Earthscan, Uk, first edition, 2009, ISBN: 978-1-84407-855-4, 352 pages)

Ioana-Bianca BERNA

Lumina-University of South-East Europe, Bucharest
Tel:+ 4 021 -240.30.22 E-mail: bianca.berna@yahoo.it

As the structural requirements for peace and security have been eluded by the fast-track changes occurring in the international system, new social accomplishments and new institutional embroidering have interlaced the subjects of climate change and global security.

These have been touchable and expended in plenty of laborious pieces of research. However, speaking out with an even greater conviction and with an even more enunciated conviction is a matter of finding the imperious matter where importance has already been shed.

The book edited by Felix Dodds, Andrew Highman and Richard Sherman, whilst providing a decent and reasonable leisure of approaching, can be characterized as a remarkable endeavor to appropriate a sense of enacting extensions in the regarded field, for the less advised audience¹.

Climate Change and Energy Insecurity – The Challenge for Peace, Security and Development – although published in 2009 – provides a current sense of approach regarding the manner in which the patterns of approximating climate change and energy insecurity have not quite been amended over time².

¹ Climate change is not only presented from the views-sight of present global vicissitudes, but, at the same time, it is presented as an institution with a decent and healthful level of existence, in terms of shaping the global security frameworks, the social security landscape world-widely, and, in terms of being considered a social institution in itself.

The book provides sustenance for climate change to guarantee a solid furnishment towards the urge for implementing measures and for the advocacy of channelizing more and more changes in the field.

The book is not totally devoid of similarities with other more recent or with other earliest works.

However, it is highly exhibiting perceptiveness in terms of reuniting in-depth opinions concerning an evaluation of the results attained so far, combined with a discernment of the measures to be implemented, when talking about a global mode of authority in the field of climate change.

² Specifically, one of the main arguments of the book sheds light upon the fact that the development regimen that has been widely practiced throughout the years, has to be seen as a by-gone cross-section of policies and national strategies.

The book is structured in three parts and 24 chapters. Each of the chapters represents a personal disquisition concerning the trials of performance that climate change has provided from different perspectives, in different regions of the globe, and from the angle of different experiments of treatises.

The recurrent examples with what has been agreed upon in the past and the efficiency of faculties exercised so far in the field of the policies related to climate change are part of one methodical system of reference that is vociferous throughout the book³.

The first chapter – The Challenge of Climate Change from a Developing Country – written by Marthinus van Schalkwyk – underwrites the necessity of a new set of rules and normative discourses- which were thought to be set in motion, in parallel with the total output of the actual norm-repairing system. An instrument that will function alongside the then performing Kyoto Protocol was thought to set a new sequence of steps into that direction.

The antagonistic relationship between the developing world and G8 is depicted as a major factor that has forestalled the implementation of measures in the domain of the climate change negotiations. The case-in-point is offered by imparting the example of South Africa and the reforms introduced by the South African government within the short span 2006-2008⁴.

More than that, ***the Start Now Strategic Option*** that South Africa inaugurated is based on the principles of conservation of resources, on the one hand, and upon the maximization of efficient energetic use, on the other hand. In all matters of discussion, South Africa has not had a positive reportable of economic indicators, as the emission reduction targets have not leaned upon the reduction targets set by the Kyoto Protocol, South Africa being included in the categories of developing countries. The interface with the latest developments in the field of climate change has, thus, not been carefully entertained.

In ***the second chapter - Energy Consumption Challenge of the Industrialized World: An Overview of German Climate Policy*** – Gabriel Sigmar provides an argument for the steadier reduction of greenhouse gasses, while depicting a rather constructive and decisive argument for the efforts made so far by Germany.

A strong plea for the decoupling of economic growth from the emission of greenhouse gasses is also made. The acceptance of a central role, in this regard, is given by the influence of market forces – as foremost actors of economic development, on the one hand, and as agents that can foster adequate means for containing the employment of greenhouse gasses.

Old-thinking regarding development is set to be altered in dynamics, in a time frame of 10-20 years, according to the book.

³ The essays provide a wealthy chance of developing arguments upon what are the prospects of the future implements and how can these be provided with more available protection, or with total alteration.

⁴ For instance, the introduction of the ***long-term mitigation scenario process (LTMS)*** in 2006.

Derek Osborn hands over a transcription of how oil interacts with climate change and how climate change can influence the secure oil resources throughout the Planet in: ***Oil - How can Europe Kick the Habit of Dependence***. Oil is to be found where the enterprises of drilling are baffled by instability of the locality, or by the fact that excavations cannot be entertained, due to the fact that oil resources are scanty for that purpose.

Furthermore, Europe is criticized for not taking the lead in diversifying the energy resources it utilizes, despite the fact that it is heavily dependent upon oil resources. The global measures proposed for curtailing the one-way use of energy resources include: “fiscal and budgetary measures to encourage the development of low-carbon goods and services, and to discourage high-carbon consumption; regulatory measures to the same end; promotional measures to encourage active engagement by the public and organizations of all kinds in bringing about the changes needed” (pp. 23-24)⁵.

Elizabeth Dowdeswell in ***the fourth chapter – The Nuclear Option*** – ponders upon the heightened nuclear reserves that China is planning and the effect that this would have upon the world-wide nuclear regime⁶. Nuclear energy still is the safest trump card for energy-amassing policies and for base-load power. Nuclear terrorism is one of the most serious contenders to the international nuclear regime⁷.

The most important focus for the standing international nuclear earmarks would be a more pregnant monitoring upon the states that have decided not to ratify ***the Treaty on Non-Proliferation of Nuclear Weapons*** and also upon the financial and economic aegis of the International Atomic Energy Agency.

Jürgen Maier`s chapter – ***entitled: Bioenergy: Neither Golden Solution nor Prescription for Disaster*** – considers attentively the issue of biofuels and the aspects of their desirability for the annunciating bearing of climate change. The sort of protectionism regarding the American and European biofuel industries⁸ is also held in close emulation by Brazil.

Brazil is a commercial ethanol-producer, first and foremost, for domestic purposes. Its strive was to satisfy the domestic requirements, cover all the domestic demand, and, on a last scale of undertaking, to embark on a global enterprisingness. The nutshell illation is that biofuels are hard to be produced, on

⁵ These are conjoint with the inelasticity of oil demand, considered world-widely.

⁶ India is also mentioned as it plans to have an eightfold increase in 2020 in its nuclear power.

⁷ The many weaknesses of the international nuclear regime spring from the structure of the underpinning ***Treaty on Non-Proliferation of Nuclear Weapons***, signed in 1970, and also from the un-relentless tenure of the states that have decided to opt out from the prerequisites of the treaty and develop independent nuclear-enriching policies.

⁸ A strong firewall against imports is introduced by US and EU systems, so that the biofuel industries would still be professed, at a competitive level worldwide.

the one hand, and, on the other hand, the particular position of the connective transport system of biofuels is in a dire state worldwide⁹.

Nnimmo Bassey gestures an interesting outlook in: *Localized Energy Conflicts in the Oil Sector*. The remarkable viral-complex regarding energy conflicts is underlined in the following exposure in connection to Africa:

“With regard to present-day Africa, we can extend this argument to say that virtually all conflicts are about who has the right to exploit what resources are available. A member of the International Crisis Group had this to say about the fighting in the Democratic Republic of Congo, acknowledging the economic roots of the fighting: ‘This is the absolute core of the conflict. What we are seeing now are beneficiaries of the illegal war economy fighting to maintain their right to exploit’ (Swagler, 2008)” (p. 47).

Despite of the local nature of the energy conflicts, their global spread is measured in the increasing numbers of environmental refugees all over the planet. Penetrating low-GNP countries offers plenty of perks for the oil companies, while damaging the socio-economic equilibrium in terms of a rightful payment and also in terms of social solidarity¹⁰.

In addition to this: “While oil and gas fever grips the tycoons in countries such as Tanzania, Mozambique, Madagascar, Chad, Mauritania, Ethiopia, Eritrea and Somalia, local communities are never consulted about what is about to hit them” (p. 53). These countries have few options at their disposal to counter the ill-effects of global conglomerates upon the local communities. One of the fall-back arrangements is one that is entitled – *The Green OPEC* – whose enactment was presented for consideration by President Wade¹¹ of Senegal¹². It is made up of the African non-oil producing countries who are aiming to yield an international begetting from the export of agro-fuels¹³.

Brazil was looked up to as an example to be followed in. Brazil’s footsteps are not that easy to be filled in, as the boded plans would take at least a decade to be taken to fulfillment. Nevertheless, until then, plenty of African parts are

⁹ Sustainability becomes an indicative checker for the development of smart-energy preservation policies. Jürgen Maier contends that the solutions implemented so far for the searching of a new energy-paradigm are more instinctive than matter-of-fact.

¹⁰ The copious notes written upon how pernicious oil multinationals can be are directed, for purposes of exemplification, to the case of Nigeria, where oil entrepreneurs have been skillful enough in order to ensue a frequent clique of people, who would promote the company interests, to the detriment of local climate and even to the detriment of social interests.

¹¹ Wade’s plan was to introduce with the suitable ceremonialisms the Pan-African Non-Petroleum Producers Association.

¹² Whose inauguration was marked in 2006.

¹³ The undergoing plan is to produce energy by using the farming land for the production of biofuels.

engaged in sustaining offshore activities¹⁴. Africa is not a land destitute of energy resources. The Niger Delta comprises approximately an eruption of about 400 million tonnes of carbon dioxide.

Andrew Highman's piece - *Creating a Climate of Security: The Latest Science and Acceptable Risk* – emphasizes the fact that the human factor has been the most important drive for the recent global transformations. Climate risks have spasmodically taken over the Planet.

Climate risks are highly threatening in Pacific countries like: Torres Strait Islands, Vanuatu, Maldives, Kiribati and Tuvalu. “Drying has also been observed over large regions, including the Sahel, the Mediterranean, Southern Africa and parts of Southern Asia. In Africa's large water catchments of Niger, Lake Chad and Senegal, total available water has decreased by 40 to 60 per cent, and desertification has been worsened by lower average annual rainfall, runoff and soil moisture, especially in Southern, Northern and Western Africa” (p. 65).

The answer for policies capable of maintaining time-enduring growth is to produce an economy that absorbs more greenhouse gasses than it emits. Only in this way a just environmental balance would be triggered.

Devyani Gupta accommodates the heavy issue of migration in the piece: *Climate of Fear: Environment, Migration and Security*. Climate resides in the same analytical corners addressed to migration and climate assistance policies. Redirecting the focus upon human security sojourns the toolbox of instruments that is required to be developed in order to adapt living standards and requirements to environmental adaptation strategies.

Reducing migration – a phenomenon that is spurred mainly from developing countries – would mean fostering and parenting a sustainable economy in those countries. This would be tokened by associating the likes of inherent mobility to the likes of producing a model of sustainable economic development and understanding the new categories that the current meaning of migration has undertaken: migration for the sake of procuring a better way of life.

Nicholas Stern in *Changing Economics* accentuates the fact that a model of an improved economy would also consider climate change as a way of interposing with the channels of the policies meant to emancipate people from extreme poverty.

Climate change is an obstructive factor of development-fostering especially in the countries where disarmingly negative prospects for development emerge and where climate change has failed to be oppugned with alternative, adequate measures.

Stern is an obstinate supporter that more should be done for the assistance of developing countries: “The arguments for 0.7 per cent of GNP as development aid from rich countries by 2015 were very powerful when they were made in 2002

¹⁴ Nigeria, Sao Tomé and Príncipe, Equatorial Guinea, Angola are some of these lands where offshore activities have been reported to come under tremendous effectuation. Ghana and Sierra Leone are mentioned to be the earliest contestants in this kind of activities.

and 2005; in the context of climate change, they are overwhelming. The developed world must recognize that the development agenda is now much more costly than anticipated 10 to 15 years ago and raise the target to around 1 per cent of GNP per annum” (p. 91).

The costs regarding the fight against climate change are unjustly paid by the rich and impoverished countries, without the provision of any actual means of support, on behalf of the efforts set aside for the enterprise of the latter¹⁵.

Johan Kuylensstierna, Michael Moore and Dave Trouba in *Water Scenarios: ‘The Unpredictable Flow’* mull over the question of water and its just management as the most precious resource entertaining life.

The uneven distribution of water resources, their dearth, their hard-reach, their exploitation in energy-production techniques, and, most of all, the high-demand¹⁶ require a holistic examination regarding the appropriation of future strategies for clean-water supply and for the sustainability of its provision. The debates surrounding the problem are not at all scanty: “Former United Nations Secretary General Kofi Annan identified water as one of ten crucial issues to be addressed at the 2002 Johannesburg World Summit on Sustainable Development (WSSD) and, indeed, it was (UN, 2002a, 2002b).

His successor, Ban Ki-moon, highlighted the need to focus more on water issues within the climate change agenda during the 2008 World Economic Forum, stressing that ‘a shortage of water resources could spell increased conflicts in the future’. He added that ‘governments must engage and lead, but the private sector also has a role to play’” (page: 98).

The critical deficiency of water in plenty of the desert regions across the globe is one distinct feature of the duration of the development objectives for the curtailing of poverty and for the facilitating clean-water consumption. The address of this issue should be and will be held in repetition for a fair amount of time, at least as long as a problem-integrated management is no longer as resource-exhausting to be irreproachably applied.

Jaques Diouf brings up the issue of food security in *Handling or not Handling the Food Crisis*. The causes and effects of food security and of the food crisis are part of a much entangled matrix. The grasp of the problem is kept under a global and also under a regional helm, as well: both the regional and global organizations concerned with the augmentation in the standards of living world-widely have risen the issue into an eminence crowned by the fact that it impacts both developing and developed countries, given the rising levels of inflation for food prices¹⁷.

¹⁵ The additional financial burdens are beginning to feel more and more adamantine. A much tougher and committed involvement from the developed world would have to be taken in with much more ambitious steps and with a clearer, more unified outlook for the future.

¹⁶ The high and ever-increasing demand of water resources across the globe.

¹⁷ Export strategies are mostly damaged by the incurrent global food crisis. The foremost goal is satisfying the needs of the endogenous population and, then, create export space for

In chapter twelve - *Climate Change and Biodiversity Loss: The Great New Threats to Peace, Security and Development* - Ahmed Djoghlaif is preoccupied with the intense solitude of the scene of biodiversity loss, under the canopy of climate change. The sublimity of biodiversity loss is minutely surveyed:

“By 2050, climate change will lead to gradual replacement of tropical forest by savannah in eastern Amazonia. Semi-arid vegetation will tend to be replaced by arid land vegetation. There is a risk of significant biodiversity loss in many areas of tropical Latin America. In North America, coastal communities and habitats will be increasingly stressed by climate change impacts interacting with development and pollution” (p. 111).

More amply and specifically, the mere continuity of some islands, where Pacific nations reside, is under immense threat: “The very existence of several island countries such as Tuvalu or Kiribati is under threat. In November 2001, Tuvalu was the first country to make arrangements for the evacuation of its population because of rising water levels. Looking at future predictions of sea-level rise, Tuvalu may, sadly, not be the last. Therefore, because of climate change, a number of sovereign nations will eventually vanish from the surface of the Earth. No technology, whatever its level of sophistication and advancement, will be able to prevent this” (p. 113-114).

The creation of both expert and technical panels to generate an in-depth resolution for the issue is likely to become another instance of festive magnificence. Capacity-building is a slow-pacer in this matter, outdistanced by institution-building frameworks that were once the seat of the luxury for optimism.

Gidon Bromberg, Ladeene Freimuth, Nader al Khateeb and Munqeth Mehyar relinquish an enticing depiction of how climate change as a threat multiplier intersects with Middle Eastern Security in: *Climate Change: A New Threat to Middle East Security*. Middle East is replete with a diverse range of instabilities. Climate-change related instability opens a place for the mutual recognition of bilateral opportunities that can be pursued by the countries residing in the region, thus surpassing the obstacles interposed in other levels of interaction and in other fields, as well.

Ambassador Stuart Beck and Michel K. Dorsey restore a declaim of the uneasy place for the debate of the small islands and of their connection to climate change in: *At the Water's Edge: Climate Justice, Small Islands and Sustainable Development*. There is no general permission laid forward for someone to take abstracts out of what represents an island nation. Nevertheless, island nations have been reunited under a common forum called: *The Alliance of Small Island States (AOSIS)*¹⁸.

food niches, in connection with the foreign demand. The expanse of these measures tends to absorb a restrictive nature, especially in the context of the penetration of the global food market by many emerging economies.

¹⁸ With a comprizal of 43 members.

The adjoining to this institutional framework takes place on a voluntary basis and it mostly utilizes the lingering legacy of lobbying on behalf of island nations, concerning a multilateral buttonhole for climate change policies and initiatives.

For island nations, given the geographical prerequisites of their location, isolation and remoteness are the most obvious hardships. Assistance and cooperation are not at all readily obtainable. For these justifications, multilateralism is a welcoming panacea for the tackling in of the necessary infrastructures for climate change.

Melinda Kimble addresses in: *Climate Risks and Insecurities* aspects regarding how resources conflicts are spurred and how the mobilization of huge masses of people is performed, under the structural causes and conditions of climate change.

In addition to this, the loss in biodiversity, in an ultimate domain like agriculture, reigns as an issue that makes all the other debates in connection to climate change abandoned to decay: "Biodiversity in agriculture is also critical to food production, economic stability and future growth. A decline in biodiversity could be more threatening to societal survival than general species loss. The moderate and relatively predictable climate of the past 250 years has paralleled the expansion of 'industrial agriculture production', especially in the developed world and the large emerging economies. This practice has created vast 'monocultures' of grain crops, which underpin the global food system and rely on a few varieties of several grains (wheat, rice and maize) and key oilseeds (rape, olive, soy and palm). The dominance of these crops makes modern society more vulnerable to climate change" (p. 150).

Felix Dodds and Richard Sherman proffer the current state of institutional multilateralism in the case of climate change in: *A Multilateral System for Climate and Energy Security: What Roles for Existing Institutions?*.

The compelling certainty of the roles that the international institutions are endowed with is outranked by the intricacies of the employment of a sound knowledge management: "As Albert Einstein said: 'We can't solve problems by using the same kind of thinking we used when we created them'" (p. 185).

Dodds and Sherman punctuate the fact that an environmental issue was first introduced for the address of the United Nations Security Council in 2007. The slowness of the official succession of debates regarding climate change and its convergence with global security pinpoint the fact that such a procrastination was partly¹⁹ caused by the fact that, besides the commitments laid forward in the '90's, the road junction with ideas regarding climate change was still under the spell of plenty of stubborn procrastination.

As other authors in this volume have one of the most extreme points of collision between the steps made so far and the steps yet to be made in matters concerning climate change, is the fact that the developed countries have been

¹⁹ As in the most part.

neglecting to alter their consumption patterns in a decisive and in a more effectual manner: “David Nussbaum, the chief executive officer (CEO) of the World Wide Fund for Nature-UK (WWF-UK) pointed out: ‘If everyone consumed resources in the way that we do in the UK or Europe, we would need three planets to support us’ (Nussbaum, 2007). And this by 2030” (pp. 155-156). The undervaluing or the improper consulting of aspects of earlier warning was a major hindrance for climate change multilateral institutional system to develop properly. Even more: “Outlining the larger problem we face might perhaps help us to focus on the problems in the area of energy and climate. What has been very clear since the Rio Earth Summit is that governments are not very good at joined-up thinking or acting, for that matter” (p. 156).

Chris Spence enlarges upon the issues of climate change and energy insecurity from the point of view of developing a global framework with decision-making abilities, in the matter, in the chapter entitled: *Who Decides? The Role of the United Nations and Security Council in Addressing Climate and Energy Insecurity*.

Spence dotes the possibility of augmenting the focus of the Security Council in the matter, within the consideration that there are other institutional mechanisms designed to better tackle the problem: UN General Assembly (UNGA), Economic and Social Council (ECOSOC), the Commission on Sustainable Development (CSD), United Nations Environment Programme (UNEP). Of course, a rise in the profile of such an issue would be highly facilitated by the enhancement of the Security Council working agenda, for purposes of its inclusion.

Nevertheless, the Security Council’s agenda is yet serving to restrict the topics approached. In addition to this, the decision-making procedures in the Security Council are yet too stypctic in effect and the participation rests in the provisional occupancies.

Barbara J. Bramble touches upon a subject highly absorbed with the practical side of combating climate change and of the instruments at hand in: *Financing the Low-Carbon Transition in Developing Countries: The Role of Multilateral Development Banks*. Moving towards achieving the development goals set in connection with climate change requires a set of instruments congregated for this outcome.

The Inter-American Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development are financial blueprints, that can be evaluated as options. Yet, for matters of factual future research, the development banks should follow tougher outlines for lending concessions: “The MDBs should follow the recommendations of the Extractive Industries Review. No new lending should be made to fossil fuel development such as coal mining, tar sands or oil and gas production; these extractive industries have a sorry record of corruption and failure to address the energy needs of the poor or to promote solid development of local economies” (p. 197).

Stavros Dimas delivers in the nineteenth chapter - *European Union Response to the Challenge* – an exhibition of complex clotures related to the emending introduced by the European Union, from the time when he was appointed as the Commissioner for Environment. The European Union has developed a neatly tailored image of a sense of unity.

However, this image does not prevent the appearance of commotions within the largest market in the world. The market volume that EU has makes it very hard for greenhouse gas emissions to be minified.

Furthermore, Stavros Dimas acknowledges the uneasy situation created by gas emissions from developing countries, as well. EU is seen as a potent mediator for sustaining the most compelling climate diplomacy for other developing countries to adopt the same poser as far as the reduction of gas emissions is concerned: “We have already made progress with regard to emission reductions; the latest EU inventory of greenhouse gas (GHG) emissions for 2006 shows that total EU-27 greenhouse gas emissions were 10.8 per cent below base year levels without emissions and removals by land use, land-use change and forestry and were 0.3 per cent lower compared to 2005” (p. 194).

Linda Adams and Steve Howard border on the important mix of state and regional²⁰ action and the best ways to achieve a successful blend of the two in: *Sub-National Climate Change Action Model for the World*.

The glide slope begins to be very different as regional governments become more and more active in the struggle to come up with a new and improved plethora of instruments to combat climate change.

Adams and Howard list the regional partnerships that have been efficient in avoiding the state power-structures and embark on autonomous programs, regardless of differentials regarding geographic proximity or geographic inhering: “The efforts of sub-national governments are significant not only on their own, but because we have agreed to work together across borders and across oceans. In addition to leading on climate actions at home, sub-national governments have formed partnerships with each other as a model for international cooperation on climate change. Out of the Montreal Declaration and state and regional partnerships, key bilateral agreements have been signed. For example, California has signed a memorandum of understanding (MOU) with South Australia, Manitoba, British Columbia and many others to advance areas such as climate change legislation, the expansion of solar and geothermal power and the adoption of tailpipe emissions standards” (p. 209).

The provincial and regional levels have seized the complex appurtenance of the momentous implications that climate change has effected and, at the same time, they are closer to their most contiguous outcomes.

Being more interested in dealing with these challenges more deftly, they are fast-organizers and, perhaps, even act with a more intense brush of

²⁰ The inference of the word *regional* refers to actions coordinated by administrative units within a state.

effervescence, in comparison to the national governments and in comparison with how the international institutions work.

Andrew Sims in: *A Green New Deal: Poverty Reduction and Economic Stability in a Carbon-Constrained World* concedes the fact that the environmental means, within which the current global development model is projected, have been surpassed by the need of a greater economic activity and by the input of more pressing human needs.

In the most nominal overviews, the current global development model is based upon the power and authority of a carbon-constrained world, a carbon-constrained world which renders the most vulnerability to the areas of the Planet living in poverty²¹.

The unreasonable character of the ambiguity of the development model is criticized by the employment of one of Robert Kennedy's citations: "Gross National Product does not allow for the health of our families, the quality of their education, or the joy of their play. It is indifferent to the decency of our factories and the safety of our streets alike. It does not include the beauty of our poetry, or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials... The Gross National Product measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile" (p. 219).

The common sense of the current state of human development must resolve this enigma and attach greater importance to the respect of the environmental limits imposed. These need to represent an imperious and inescapable tramontane for all international decision-makers, especially in the post-Kyoto structural conditions.

Winston Gereluk and Lucien Royer discuss in: *Energy, Climate Change and Human Security: The Trade Union Challenge* confute about how the changing ecosystem of the Planet produces effects upon the working conditions worldwide, through the considerations that workers represent the prime focus of industrial activities, as they entertain the industrial activities²².

The primary authority for the engendering of climate-related risks and insecurities is, beyond any shadow of the doubt, the central cause. The failure of social protection policies can be re-directed for explanation to the carelessness of governmental authorities and, at the same time, to the lack of funding necessary for the social, institutional leas to be able to function properly.

As Gereluk and Royer endorse, the guidance for the unveiling of good industrial relations lies at the forefront of the association of workers in order to

²¹ Contrary to the received opinion that the risk of development is parallel to those who do not infer with it.

²² The workers represent an element of support of every industrial activity. To a large-scale of discussion, human security concerns are the midpoint of how climate change affects the manner in which the social dimension of the workers' employment conditions and his/her environmental rights are declaimed.

implement the required environmental criterions. There are some examples integrated to this analysis: “Article 6 of the New Delhi Programme of Work asks parties to advance and report on activities for public awareness through education and training as a route to public participation and access to information, and, in many countries, trade unions are in the best position to contribute, as they are the largest single provider of informal adult education” (p. 232).

Beyond what has been said, economic agents can play an enhanced role in this issue by proposing legislative adjustments where the national legislation requires major revisions or where the national legislation manifests a truancy in this respect.

Within the same musing, Craig Bennett in: *What Is a Credible Corporate Response to Climate Change?* – delineates the manner in which corporate actors collate with the environmental infrastructure of needs and concerns. If in the previous chapter, details about how corporate actors can act in order to tie in an important musing connected to the upshots of climate change, in this chapter, the main and the most special nidus is given to the mien of business operations and to their environmental sustainability.

If the last chapter was mostly concerned to the workers` needs and working environment, this chapter depicts a rendition of how the products and services of different companies are delivered and how energy amassing is ceded in restoration or not, depending upon the different economic niches taken in for purposes of exemplifying. The abstraction of the encouragement of *green consumerism* is insinuated.

Green consumerism refers to the ethics of purchasing with the respect and adherence to moral principles, through the broaching of financial additives to a special category of products or of services.

The standards applied involve the categories that imply the respect for human rights, for the screen and security of the environment, for the guardianship of the habitat, or of the ecological system. There are some definitudes identified for the practice of *green consumerism*: “The limitations of green consumerism should have been obvious, however. When ‘green products’ (however defined) are produced for a niche market of ‘green consumers’, they are nearly always more expensive than those that are merely produced as cheaply as possible. A more fundamental limit is that even the most ardent, the most caring, the most affluent green consumer will never possess enough knowledge (or time) to buy ‘green’ all the time” (p. 234-235).

Andrew Higham in: *Taking Action: Financing a Climate Change Technology Revolution* - scrutinizes the manner in which technological progress is intermixed with the need to provide cheaper and more user-friendly technologies, as an intricate part of the process of innovation.

Higham records an interesting feature of the process of technological development - there are measuring units of the technological progress and of the intermediary steps attained at a precise moment in time: "The concept of *stages of technological maturity* provides a measure of the progress of a technology

from the research laboratory to a widely available, commercially viable product. These stages describe a technology's progress through successive phases of technological innovation" (p. 249-250).

There are, as imagined, plenty of barriers for the deployment of climate change technologies in developing countries. According to Highman, the major requirement is a policy-based approach for assisting the developing countries in the implementation for setting in targets regarding the use of renewable energy, on the one hand, and, on the other hand, for the accreting obligations and tariffs²³.

In the final analysis, the debates through which climate change is complimented are multi-varied. Climate change rests a toilsome challenge. At the same time, implementing policies for combating climate-change is a very unsure undertaking²⁴. Eradicating the gainsay of climate change is no less ambitious than achieving alternative ultra-elevated goals.

The impression that this book gives alludes to the fact that individual action, in correlation to climate change, has been, more or less, disregarded in the recent present, as it has been several decades ago. A constant denomination of danger and of concerted calls for public action falls short of prospective expectations. In order to better support a framework of understanding, the fact that foremost sectors of the economic activity will be affected by climate change and by all the high-minded impacts of the ulterior phenomena. All in all, climate change is not only an issue of concern, it is an issuance of relevant expectation for genuine pioneering.

²³ Highman appreciates that the most important dyad, in this respect, is the connection between the corporate actors and public policies. In Highman's view, corporate actors have a corporate responsibility as well as a social responsibility. A narrowly-drawn interest and the corporate greed have been the pillars on which the public image of corporate actors has been built. Some sort of a retard action has been manifesting as far as the need for accomplishment climate change principles is concerned (which has not actually be thought of as a task incorporated in the realm of corporate duty). Andrew Highman characterizes this sort of attitude as "*a lazy indifference*".

²⁴ Unsure regarding the manner in which the objectives nurture the possibility of their realization.