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Promoting the implementation of sustainable development goal number 13: The role of private enterprises

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Topic Area A:

Promoting the implementation of sustainable development goal number 13: The role of private enterprises

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List of Abbreviations

CDM: Clean Development Mechanism

CER: Certified Emissions Reduction

COP: Conference of the Parties

DRM: Disaster Risk Management

ERU: Emission Reduction Units

EU ETS: European Union Emissions Trading System

GCF: Green Climate Fund

GHGs: Green House Gases

IPCC: Intergovernmental Panel on Climate Change

SDGs: Sustainable Development Goals

UNDP: United Nations Development Program

UNEP: United Nations Environmental Program

UNFCCC: United Nations Framework Convention on Climate Change

WMO: World Meteorological Organization

1. Welcoming message

Dear participants,

It is our uttermost pleasure to welcome you to ThessisMUN 2018 and more specifically to Economic and Social Council. Our first participation to ThessisMUN dates back to 2014 and despite the growing size of the conference, its unique characteristics such as academic excellence, organizational perfection and cooperation ambience are still omnipresent. For those reasons we truly believe that your participation in ThessisMUN will be an unforgettable experience for you regardless of your previous experience in such simulations.

The document that you are holding in your hands is the study guide of our committee. The aim of this document –and our expectation- is that it will enable you to acquire a more profound insight into the topics under discussion. During your preparation this guide will be a compass for your research and, combined with it, will allow you to present your position paper (your country's policy on the topic) to us. Additionally, it should contribute to your pre-conference academic preparation. However, apart from acquiring knowledge on the topics under discussion do not neglect to go through the rules of procedure something that will facilitate our committee's work.

As the board members of ECOSOC we are here to assist you in your endeavor to address the prominent topics of action against climate change and the promotion of restorative justice. We acknowledge that this year's topics are both intriguing and challenging but we are here to answer your inquiries and assist you in any way possible.

We both expect that our cooperation will be based on trust, communication, punctuality and respect which all work both ways. We are looking forward to meeting you all next April in the beautiful city of Thessaloniki.

Best regards from Athens!

Your chairpersons,

Bograkou Elpida

Lagouvardos-Kotronis Orestis

2. Introduction to the institution

The Economic and Social Council (hereinafter ECOSOC) of the United Nations was established in 1945 and since then has been one of the six main bodies of the Organization.

In the 10th Chapter of the UN Charter (i.e. Chapter X), under article 61 the composition of the Council is displayed as follows. The Members of ECOSOC shall be fifty-four (54), with the possibility of reelection and with only one representative per member state. Each member state has the right to one vote and the decisions in the Economic and Social Council are made based on the majority of the members present and voting (Article 67).

The procedure followed by the ECOSOC is quite simple. The Economic and Social Council may set up commissions in economic, humanitarian and social fields, may invite any Member of the United Nations to participate, without the right of vote, in its debates and discussions, if the topic under discussion is directly related or relevant to that Member of the UN or its national interests. Other parties that may participate in its deliberations without the right to vote include representatives of specialized agencies. Those representatives may participate in the ECOSOC debates or the established commissions' debates and vice-versa, its representatives can participate in the deliberations of the specialized agencies. Lastly, the Economic and Social Council has the power to arrange for non-governmental organizations, international organizations or even national ones to attend in order to provide their consultation.

Nowadays, the Economic and Social Council of the United Nations is more needed than ever. It focuses on current burning issues upon the economic development, the humanitarian refugee crisis, the environment, children in need, food security and education.

More specifically, the current discussion of the Council on the issue of economic matters revolves around the Asia-Pacific region and how despite the positive

signs, the threats of financial instability remain. What is more, on the humanitarian issues, ECOSOC is currently discussing upon the boosting of winter-assistance for displaced persons from Iraq in conflict-affected villages, while urging the European Union to adopt more proactive measures in order to tackle effectively the migrant flows in the region. A ban on Europe's "dirty fuels" is a focal point of debates, as well, as we see "West African countries putting the health of their people first", while on World Soil Day an immediate need for healthy soils for essential services is expressed. Along with UNICEF, ECOSOC deals with the issues of children lacking access to clear water etc.

3. Introduction to the topic

From 1750 onwards and starting from the United Kingdom, industrial revolution spread out gradually to the whole European continent. Apart from economic, political and societal changes that occurred since 1750, industrial revolution introduced a new way of producing massive amounts of goods. Villages were abandoned, cities grew bigger and small manufacturers transformed to industrial workers. Humankind was entering into a new era. However, this transition bore its own costs. Amongst them, the degradation of Earth's climate has been one of the most significant and prominent repercussions.

The notion that human activity in one region could generate global results is attributed to the theoretical work of Svante Arrhenius and to his paper entitled "On the influence of Carbonic Acid upon the Temperature of the Ground". Arrhenius not only understood that atmosphere is functioning as a greenhouse but he also reached the conclusion "that the power of the atmosphere's warming effect was determined by the amount of carbonic acid (CO2) it contained"[1]. The author inferred that fossil fuels might lead to an increase in global temperature.

[1] Clark, D. (2009). *Climate controversies (of the nineteenth century)*. [The Guardian]. Available from: https://www.theguardian.com/environment/blog/2009/feb/19/climate-change-arrhenius. [Accessed: November 23rd 2017]

Nevertheless, contemporary scientific circles dismissed the validity of his conclusions.

In 1958 though, "measurements of carbon dioxide confirmed its steady increase in the atmosphere"[2] and some years later the argument that greenhouse gases would actually warm the planet began gaining support. Nowadays, despite the fact that the evidences of global warming and climate change are omnipresent, the international community has failed to reach consensus on how climate change can be tackled.

The purpose of this study guide is to analyze in depth the actions that the global community has implemented so far in terms of addressing climate change and its results. Our focal point will be on Sustainable Development Goal number 13 which conveys the willingness of the international community to deal with climate change. Moreover, we will not only mention which are the actions of the United Nations on this topic but we will also designate the role of private enterprises. This document emphasizes on assisting (but not substituting) the deliberations of our committee during its official sessions. The role of ECOSOC has never before been so crucial.

4. Historical and Analytical Background

A prerequisite tool for this analysis is laying the historical, analytical and legal foundations of the United Nation's actions in terms of combating global warming and its effects.

[2] Henson, R. (2011). *When did we discover man-made climate change?* [The Rough Guide to climate change]. Available from: https://www.theguardian.com/environment/2011/mar/02/when-discover-climate-change. [Accessed: November 23rd 2017].

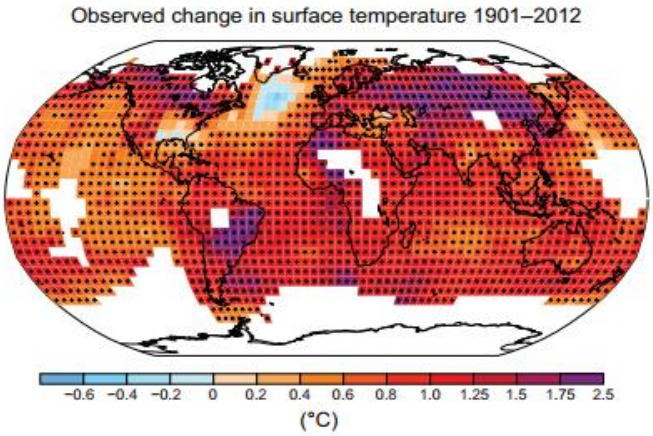
4.1 Intergovernmental Panel on Climate Change

In 1988 the World Meteorological Organization ("WMO") along with the United Nations Environmental Program ("UNEP") decided to establish the Intergovernmental Panel on Climate Change ("IPCC"). The main objectives of IPCC were to assess contemporaneous climate change aspects and formulate efficient and effective response strategies that would be implemented[3]. Resolution A/RES/43/53 of 1988 designated the mandate of IPCC regarding its core tasks which include inter alia the promotion of "the state of knowledge of the science of climate and climatic change; programmes and studies on the social and economic impact of climate change, including global warming; possible response strategies to delay, limit or mitigate the impact of adverse climate change; the identification and possible strengthening of relevant existing international legal instruments having a bearing on climate; elements for inclusion in a possible future international convention on climate;"[4]

Every five to seven years IPCC publishes assessment reports which sum up the most recent evolvements in the area of climate and are separated into three different volumes. The latest one was released in 2014 under the tile AR5 (fifth assessment report). The conclusions of this report were alarming. More specifically, IPCC experts suggest that since 1950 "the atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased"[5]. Furthermore, from 1880 to 2012 global temperature has risen by an average of 0.85 °C. Below we

[3] IPCC, (2007). *History.* Available from: https://www.ipcc.ch/organization/organization_history.shtml. [Accessed: November 23rd 2017]
[4] United Nations General Assembly, (1988). *A/RES/43/53 70th plenary meeting 6 December 1988: Protection of global climate for present and future generations of mankind.* Available from: http://www.un.org/documents/ga/res/43/a43r053.htm. [Accessed: November 23rd 2017]
[5] IPPC, (2013). *Climate Change 2013: The Physical Science Basis. Summary for Policymakers.* [Online]. Available from: http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf. [Accessed: November 23rd 2017]

can see a diagram illustrating the increase in global temperature from 1901-2012 per every part of our continent.



Source: IPCC Summary for policymakers[6]

Ocean temperature has also increased over the past 40 years. Scientists claim that this increase may be observed in depths that reach or exceed the threshold 2,000 meters. In addition to that, sea level rose by 20 cm since 1901. The second volume of AR5 deals with approaches to climate change mitigation and it will be addressed in later parts of this document.

In addition to that, 195 countries are members of IPCC. IPCC along with Al Gore share the Nobel Peace Prize of 2007.

4.2 United Nations Framework Convention on Climate Change

Following the creation of IPCC, the United Nations moved forward with the establishment of the United Nations Framework Convention on Climate Change ("UNFCCC"). In 1992, global representatives from all parts of our continent joined UNFCCC, a treaty that provides a "framework for international

[6] IId.

cooperation to combat climate change by limiting average global temperature increases and the resulting climate change"[7].

Article 3 paragraph 5 of UNFCC highlights the fact that economic development should lead to sustainable economic growth but it also provides that "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade"[8]. Furthermore, the contracting states committed themselves in both preventing and addressing the repercussions of climate change. Adapting to the impacts of climate change, implementing integrated plans, adopting national legislation aiming at mitigating climate change effects and assisting developing countries in terms of achieving an efficient response to climate change were among the top priorities of UNFCCC. Last but not least, article 11 of the same treaty calls for the establishment of a financial mechanism responsible "for the provision of financial resources on a grant or concessional basis, including for the transfer of technology"[9]. UNFCCC entered into force in 1994 and currently there are 197 countries parties to this treaty with 165 amongst them being also signatories.[10]

UNFCCC was opened for signature in June 1992 during the United Nations Conference on Environment and Development, which took place in Rio de Janeiro, Brazil. This conference is also referred to as the Earth Summit.

Following the entering into force of UNFCCC in 1994 and more specifically in 1995, the first Conference of the Parties (COP 1) was held in Berlin. This

[7] United Nations Framework Convention on Climate Change, (2015). *Background on the UNFCCC: The international response to climate change.* [Online]. Available from: http://unfccc.int/essential_background/items/6031.php. [Accessed: December 8th 2017]
[8] United Nations, (1992). *United Nations Framework Convention on Climate Change.* Available from: https://unfccc.int/resource/docs/convkp/conveng.pdf. [Accessed: November 23rd 2017]
[9] IId.
[10] United Nations Framework Convention on Climate Change, (2017). *Status of Ratification of the Convention.* [Online]. Available from: http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php. [Accessed: December 8th 2017]

conference laid the foundations for what would come next and in particular the most famous and important action of the United Nations implemented so far: the Kyoto Protocol.

4.3 The Kyoto Protocol

The Kyoto Protocol was adopted in Japan in 1997 and "is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets". However, it took for the Kyoto Protocol 8 years to enter into force. Apart from the United States, all UN member states have **currently** ratified the Kyoto Protocol.

4.3.1 Provisions of the Kyoto Protocol

Annex A of the Kyoto Protocol identifies six greenhouse gases that are responsible for climate change. Those are the following: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF6)[11].

The most important article of the Kyoto Protocol is article 3. In paragraph 1 of this article all parties included in Annex I "committed to reduce their overall emissions of such gases [gases of Annex A] by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012"[12]. Annex I included all current member states of the European Union with the exception of Malta and Cyprus as well as other developed or developing countries such as but not limited to Australia, Canada, New Zealand, Russian Federation, Ukraine and the United States of America. Among those countries the member states of the European Union undertook the most ambitious commitments for reducing their emissions

[11] United Nations, (1998). *Kyoto Protocol to the United Nations Framework Convention on Climate Change.* [Online]. Available from: https://unfccc.int/resource/docs/convkp/kpeng.pdf. [Accessed: December 8th 2017]
[12] IId.

by 8% in comparison with the 1990 levels. If industrialized counties had managed to abide by this provision, there would have been a 29% cut in the values that would have otherwise occurred in the time period 2008-2012[13].

Moreover, all the countries, which undertook the abovementioned commitments, were also requested to establish by 2007 an adequate and competent mechanism to estimate the volume of greenhouse gases ("GHGs") that are produced by human activity. Monitoring the emissions of GHGs is a stepping-stone for setting realistic reduction targets.

COP meetings would serve as the meeting place of Kyoto Protocol with member states bearing also the responsibility for reviewing and revising the methodologies used in the Kyoto Protocol process.

4.3.2 Kyoto mechanisms

Under the provisions of the Kyoto Protocol, three different mechanisms where established in the context of facilitating the fulfillment of Kyoto Protocol goals.

The first mechanism is entitled **International Emissions Trading[14]**. According to article 17 of the Kyoto protocol "countries with commitments under the Kyoto Protocol can acquire emission units from other countries with commitments under the Protocol and use them towards meeting a part of their targets"[15]. Therefore, countries with a surplus of emissions units can actually sell their emission allowances to other countries through this platform. Thus, this international emissions trading system incentivizes countries to cut the GHGs they emit per annum.

[13] Guardian, (2011). *What is the Kyoto Protocol and has it made any difference.* [The Guardian]. Available from: https://www.theguardian.com/environment/2011/mar/11/kyoto-protocol. [Accessed: December 8th 2017]
[14] UNFCCC, (2017). *International Emissions Trading.* [Online]. Available from: http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php. [Accessed: January 5th 2017]
[15] UNFCCC, (2007). *The Kyoto Protocol Mechanisms: International Emissions Trading, Clean Development Mechanism, Joint Implementation.* [Online]. Available from: http://unfccc.int/resource/docs/publications/mechanisms.pdf. [Accessed: December 7th 2017

Moving on, the second mechanism that has been established under the auspices of the Kyoto Protocol is referred to as the **Clean Development Mechanism (CDM)**[16]. Based on article 12 of the Protocol, CDM "allows governments or private entities in industrialized countries to implement emission reduction projects in developing countries and receive credit in the form of "certified emission reductions," or CERs"[17]. Hence, CDM provides a motive to industrialized countries to finance either directly or indirectly relative projects in the developing world. Any reductions deriving from such projects will be subtracted from the agreed quota of the same country. For instance, the Alizés Electricity: Rural Electrification project, that was implemented in Mauritania and targeted to equip 14 local villages with electricity coming from wind turbines, best exemplifies the expectations of the United Nations in that context[18].

Last but not least, the **Joint Implementation mechanism**[19] functions likewise CDM through allowing a country with an emission reduction or limitation commitment under the Kyoto Protocol to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another party[20]. The former party benefits from a decrease in the required number of emissions cuts and the latter party from the receipt of foreign investments and technologic scientific diffusion.

4.3.3 Criticism

Despite its significance, the Kyoto Protocol has been subject of criticism for its failure to undertake courageous initiatives towards tackling climate change.

[16] Clean Development Mechanism, (2017). *About CDM.* [Online]. Available from: https://cdm.unfccc.int/about/index.html. [Accessed: January 5th 2017]
[17] UNEP, (2010). *Clean Development Mechanism.* [Online]. Available from: https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf. [Accessed: December 7th 2017]
[18] GRET, (2017). *Alizés Electricity: Rural Electrification.* [Online]. Available from: http://www.gret.org/projet/alizes-electricity-rural-electrification/?lang=en. [Accessed: December 6th 2017]
[19] UNFCCC, (2017). *Joint Implementation (JI) – Home.* [Online]. Available from: http://ji.unfccc.int/index.html. [Accessed: January 5th 2017]
[20] United Nations, (1998). *Kyoto Protocol to the United Nations Framework Convention on Climate Change.* [Online]. Available from: https://unfccc.int/resource/docs/convkp/kpeng.pdf. [Accessed: December 8th 2017]

Many argue that the introduction of the mechanisms described above does nothing but enabling countries to meet their targets in "flexible" ways - often in other countries - rather than by making domestic emission cuts[21]. Moreover, by 2008 many of the countries that had undertook commitments for reducing their emissions had failed to achieve the agreed goals.

Another issue that has received criticism has to do with the 1990 benchmark for assessing the decrease in GHGs emissions instead of the per capita emissions[22]. Additionally, **the fields of aviation and shipping** have been excluded from the fields covered by the Kyoto Protocol. Given the contribution of aviation and shipping in terms of GHGs emissions we can understand that this omission constitutes a significant drawback of the Kyoto Protocol.

Nevertheless, it is of outmost importance to bear in mind the words of Yvo de Boer, former executive of the UN climate secretariat. De Boer said that Kyoto has paved the way for future actions through establishing "monitoring and verification systems, carbon markets, technology transfer and funds for adaptation"[23].

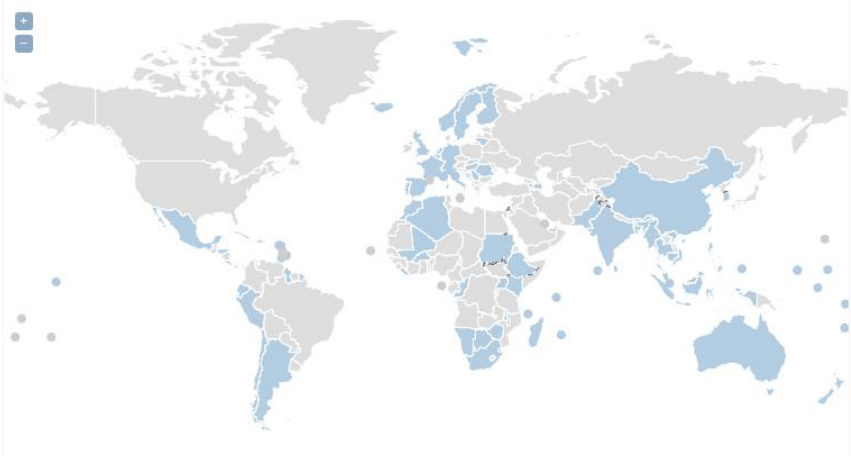
4.4 From 2012 onwards

In 2012 the first commitment period of the Kyoto Protocol came to an end. During the 8th COP session held in Doha in 2012 an amendment of the former protocol for the time period 2012-2020 has been adopted. The most significant alterations that were introduced with this amendment were two. On the one hand, a seventh greenhouse gas [Nitrogen trifluoride (NF3)] has been added to

[21] Adam, D. (2008). *Analysis: Has the Kyoto protocol worked?* [Online]. Available from: https://www.theguardian.com/environment/2008/dec/08/kyoto-poznan-environment-emissions-carbon. [Accessed: December 7th 2017]
[22] IPFS, (2017). *Criticism of the Kyoto Protocol.* [Online]. Available from: https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Criticism_of_the_Kyoto_Protocol.html. [Accessed: January 9th 2018]
[23] KIIT School of Law, (2017). *Climate change and sustainable development.* [The world journal on juristic policy]. Available from: http://jurip.org/wp-content/uploads/2017/03/Soham-Bandopadhyay.pdf. [Accessed: December 8th 2017]

the GHGs list and on the other hand, a second commitment period for 2013-2020 has been established.

However, major polluters refrained from either signing or ratifying this amendment including inter alia: the United States of America, Russian Federation, Canada and Brazil. In the interactive map provided below the countries that have ratified the Doha amendment of the Kyoto Protocol are highlighted in blue.



Source: UNFCCC, Status of the Doha Amendment [24]

The only promising fact of this period is the commitment of the EU member states to jointly reduce their emissions by 20% by 2020 in comparison with the 1990 levels[25]. However, this reduction is not deemed to be sufficient to compensate the reservations expressed by the other countries.

In 2012 the United Nations Conference on Sustainable Development was held in Rio de Janeiro, Brazil (Rio +20) and more recently COP 21 was held in Paris. COP 21 is considered a historic agreement in the endeavor to counter climate

[24] United Nations Framework Convention on Climate Change, (2012). *Status of the Doha Amendment.* [Online]. Available from: http://unfccc.int/kyoto_protocol/doha_amendment/items/7362.php. [Accessed: December 12th 2017]

[25] EUROSTAT, (2017). *Europe 2020 indicators - climate change and energy.* [Online]. Available from: http://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_2020_indicators_-_climate_change_and_energy. [Accessed: January 9th 2018]

change[26]. Almost two hundred global leaders agreed inter alia on the following: "keep global temperatures "well below" 2.0C (3.6F) above pre-industrial times and "endeavor to limit" them even more, to 1.5C and limit the amount of greenhouse gases emitted by human activity to the same levels that trees, soil and oceans can absorb naturally, beginning at some point between 2050 and 2100"[27]. However, only segments of the Paris agreement are legally binding. In addition to that, many countries view the funds provided by this agreement as inadequate. The abovementioned concerns along with the conservative provisions of this agreement cast the most serious doubt on the sufficiency of the Paris Agreement.

Presenting the most prominent actions that the United Nations has implemented so far in the context of addressing climate change and its repercussions is a stepping stone for the introduction and the analysis of our topic area: ***Promoting the implementation of Sustainable Development Goal number 13: the role of private enterprises.***

[26] European Commission, (2015). *Paris Agreement.* [Online]. Available from: https://ec.europa.eu/clima/policies/international/negotiations/paris_en. [Accessed: January 9th 2018]
[27] Briggs, H. (2017). *What is the Paris climate agreement?* [BBC News]. Available from: http://www.bbc.com/news/science-environment-35073297. [Accessed: December 12th 2017]

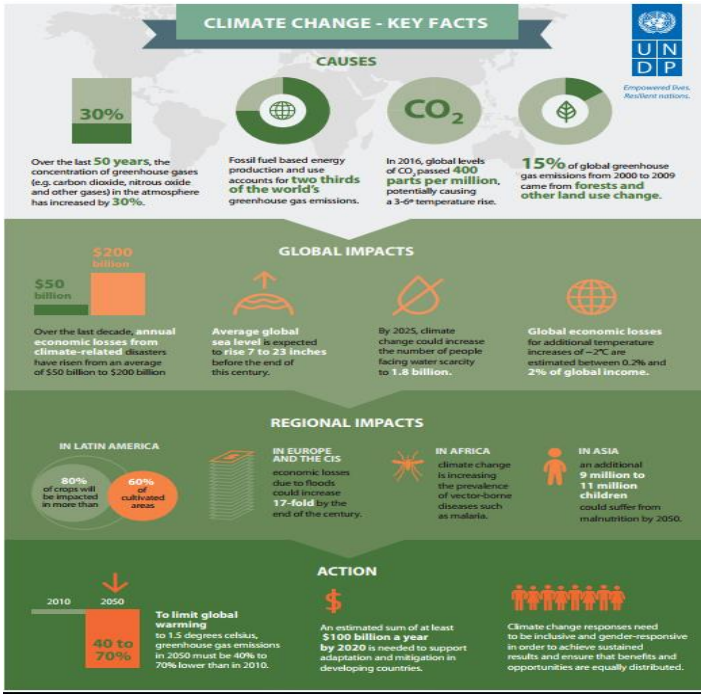
5. Main analysis

Sustainable Development Goals (hereinafter SDGs)[28] were adopted in 2015. In other words, the international community adopted a set of goals to end poverty, protect the planet and ensure prosperity for all.

SDG number 13 is entitled "Take urgent action to combat climate change and its impacts" and the key objectives of this goal as set out by the United Nations are the following:

- ✓ "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- ✓ Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- ✓ Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- ✓ Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- ✓ Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities"[29]

[28] United Nations, (2017). *Sustainable Development Goals: 17 Goals to transform our planet.* [Online]. Available from: http://www.un.org/sustainabledevelopment/sustainable-development-goals/. [Accessed: January 9th 2017]
[29] United Nations Sustainable Development Goals. *Goal 13: Take urgent action to combat climate change and its impacts.* [Online]. Available from:



Source: UNDP, UNDP Support to the Implementation of the Sustainable Development Goals, 2017 [30]

5.1 Implementing Sustainable Goal number 13

A thorough analysis of the actions that are undertaken by the United Nations in order to implement SDG 13 is of outmost importance. As mentioned before, under the scope of this goal there are five specific targets set by the UN in order to assist the evaluation of international progress towards this goal. In that context, an additional number of seven indicators is used in order to evaluate the efficiency of this goal.

5.1.1 Strengthening resilience and adaptive capacity

The repercussions of climate change outlined before, pose a significant threat to humankind. Extreme weather conditions such as floods, land erosion, draughts,

http://www.un.org/sustainabledevelopment/climate-change-2/. [Accessed: December 12th 2017]

[30] UNDP, (2017). *UNDP Support to the Implementation of the Sustainable Development Goals.* [Online]. Available from: http://www.undp.org/content/undp/en/home/librarypage/sustainable-development-goals/undp-support-to-the-implementation-of-the-2030-agenda/. [Accessed: December 27th 2017]

the rise of global temperature and the rise of sea water are among the most prominent alterations to climate that threaten our societies. Hence, building resilience on this topic is of paramount importance.

According to World Economic Forum, strengthening a nation's resilience to extreme climate conditions can be extended in three levels: "the ability to adapt to changes, anticipate what might happen next and absorb shocks when they do come along"[31].

Moreover, disasters from extreme weather conditions affect disproportionally the developing parts of our continent. "From 1995 through 2014, 89% of storm-related fatalities were in lower-income countries, even though these countries experienced just 26% of storms"[32]. For instance from 2005-2014 in the Asia pacific region half a million people lost their lives due to such disasters[33]. In addition to that, since the 80s more than 3 trillion USD were lost due to adverse weather conditions, an amount that is almost fifteen times as high as the Gross Domestic Product (GDP) of Greece. Therefore, environmental hazards have an elevated cost, affect the poor and threaten the future of our continent. In that sense, the international community has undertook a plethora of initiatives in order to mitigate the abovementioned results.

According to the United Nations, the response to this situation requires action in the fields of disaster risk reduction, emergency response and post-disaster recovery[34].

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[31] Goering, L. (2015). *3 ways to build resilience to climate change.* [Online]. Available from: https://www.weforum.org/agenda/2015/09/3-ways-to-build-resilience-to-climate-change/. [Accessed: December 25th 2017]

[32] The World Bank, (2017). *Disaster Risk Management.* [Online]. Available from: http://www.worldbank.org/en/topic/disasterriskmanagement/overview. [Accessed: December 25th 2017]

[33] UNESCAP, (2015). *Enhanced regional cooperation key to building resilience to floods and landslides.* [Online]. Available from: http://www.unescap.org/news/enhanced-regional-cooperation-key-building-resilience-floods-and-landslides. [Accessed: January 9th 2018]

[34] UN Environment, (2017). *Building resilience to disasters and conflicts.* [Online]. Available from: https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/building-resilience-disasters-and-conflicts. [Accessed: December 27th 2017]

The role of the World Bank in that endeavor is pivotal. Disaster Risk Management ("DRM") programs set by the World Bank aim to support countries to assess their exposure to hazards and address several disaster risks through the provision of technical and financial support for risk assessment, risk reduction, preparedness, financial protection, resilient recovery and reconstruction[35]. For the purposes of such programs the World Bank invested more than $4 billion during the last fiscal year (2017)[36]. Under the auspices of the World Bank Group ("WBG") DRM many programs have been supported both in the context of mitigating and addressing the repercussions of climate change. An example of such programs is the Seismic Risk Mitigation Project that was implemented in Turkey from 2005-2015 with a total cost of $400 million[37] helping the country to better respond to catastrophic earthquakes. The diffusion of scientific knowhow, the establishment of risk mitigation strategies and the provision of funds are considered to be efficient steps towards the achievement of this target.

5.1.2 Integrate climate change measures into national policies

The main objective of this target is to enable member states "to integrate climate change concerns into their National Sustainable Development Strategies and other planning processes, particularly with regard to technology transfer"[38]. The purpose of this target is dual. On the one hand, member states should try and adopt counter climate change strategies and on the other hand that transition should not hamper their development perspectives. As of April 20, 2017 seven

[35] The World Bank, (2017). *Overview.* [Online]. Available from: http://www.worldbank.org/en/topic/disasterriskmanagement/overview#2. [Accessed: December 26th 2017]
[36] IId.
[37] The World Bank, (2016). *The Istanbul Seismic Risk Mitigation Project.* [Online]. Available from: http://www.worldbank.org/en/country/turkey/brief/the-istanbul-seismic-risk-mitigation-project. [Accessed: January 9th 2018]
[38] United Nations Development Account, (2013). *Integrating climate change into national sustainable development strategies and plans in Latin America and the Caribbean***.** Available from: http://www.un.org/esa/devaccount/projects/2006/0607AG.html. [Accessed: December 27th 2017]

developing countries managed to integrate to the national plans strategies that aim at addressing climate change.

The United Nations Development Program ("UNDP") assists governments to render national targets as set by international documents, such as the Paris Agreement, into solid national legislation. Agreeing upon specific targets and moving forward with their implementation are two distinct procedures. When it comes to Developing or Least Developed Countries or Small Island Developing States the importance of this target becomes more and more obvious.
The case of the European Union best exemplifies the transition from undertaking commitments to transforming them into reality.

5.1.2.1 The case of the European Union

As described earlier, the European Union has undertaken the most significant steps towards the issue of addressing the repercussions of climate change. By 2020, the EU member states have committed themselves in reducing the GHG emissions by 20%, in improving the Union's energy efficiency by the same percentage and in increasing the share of renewable energy resources as a percentage of EU total energy necessities to 20%[39]. Furthermore, by 2030 the same percentages increase to 40%, 27% and 27% respectively. Until 2050, the European Union aims at becoming a low carbon economy by reducing GHGs emissions by 80% in comparison with the 1990 levels[40].

In addition to that, the European Union Emissions Trading System ("EU ETS") that was established on October 13, 2003 with the Directive 2003/87/EC has created "a scheme for greenhouse gas emission allowance trading within the

[39] European Commission, (2017). *2020 climate and energy package.* [Online]. Available from: https://ec.europa.eu/clima/policies/strategies/2020_en. [Accessed: December 27th 2017]
[40] European Commission, (2017). *2050 low carbon economy.* [Online]. Available from: https://ec.europa.eu/clima/policies/strategies/2050_en. [Accessed: December 27th 2017]

Community in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner"[41].

According to EU ETS and from 2005 onwards, industrial plants that operate inter alia in the fields of energy production, minerals, steel and iron and which emit specific GHGs must possess a permit that allows them to do so. Furthermore, this Directive has been also responsible for enabling EU member states to fulfill their responsibilities deriving from Kyoto protocol[42]. Each year, according to various criteria, a cap for emissions is attributed to each installation that resides inside the European Economic Area. A cap is set on the total amount of certain GHGs that can be emitted by installations covered by the system. The cap is reduced over time so that total emissions fall. The EU ETS is the largest cap and trade system in the world and its success may point out the way forward for the international community[43].

5.1.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

The role of education and awareness is essential in all parts of human activity. The same applies on the topic of climate change as well. Education "helps young people understand and address the impact of global warming, encourages

[41] Official journal of the EU, (2003). *DIRECTIVE 2003/87/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.* [Online]. Available from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003L0087&from=EN. [Accessed: September 5th, 2017]

[42] LSE, (2003). *EU Emissions Trading Scheme (EU ETS).* [Online]. Available from: http://www.lse.ac.uk/GranthamInstitute/law/eu-emission-trading-scheme-eu-ets-directive-200387ec-establishing-a-scheme-for-greenhouse-gas-emission-allowance-trading-within-the-community-and-amending-council-directive-9661ec/. [Accessed: September 5th, 2017]

[43] Lagouvardos-Kotronis, O. (2017). *Study Guide CEU.* [Online]. Available from: http://hammun.de/wp-content/uploads/2017/11/CEU_HamMUN17_guide.pdf. [Accessed: December 23rd 2017]

changes in their attitudes and behaviour and helps them adapt to climate change-related trends"[44].

Being a subsidiary body of the United Nations, UNESCO has implemented a program entitled ***Climate Change Education for Sustainable Development***[45] that focuses on serving the goals outlined in the last paragraph. Climate change education is a substantial part of this effort. Climate change oriented education will inter alia "strengthen the capacity of Member States to provide quality climate change education for sustainable development at primary and secondary school level, encourage and enhance innovative teaching approaches to integrate quality climate change education for sustainable development in schools and raise awareness about climate change and enhance non-formal education programmes through media, networking and partnerships"[46].

Youth should be informed about the ever-changing world where it will be forced to grow up in and on what can be the contribution of each and every citizen in terms of avoiding the alterations of climate that are currently occurring. The input of the society is pivotal in order to make policymakers realize the significance of the environment in the agenda of the society.

5.1.4 Funding and resources mobilization

Unfortunately, the will of UN member states to implement and achieve the targets set out in SDG number 13 is not sufficient. The importance of funding and mobilizing resources is more than important. In 2015, UN member states reached an important agreement in terms of generating financing as a

[44] UNESCO, (2017). *Climate change education.* [Online]. Available from: https://en.unesco.org/themes/education-sustainable-development/cce. [Accessed: December 26th 2017]
[45] United Nations Education for Sustainable Development, (2010). *The UNESCO Climate Change Initiative.* [Online]. Available from: http://unesdoc.unesco.org/images/0019/001901/190101E.pdf. [Accessed: January 9th 2017]
[46] UNESCO, (2010). *The UNESCO climate change initiative.* [Online]. Available from: http://unesdoc.unesco.org/images/0019/001901/190101E.pdf. [Accessed: December 26th 2017]

prerequisite tool for achieving the sustainable development agenda. The document that was produced in June 2015 is entitled Addis Ababa Action Agenda[47]. The former Secretary General Ban Ki-moon stated that "this agreement is a critical step forward in building a sustainable future for all. It provides a global framework for financing sustainable development. The results here in Addis Ababa give us the foundation of a revitalized global partnership for sustainable development that will leave no one behind"[48].

The Addis Ababa Action Agenda mainly focuses on the issues of debt sustainability, international trade and cooperation and domestic and international public and private business which are all seen as generators of development for the developing parts of this continent. For instance, paragraph 44 of this document highlights the importance of "domestic capital markets, particularly long-term bond and insurance markets where appropriate, including crop insurance". It is in other words a first major step in terms of establishing a mindset that without a prosperous economy a sustainable society is not feasible. The most important function of this target has to do with implementing "the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries"[49]. In 2010 and subject to the commitments made by the UNFCCC a global fund was established in order to enable developing countries to deal with climate change. This fund was named Green Climate Fund ("GCF") and under the auspices of the Paris Agreement its role is pivotal in the context of containing the rise of global temperature. "GCF launched its initial resource mobilization in

[47] United Nations, (2015). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development.* [Online]. Available from: http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf. [Accessed: December 27th 2017]
[48] United Nations, (2015). *Countries reach historic agreement to generate financing for new sustainable development agenda.* [Online]. Available from: http://www.un.org/esa/ffd/ffd3/press-release/countries-reach-historic-agreement.html. [Accessed: December 25th 2017]
[49] The Global Goals, (2017). *13 Climate action: take urgent actions to combat climate change and its impacts.* [Online]. Available from: http://www.globalgoals.org/global-goals/protect-the-planet/. [Accessed: December 28th 2017]

2014, and rapidly gathered pledges worth USD 10.3 billion" moreover it "aims to catalyze a flow of climate finance to invest in low-emission and climate-resilient development, driving a paradigm shift in the global response to climate change"[50].

However, the mobilization of those funds is still at a low level and, besides that, there numerous voices that highlight the low efficiency of the funds that have been allocated so far[51]. One of the main deliverables of our committee should be to enhance the efficiency of the funds allocated.

5.1.5 Raising capacity for effective climate change-related planning

The case of the Republic of Kiribati is an example of proactive climate change planning. In 1999, two uninhabited islands of the group of islands that consist the country vanished due to the sea water level rise. In 2014, the government moved forward with the purchase of 20 sq. km on Vanua Levu, one of the Fiji islands, about 2,000km away. The president of Kiribati made an alarming statement saying that "whatever is agreed within the United States today, with China it will not have a bearing on our future, because already, it's too late for us"[52].

Undoubtedly, it will take many years for us to restore the damages made to the ecosystem from climate change and therefore climate related planning will enable our societies to deal with the effects of climate change.

[50] Green Climate Fund, (2017). *Who we are.* [Online]. Available from: http://www.greenclimate.fund/who-we-are/about-the-fund. [Accessed: December 28th 2017]
[51] Tabuchi, H. (2014). *U.N. Climate Projects, Aimed at the Poorest, Raise Red Flags.* [Online]. Available from: https://www.nytimes.com/2017/11/16/climate/green-climate-fund.html. [Accessed: December 27th 2017]
[52] Caramel, L. (2014). *Besieged by the rising tides of climate change, Kiribati buys land in Fiji.* [The Guardian]. Available from: https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu. [Accessed: December 28th 2017]

In 2014, and based on the Vancouver declaration of 2006[53], UN Habitat published a paper relating to climate change related planning. Such planning mainly should concern modern cities which account for the majority of GHGs emitted in the atmosphere but the whole planning framework should be based in the following values. First of all, improving the resilience of infrastructure towards extreme weather condition is a significant step towards a better planning. The accident in Fukushima, Japan in 2011 is an indication that anticipating the unexpected should be a top priority for policymakers. The main priorities of an exhaustive planning framework should include the following: minimizing risk, improving infrastructure, protecting ecosystems, improving disaster risk reduction and supporting local economic development[54].

5.2 The role of private enterprises

Private enterprises both affect and become affected by the repercussions of climate change. The diversity of the private sector is enormous ranging from family businesses and small and medium sized enterprises to huge corporations and from domestic enterprises to multinational holdings. "Private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation"[55]. Private corporations' role in that context is not restricted to decreasing their emissions but it expands to assisting in creating a sustainable world.

[53] World Planners Congress, (2006). *Vancouver Declaration of 2006.* [Online]. Available from: http://globalplannersnetwork.org.157.104-219-56.groveurl.com/wp-content/uploads/2016/10/06declarationenglish.pdf. [Accessed: January 10th 2018]
[54] UN Habitat, (2014). *Planning for climate change. A strategic, values-based approach for urban planning.* [Online]. Available from: https://www.uncclearn.org/sites/default/files/inventory/planning_for_climate_change.pdf. [Accessed: December 28th 2017]
[55] United Nations, (2015). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development.* [Online]. Available from: http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf. [Accessed: December 27th 2017]

One question that arises has to do with the extent to which companies can benefit from adopting an environmentally friendly profile. A survey published few years ago highlighted that those advantages are numerous. Among them are the following:

- ✓ Avoid costs, manage liabilities and build resilience to climate change impacts by addressing climate risks throughout their operations and value chains, while at the same time increasing community resilience.
- ✓ Expand market share and create wealth in communities by developing and deploying new products and services that help people adapt.
- ✓ Access new opportunities to collaborate with the public sector, as developing country governments seek corporate partners who can effectively deliver goods and services that support high-priority climate change adaptation efforts.
- ✓ Build corporate reputation and exercise good corporate citizenship by showing commitment to decreasing climate vulnerability and promoting long-term resilience in places where it is needed most.

Moreover, in a recent report published from the British government[56] it is demonstrated that companies in basically every industry and field of human activity can benefit from introducing environmentally friendly production techniques. The famous Porter Hypothesis has also demonstrated that adapting to environmental regulations does not hamper the development perspectives of an enterprise[57].

[56] UK.GOV (2015). *Business opportunities in a changing climate: managing impacts and market opportunities.* [Online]. Available from: http://www.acclimatise.uk.com/wp-content/uploads/2017/09/Business-opportunities-climate-change-UK-Environment-Agency_Acclimatise.pdf. [Accessed: December 28th 2017]

[57] Porter, M. & Linde, Claas. (1995). *Towards a new conception of the environment-competitiveness relation.* [The Journal of Economic Perspectives]. Available from: http://www.conservationeducation.org/uploads/6/2/0/1/6201942/porter_-_environment__competitiveness_1995.pdf. [Accessed: December 27th 2017]

Sectors	Example products and services	Example company	Level of expertise	Assessment of growth potential
Accommodation and food services	Increasingly popular tourism destinations and services (e.g. in the UK and northern Europe) Supplying food products and services that responds to a shifting customer demand for alfresco-orientated food experiences	Thomas Cook	●●○○○	Medium
Administrative and support services	Climate-related disaster and emergency response services Building and infrastructure management services ensuring climate resilience (e.g. water management, pest control)	G4S	●○○○○	Medium
Agriculture, forestry and fishing	Development of drought resistant seeds and opportunity to diversify into new crop varieties Advisory services to support growers in UK and internationally	Bayer	●●●●○	Medium
Construction	Climate resilient solutions for existing and new buildings / infrastructure, including insulation, ventilation, flood protection and water saving	Balfour Beatty	●●●●○	High
Education	Learning services to support increased awareness and knowledge of climate change, and management courses to train public and private sectors on how to respond to a changing climate	Ashbridge Business School	●○○○○	Low
Electricity, gas, steam and air conditioning supply	Opportunity to supply space cooling technologies, and particularly for domestic use Energy efficient heating and cooling	SSE	●●●●●	High
Financial and insurance activities	Climate-related disaster and emergency response services Building and infrastructure management services ensuring climate resilience (e.g. water management, pest control)	Catlin group	●●●●●	High

Source: UK.GOV, Business opportunities in a changing climate: managing impacts and market opportunities (2015) [58]

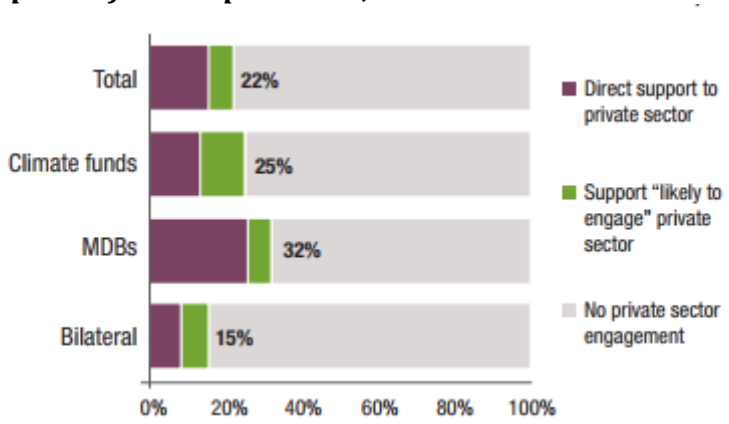
The chart above illustrates with industry and firm specific examples advantages that derive from the adoption of climate friendly operational techniques by businesses and enterprises. For instance, construction companies through adopting resilient construction techniques can reduce their costs (thus becoming more competitive) and gain new clients something that will allow them to grow fast. The same applies for basically all fields of human activities.

Since we have examined why enterprises benefit from adapting to climate change regulations we will now have to address the ways through which this can become reality.

[58] UK.GOV (2015). *Business opportunities in a changing climate: managing impacts and market opportunities.* [Online]. Available from: http://www.acclimatise.uk.com/wp-content/uploads/2017/09/Business-opportunities-climate-change-UK-Environment-Agency_Acclimatise.pdf. [Accessed: December 28th 2017]

Private sector companies can do many things in order to adopt an environmentally friendly profile. First of all, they can reduce their energy consumption and water usage, install buildings in low risk areas and purchase insurance towards weather conditions[59]. Those measures are extremely useful and important especially for small and medium sized enterprises. Moving on, large corporations and holdings can invest in green technologies and of course harness skills and knowledge for green growth[60]. Innovation, asset allocation and mobilization, building partnerships between enterprises and governments and reducing the carbon footprint are ways through which the private sector can engage itself in the endeavor against climate change.

Climate-related Development finance supporting private sector engagement across development finance providers, 2013



Source: OECD, Private Sector Engagement to Address Climate Change and Promote Green Growth (2017) [61]

Therefore, governments should try and involve the private sector in this endeavor against climate change through proper incentives. Additionally, the

[59] World Resource Institute, (2013). *Adapting to Climate Change: The Private Sector's Role.* [Online]. Available from: http://www.wri.org/blog/2013/11/adapting-climate-change-private-sector%E2%80%99s-role. [Accessed: December 28th 2017]
[60] OECD, (2017). *Private Sector Engagement to Address Climate Change and Promote Green Growth.* [Online]. Available from: https://www.oecd.org/dac/peer-reviews/Policy-Brief-4-Private-Sector-Engagement-to-Address-Climate-Change-and-Promote-Green-Growth.pdf. [Accessed: December 28th 2017]
[61] Ibid.

role of private sector companies is not only limited to the abovementioned but can also be seen as part of assisting in the achievement of the specific targets of SDG number 13.

That being said, we can now move forward with the analysis by presenting any recent developments with respect to our topic.

6. Recent Developments and the Future

The most recent development in the field of climate change has been the COP 23 meeting in Bonn Germany[62]. This meeting was characterized by two contradicting outcomes. On the one hand, countries undertook significant commitments in terms of implementing the Paris Agreement but on the other hand experts conveyed the message that climate change is accelerating and that the international community should keep up the pace in that context[63].

During this 10 days long conference numerous side events were held by various stakeholders. One of them was entitled "cooperation between major economies for the implementation of the Paris agreement and the global energy transition". The outcome of that was that "major economies are increasing their cooperation in support of the multilaterally agreed objectives through a web of bilateral policy dialogues and plurilateral fora and that those processes accelerate the dissemination of experience and expertise across countries and open doors for more concrete collaborations among practitioners. Moreover, they weave together a strong collective momentum beyond the political cycles in individual

[62] United Nations Climate Change Conference, (2017). *UN Climate Change Conference - November 2017.* [Online]. Available from: https://cop23.unfccc.int/un-climate-change-conference-november-2017. [Accessed: January 10th 2018]
[63] United Nations Climate Change, (2017). *Patricia Espinosa on Key COP23 Outcomes.* [Online]. Available from: https://cop23.unfccc.int/news/patricia-espinosa-on-key-cop23-outcomes. [Accessed: December 28th 2017]

countries"[64]. The panel of speakers for this event was comprised of representatives from China, Argentina and the European Union something that allows us to understand that there is a silver lining in the horizon.

COP 24 will be held in Katowice Poland from 3-14 December 2018[65] in a place where global leaders will be required to implement event more promising steps in terms of achieving the outcomes of the Paris Agreement and of the Kyoto Protocol. We should not also neglect that the second assessment period for the Kyoto Protocol will come to an end in 2020 and therefore it is imperative for the international community to start paving the way for the post 2020 era.

7. Concluding remarks

Before concluding with our analysis it is vital to reiterate some climate change related statistics. Global temperature has risen by 1.7 degrees Fahrenheit since 1880, carbon dioxide concentration in the atmosphere has risen by 407.06 ppm (parts per million), sea level is rising by 3.4 millimeters per year and land ice is decreasing by 286.0 gigatonnes per year[66].

Climate change leads to land erosion, land degradation and rise in sea level. It mainly affects the poorest parts of our world but the developed world will suffer from those repercussions as well. Therefore, since the straights are dire our actions should be brave as well.

[64] European Commission, (2017). *Cooperation between major economies for the implementation of the Paris agreement and the global energy transition.* [Online]. Available from: https://ec.europa.eu/clima/sites/clima/files/events/docs/0118/major_economies_event_programme_en.pdf. [Accessed: December 28th 2017]
[65] IISD Hub, (2017). *UNFCCC COP 24.* [Online]. Available from: http://sdg.iisd.org/events/unfccc-cop-24/. [Accessed: December 28th 2017]
[66] NASA, (2017). *Vital signs of the planet.* [Online]. Available from: https://climate.nasa.gov/. [Accessed: December 28th 2017]

The role of private enterprises in the context of countering the repercussions of climate change is pivotal. Private sector can help us to strengthen resilience and adaptive capacity, improve education and awareness raising, mobilize funds and raise capacity for effective climate change-related planning and management. Private sector can influence decision and policy making and be influenced by it. The relationship between the two is mutually reinforcing and therefore our committee should reveal and build on this relationship.

The purpose of this study guide is to briefly describe the actions of the United Nations so far in that context. SDG number 13 will lead us to 2030 and until then the future of our planet is at stake. As the Economic and Social Council of the United Nations we must be decisive and pledge allegiance to a sustainable future both for our societies and for our planet.

This document is the beginning (and we hope not the end) of your research. The latter is what will enable you to understand not only the severity of this topic but also which should be the next steps of the international community towards that issue.

8. Questions Raised

I. Which are the most significant repercussions from climate change that can be observed today? Do you expect those repercussions to escalate in the future and if yes how and how much?
II. How do you evaluate the actions implemented so far from the part of the United Nations in terms of addressing the effects of climate change? Do you think that they are sufficient?
III. What synergies can be promoted between the United Nations and regional organizations such as the European Union, institutions like the World Bank and the OECD and NGOs?

IV. Do you believe that the international community will manage to succeed in implementing the SDGs and in particular goal 13?

V. What further initiatives can be undertaken in order to achieve both sustainable development goals and its specific targets? Which actions are deemed necessary?

VI. Which concrete proposals can be implemented in order to strengthen resilience and adaptive capacity, improve education and awareness-raising, mobilize funds and raise capacity for effective climate change-related planning and management?

VII. How can we reinsure that all funds allocated in the context of SDG number 13 will be allocated in the most efficient manner?

VIII. Bearing in mind the relevant provisions of the Kyoto Protocol do you believe that the EU ETS could be expanded in a global scale as well?

IX. Should we pay any particular attention to least developed countries and/or small island developing states? If yes, what should/could/must be done?

X. Which should be the input of private enterprises in that context? How can governments and organizations involve the private sector and an efficient manner in that context? Do you think that companies are able to acquire an advisory role in that context (propose legislation, assess impacts etc.)

XI. Which incentives deriving from domestic legislation can be given to enterprises so as to allow companies invest in Green technologies?

XII. Apart from the role of private enterprises what can be the input of governments and academia in that context?

XIII. Taking into account the considerations expressed from the United Nations regarding the severity of the issue of climate change what should be next steps of the international community in that context? What actions can be implemented in the timespan up to Cop24?

XIV. Do you have anything further to suggest/add based on policies that your country has implemented to today?

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