



UNEP

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Table of Contents

<i>WELCOME LETTER</i>	3
<i>COMMITTEE'S GENERALITIES</i>	5
I. Description	5
II. Function	6
III. Protocol	7
<i>TOPIC 1: THE LACK OF PROGRESS AND NON-FULFILLMENT OF THE GOALS STATED IN THE PARIS AGREEMENT FOR THE ACHIEVEMENT ON THE GREENHOUSE GASES' EMISSIONS</i>	8
I. Description	8
II. Historical context	8
III. Current situation	11
IV. Guiding questions	12
V. Support links	12
<i>TOPIC 2: MEASURES TO PREVENT THE DAMAGE ON THE SOIL AND SUBSOIL CAUSED BY THE PETROLEUM EXTRACTIONS</i>	13
I. Description	13
II. Historical context	13
III. Current situation	14

IV. Guiding questions 16

V. Support links 16

REFERENCES 17



WELCOME LETTER

Dear delegates,

Receive a friendly and fraternal greeting on behalf of your President, Laura Alejandra Guío, and co-president, Maria Jose Calderón. First, we would like to thank you all for joining this committee and give you the warmest welcome to UNEP. For us it is a great pleasure to be able to accompany you through this entire process of learning in which all of you will be developing several abilities such as oratory, researching, and debating based on facts between others, and gain experiences which we are sure will be very useful in your successful futures. It has been months since we started planning how to achieve that the people who are new to debates and to the UN model acquire, and those who have already taken part of reinforce the wide and diverse strategies which are needed to be a good delegate under the institution and the guide of us, your President and co-president, who will be open to help you with all the questions and the doubts that may arise during your investigation process, the creation of your folder, the appropriation of the topics and the formalities of the model.

Finally for us it is a great pleasure being by your side and guide you during this process. We hope the knowledge you gain through the process would be useful, and that not only it stays in our committee but that it is showed in the rest of the activities you realize daily, and that the rest of the people recognize you as wholesome, educated and conscious people in front of the problematics that torment the whole world in relation to environmental problems.

Thank you for your time. We will be looking forward to your participation.

In case you have any questions, doubts or concern about the matter, feel free to let us know by our e-mails which will be attached below.

President

Laura Guío

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Co-President

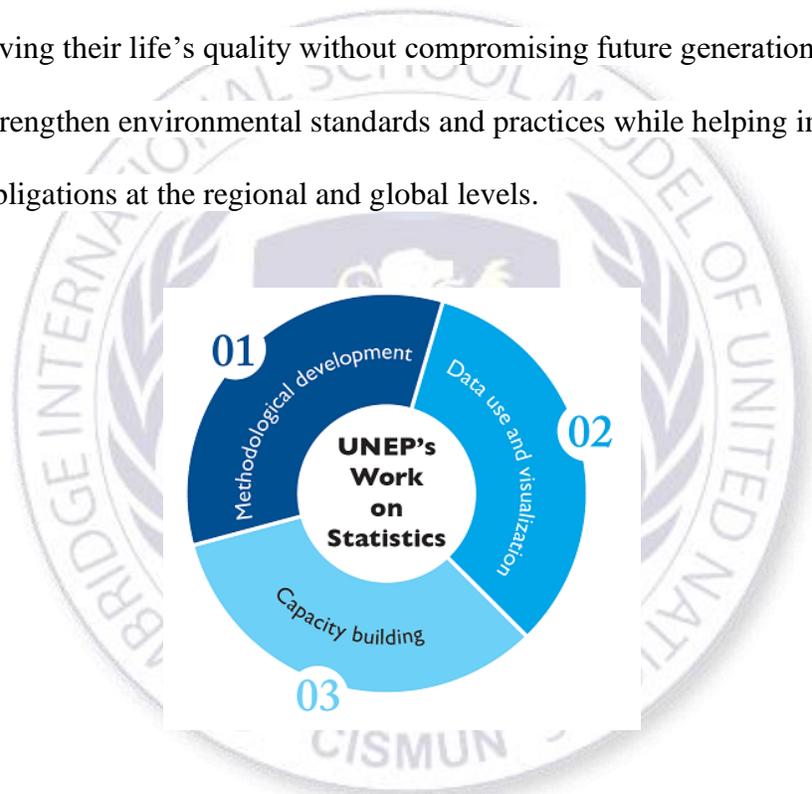
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I. Description

The United Nations Environmental Programme (UNEP) is an environmental global authority which specializes on promoting an adequate implementation of the world's environmental dimensions for a clean and sustainable development by inspiring and informing nations and people for improving their life's quality without compromising future generations. UNEP uses its expertise to strengthen environmental standards and practices while helping implement environmental obligations at the regional and global levels.



Our mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

“Our leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.” -UNEP

II. Function

The UNEP promotes protection, sustainable management and use of the world's resources in the matters of air, biosafety, chemicals and waste, climate change, disasters and conflicts, ecosystems, education and environment, energy, environment under review, environmental rights and governance, extractives, forests, gender, green economy, oceans and seas, resource efficiency, sustainable development goals, technology, transport and water.

For the protection of the country's ecosystems and the sustain of the services of the future generations to come by promoting the efficient use of the renewable resources, promoting the governments to manage the potential adverse effects and benefits of modern biotechnology, with a focus on protecting the biological diversity and human safety.



III. Protocol

Below, the basic protocol within the committee, for specific information, please visit the protocol section inside the Handbook that it's uploaded in the model's webpage.

1. Rollcall
2. Motion to open session
3. Motion to open agenda with topic A/B.
4. Motion to read the opening speeches.
5. Motion to start General speakers list (formal debate)/ moderated caucus (informal debate).
6. Motion to suspend/ resume session.
7. Motion to start unmoderated caucus (lobby time).
8. Motion to read the working papers.
9. Motion to start the voting process of the working paper **.
10. Motion to close agenda.
11. Motion to close session.

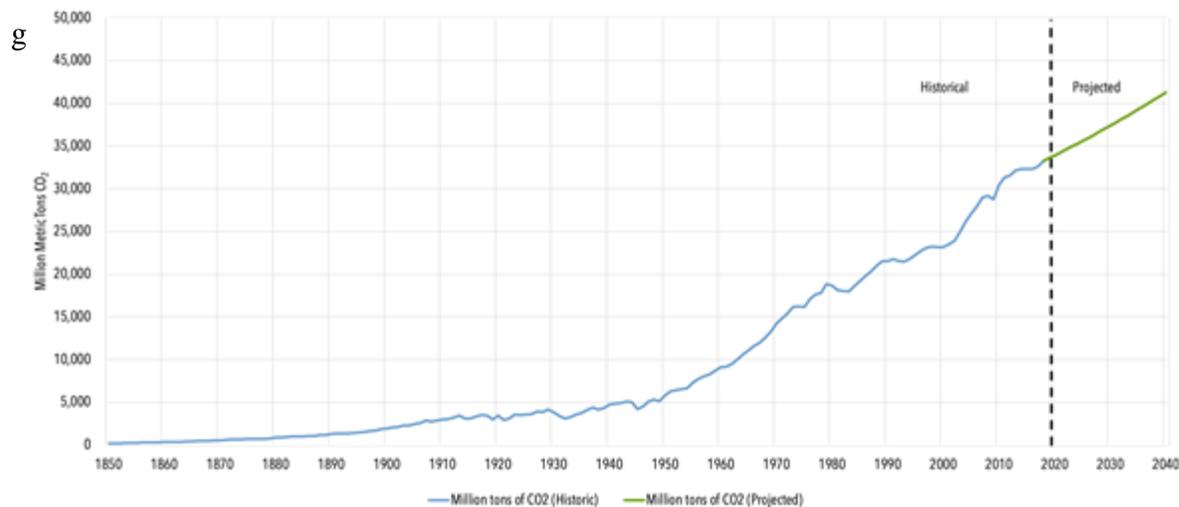
TOPIC 1: THE LACK OF PROGRESS AND NON-FULFILLMENT OF THE GOALS STATED IN THE PARIS AGREEMENT FOR THE ACHIEVEMENT ON THE GREENHOUSE GASES' EMISSIONS

I. Description

During the development of the topic, you will be discussing and arguing the status of the development of accomplishment of the Paris Agreement on the greenhouse gases' emission by the most important and controversial countries. In which, the delegations will be identifying and trying to find an adequate and reasonable explanation and solution to the non-fulfillment of the goals.

II. Historical context

During the development of the topic, you will be discussing and arguing the status of the development of accomplishment of the Paris Agreement on the greenhouse gases' emission by the most important and controversial countries. In which, the delegations will be identifying and trying to find an adequate and reasonable explanation and solution to the non-fulfillment of the



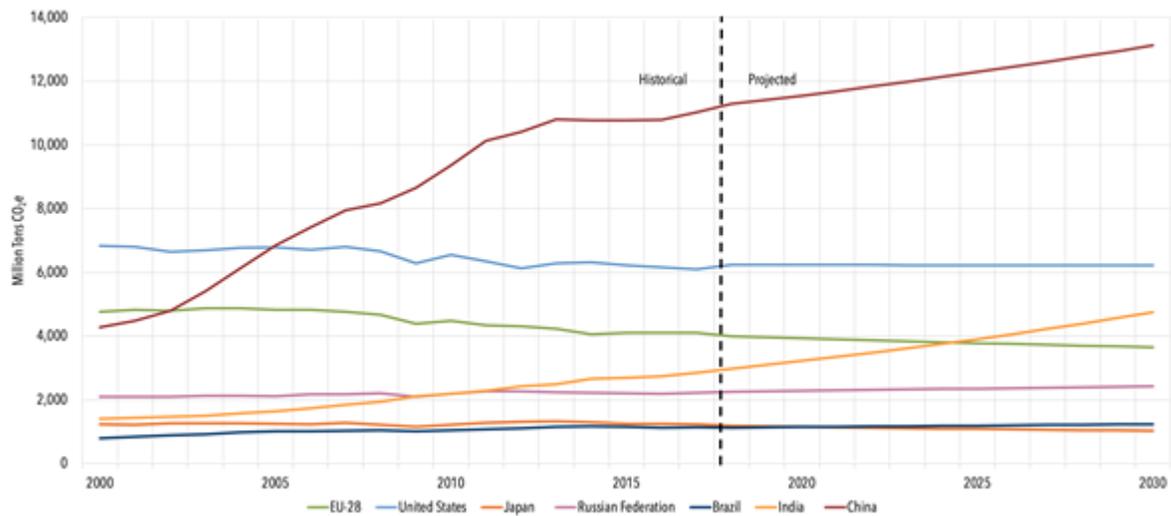
Global Carbon Dioxide Emissions, 1850 – 2040

SOURCES

[Carbon Dioxide Information Analysis Center](#) (Oak Ridge National Laboratory, 2017)

[World Energy Outlook](#) (International Energy Agency, 2019).

Since the industrial revolution the greenhouse gases have been heavily increasing into a higher peak. The predictions for 2040 determine that the peak will be growing regularly.



Greenhouse Gas Emissions for Major Economies, 1990–2030

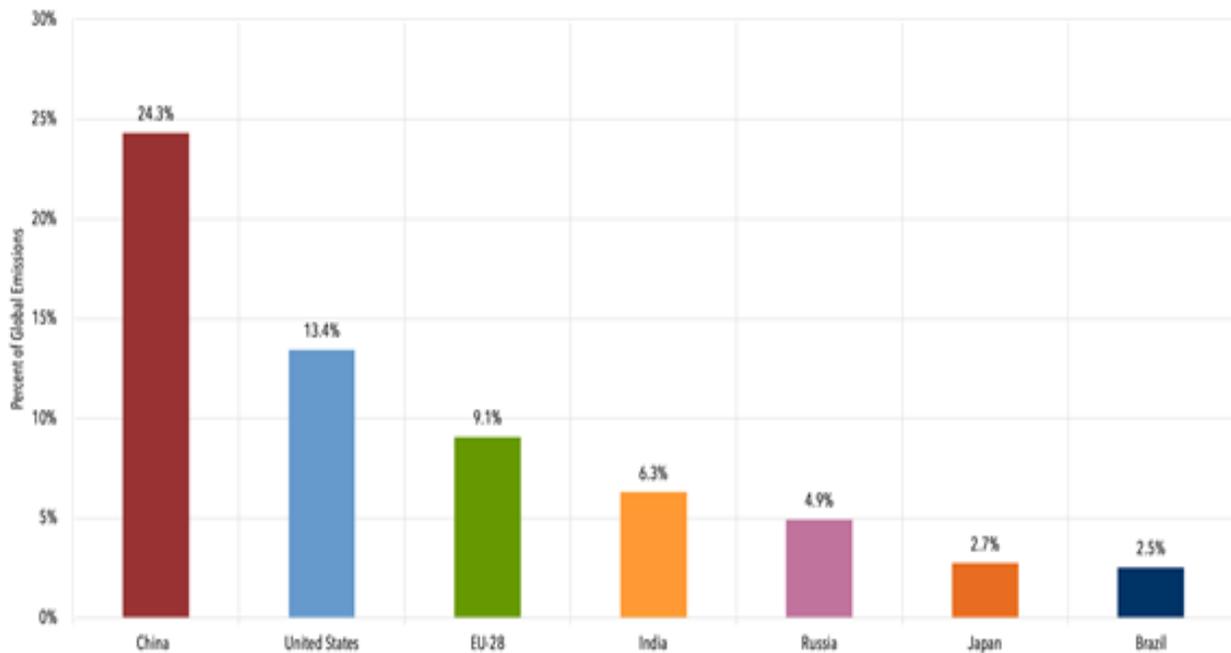
SOURCES

[World Energy Outlook](#) (International Energy Agency, 2019),

[CO2 Highlights](#) (International Energy Agency, 2019)

[International Non - CO2 Projections](#) (U.S. Environmental Protection Agency, 2012)

Main product developer countries have been enormously increasing the greenhouse gas emissions.



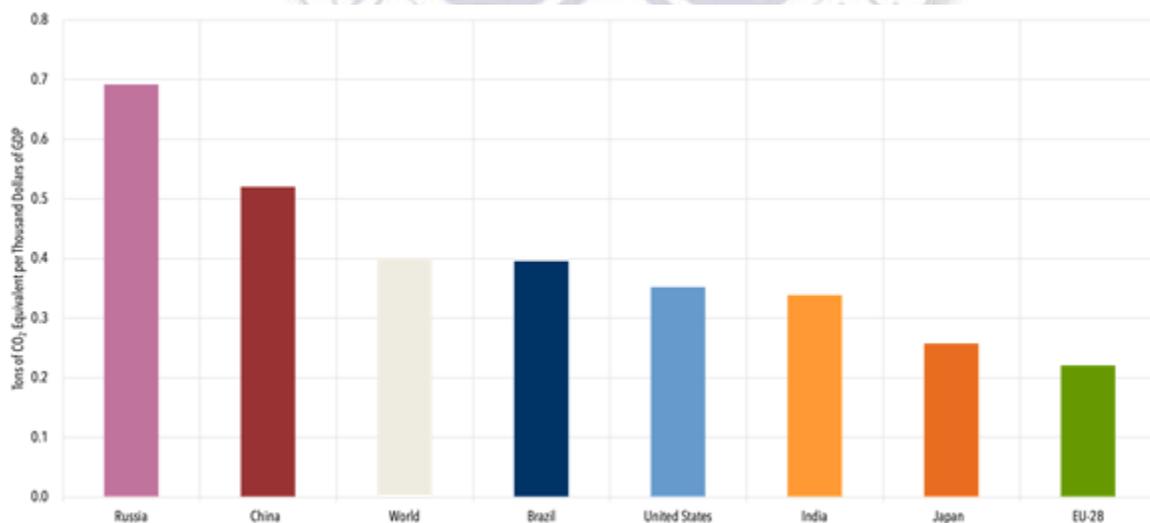
Greenhouse Gas Emissions From Top Emitters, 2017

SOURCES

[CO2 Highlights](#) (International Energy Agency, 2019)

[International Non CO2 Projections](#) (Environmental Protection Agency, 2012)

China and the United States were the biggest issuers of the greenhouse gases because of their great power in the economic market during 2017.



Greenhouse Gas Intensity, 2017

SOURCES

[CO2 Highlights](#) (International Energy Agency, 2019)

[International Non CO2 Projections](#) (Environmental Protection Agency, 2012)

III. Current situation

Paris Climate Agreement:

The Paris Climate Agreement is the first global agreement in which all countries are committed to achieve and to generate a climate change crisis. During the signature of the agreement in 2015, 195 countries signed in addition of the European Union, and agreed to keep global warming below 2°C (3,6°F), and to try their best to go below 1,5°C (2,7°F).

Different to other climate agreements, this one succeeded because it allowed each country to determine their emission reduction target and to stand by its own methods and strategies for accomplishing their goals.

The human-caused global climate change has caused impacts on people's daily lives, on wildlife and on habitats for living organisms all around the world. Because all of these reasons it has been taken as a matter of deep global importance and risk to decrease the climate change effects and to fix the damages done to the planet for the survival and the benefits of all the future generations.

The UNEP'S Emissions Gap Report evaluates each year emission and makes a comparison between each year's report to see the advances on the progresses of the goals each country has stated on the Paris Agreement.

As the world strives to cut greenhouse gas emissions and limit climate change, it is crucial to track progress towards globally agreed climate goals. For a decade, UNEP's Emissions Gap

Report has compared where greenhouse gas emissions are heading against where they need to be and highlighted the best ways to close.

<https://www.youtube.com/embed/u0QRcFuT2Sg?feature=oembed>

IV. Guiding questions

1. How is the country benefiting or not the signature on the Paris Climate Agreement?
2. What actions is the country taking to fulfill the goals stated in the Paris Climate Agreement?
3. What are the country's opinions on the Greenhouse Gases effects?
4. What are the main causes of greenhouse gases in my country?
5. Which are the main countries that contaminate the world?

V. Support links

- <https://www.youtube.com/watch?v=Egy54EgeE5g>
- <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>
- <https://www.ctc-n.org/resources/2019-ctcn-progress-report>
- <https://wedocs.unep.org/bitstream/handle/20.500.11822/30797/EGR2019.pdf?sequence=1&isAllowed=y>
- <https://www.zaragoza.es/contenidos/medioambiente/onu/942-eng.pdf>
- <http://www.environmentportal.in/files/Greenhouse%20gas%20emission%20targets.pdf>
- <https://www.ncbi.nlm.nih.gov/pubmed/27357792>
- <https://www.pbl.nl/en/publications/contribution-of-the-g20-economies-to-the-global-impact-of-the-paris-agreement-climate-proposals>

TOPIC 2: MEASURES TO PREVENT THE DAMAGE ON THE SOIL AND SUBSOIL CAUSED BY THE PETROLEUM EXTRACTIONS

I. Description

Around all the world thousands of plants, flowers and other type of vegetation are being destructed by different types of machines, included the ones that are used for the extraction of petroleum, for different methods, like fracking or another one. Besides damaging the vegetation, This kind of process affects the subsoil, it means the tectonic plates producing earthquakes.

II. Historical context

The money at stake for both oil companies and governments are so vast that human rights and environmental destruction are merely regrettable necessities in the route to enormous profits. Oil extraction has contaminated what were previously some of the most biodiverse areas in the Amazon Basin. Also, Oil exploration in the rainforests causes massive deforestation, and dangerous toxins to be pumped into the environment.

There are different methods of extraction like the Soxhlet method. Soxhlet extraction is an EPA-approved method for volatile and semi volatile organic contaminants from solid materials, but it has many disadvantages including long extraction periods and potential loss of volatile compounds.

Another method that is used a lot is the fracking, which is the process of drilling down into the earth before a high-pressure water mixture is directed at the rock to release the gas inside. Water, sand and chemicals are injected into the rock at high pressure which allows the gas to flow out to the head of the well.

III. Current situation

WHAT IS HAPPENING TO THE AMAZON BASIN?

For the big companies the money at stake is the most important, setting aside the environment destruction and human rights. The extraction of petroleum has been contaminating what were some of the biggest biodiversity areas in the Amazon Basin. Also, the exploitation of Petroleum in the rainforest causes massive deforestation and contaminates the air.

In earlier years' businesses tended to dispose the waste into water or big wells. Nowadays, these wastes continue contaminating waterways. Once petroleum extraction starts, substances are used to create oil wells and to take it out of the well. Also, it damages and destroys the soil's structure and the biodegradability. As a result, it brings with its physical and chemical properties changes on the soil like permeability characteristics and chemical properties as pH total organic carbon, soil minerals, nutrients such as sodium, potassium, sulfate, phosphate and nitrate of soil. At the same time, it affects the development of microorganisms and plants.

NIGERIA PROBLEMS WITH PETROLEUM

Nigeria has impacted negatively the biodiversity of its areas. The principal problems arrive from leakages of crude oil, gas burning, and the escape of other chemical products used in the production processes. Effects on flora and fauna of the ecosystems of freshwater in Nigeria. Government has established protection laws for the environment against the exploration of petroleum, but these ones have to be obeyed in terms of implementation, application, and monitoring by part of the responsible agencies. The oil companies who operate in this region have contributed to reduce the impact of their activities in the environment. Oil exploration by seismic companies involves surveying, clearing of seismic lines, and massive dynamiting for

geological excavations. The explosion of dynamite in aquatic environments leads to narcotic effects and mortality of fish and other faunal organisms (Abbey, 2004).

EARTHQUAKES PRODUCED BY PETROLEUM EXTRACTION

Another consequence of petroleum extraction are the earthquakes. Several factors can promote the occurrence of these. There are natural changes caused because the move of the tectonic plates, how the glaciers are melting, the addition or elimination of surface or underground waters, and the injection and elimination of substances because the industrial activity. Some studies made in April showed two reports that indicated that human activity, including the activities associated with gas and petroleum extraction, are starting to play an important role in the earthquake's activations in the U.S center. The petroleum extraction and oil from the rock implicates the cracking or fracking of one rock subterranean layer with a water mix, sand and chemical products, with high pressure. Since the oil and petroleum are being released, and the injection of fluid and briny water. United Nation Environment Programme wastewater is eliminated in what is denominated "injection wells", or on some occasions "elimination wells". It is important to keep in mind that is not the fracking process what frequently causes these earthquakes, it is the quick injection of the liquid during the elimination of wastewater what sometimes pumps hundreds of millions of gallons of brine deep to the soil each year.

ISSUES CAUSED BY PETROLEUM EXTRACTION

Health effects from exposure to petroleum products vary depending on the concentration of the substance and the length of time that one is exposed. Breathing petroleum vapors can cause nervous system effects (such as headache, nausea, and dizziness) and respiratory irritation. Very high exposure can cause coma and death. Liquid petroleum products which come in contact with

the skin can cause irritation, and some can be absorbed through the skin. Chronic exposure to petroleum products may affect the nervous system, blood and kidneys. Gasoline contains small amounts of benzene, a known human carcinogen. Animals exposed to high levels of some petroleum products have developed liver and kidney tumors. Whether specific petroleum products can cause cancer in humans is not known; however, there is evidence that occupationally exposed people in the petroleum refining industry have an increased risk of skin cancer and leukemia.

IV. Guiding questions

1. What actions is my delegation taking to reduce the matter in discussion in my country?
2. How is my delegation contributing to the damages of the soil and subsoil?
3. Who are the greatest soil producers? And how is the impact they produce on the environment?
4. Has there been any actions taken to stop the petroleum extraction through harmful methods for the environment?

V. Support links

- <https://pubs.acs.org/doi/10.1021/es9809758>
- <https://ui.adsabs.harvard.edu/abs/2019ApWS....9...89D/abstract>
- <https://www.merriam-webster.com/>
- <https://rainforestfoundation.org/>
- <https://www.bbc.com/news/uk-14432401>

- https://www.researchgate.net/publication/290488388_Human_induced_earthquakes_from_deep_well_injection_a_Brief_Overview<https://ag.ny.gov/environmental/oil-pill/what-are-health-effects-exposure-petroleum-products>
- <https://www.tandfonline.com/doi/pdf/10.3152/146155108X316397A>
- https://www.researchgate.net/publication/247897086_Negative_impacts_of_oil_exploration_on_biodiversity_management_in_the_Niger_Delta_Area_of_Nigeria



REFERENCES

- UN Environment Programme. (2019, Nov, 19) On the Brink - Emissions Gap Report 2019 launch. Taken from <https://youtu.be/u0QRcFuT2Sg>
- Iucn, U. (1991). WWF (1991) Caring for the Earth: a strategy for sustainable living. IUCN, UNEP, WWF, Gland.
- UNEP, W. (2001). IPCC Third Assessment Report Climate Change 2001'. Assessment, U. G. M. (2013). Sources, emissions, releases and environmental transport. UNEP Chemicals Branch, Geneva, Switzerland, 42.
- Meinshausen, M., Meinshausen, N., Hare, W., Raper, S. C., Frieler, K., Knutti, R., ... & Allen, M. R. (2009). Greenhouse-gas emission targets for limiting global warming to 2 C. *Nature*, 458(7242), 1158-1162.
- Rogelj, J., Den Elzen, M., Höhne, N., Fransen, T., Fekete, H., Winkler, H., ... & Meinshausen, M. (2016). Paris Agreement climate proposals need a boost to keep warming well below 2 C. *Nature*, 534(7609), 631-639.
- Den Elzen, M., Admiraal, A., Roelfsema, M., van Soest, H., Hof, A. F., & Forsell, N. (2016). Contribution of the G20 economies to the global impact of the Paris agreement climate proposals. *Climatic Change*, 137(3-4), 655-665. Schwab, A. P., Su, J., Wetzal, S., Pekarek, S., & Banks, M. K. (1999). Extraction of petroleum hydrocarbons from soil by mechanical shaking. *Environmental science & technology*, 33(11), 1940-1945.
- Devatha, C. P., Vishal, A. V., & Rao, J. P. C. (2019). Investigation of physical and chemical characteristics on soil due to crude oil contamination and its remediation. *Applied Water Science*, 9(4), 89.

Dictionary, M. W. (2002). Merriam-webster. On-line at [http://www. mw. com/home. htm](http://www.mw.com/home.htm).

United Nation Environment Programme

Tierney, J., & Aguinda, M. (2004). versus Texaco Oil Company. Nueva York, Rainforest Foundation US, Inédito.

Shukman, D. (2013). What is fracking and why is it controversial. BBC NEWS, 27.

Folger, P., & Tiemann, M. (2017). Human-induced earthquakes from deep-well injection: A brief overview.

Ugochukwu, C. N., & Ertel, J. (2008). Negative impacts of oil exploration on biodiversity management in the Niger De area of Nigeria. *Impact assessment and project appraisal*, 26(2), 139-147.

