



National Inquiry on Climate Change Report

A report by the *Commission en Banc V*
of the Commission on Human Rights

2022

THIS IS A REPORT BY THE
COMMISSION ON HUMAN RIGHTS OF THE PHILIPPINES (CHRP)

A copy of this report is available at <https://chr.gov.ph/>

First Printing, December 2022 by the CHRP

All rights reserved.

Commission on Human Rights of the Philippines
SAAC Building, UP Complex, Commonwealth Avenue
Diliman, Quezon City, Metro Manila, Philippines 1101
chad.pasco.chr@gmail.com; chr.esrcrcenter@gmail.com

NATIONAL INQUIRY
ON
CLIMATE CHANGE
REPORT



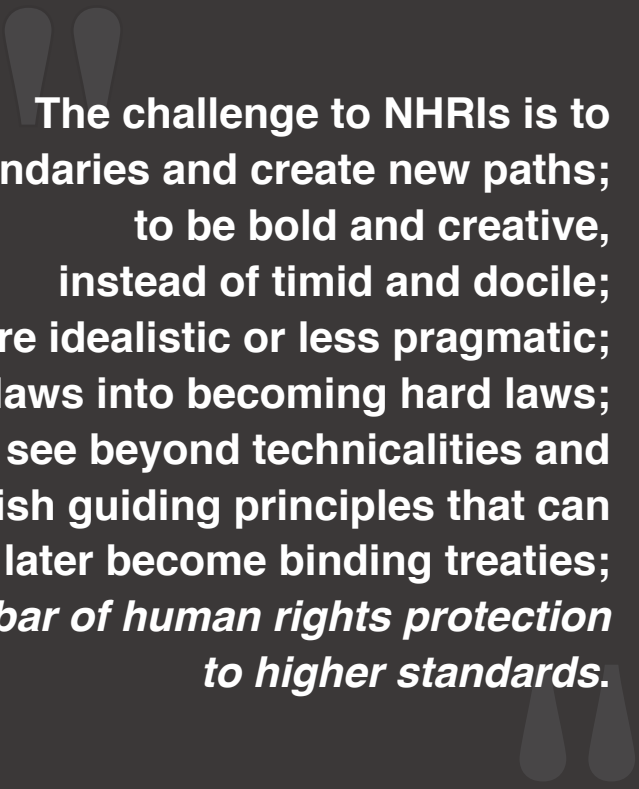
Contents

Preface	1
I. Mandate of the Commission	9
II. Matter Before the Commission	9
III. CHRP Jurisdiction and Admissibility of the Petition	10
IV. History of the Climate Inquiry and Conduct of the Public Hearings	12
<i>A. Multi-disciplinary Consultative Process</i>	13
<i>B. Public Hearings</i>	19
V. Findings	24
<i>A. Climate Change is Real</i>	24
1. Atmospheric Warming	26
2. Oceanic Indicators	26
3. Cryosphere Loss	27
4. Extreme Weather and Climate Events	28
<i>B. Anthropogenic Dimension of Climate Change</i>	29
<i>C. Climate Change: A Grave and Urgent Human Rights Concern</i>	30
1. Adverse Impacts of Climate Change on Human Rights	30
2. Adverse Impacts of Climate Change in the Philippines	32

VI. Duty of States to Protect Human Rights	63
<i>A. General Duty</i>	63
<i>B. Special Duty of States to Protect Human Rights in the Context of Climate Change</i>	70
<i>C. Refusal of Governments to Engage in Meaningful Action to Mitigate Climate Change may be Categorized as a Human Rights Violation</i>	78
VII. Responsibility of Business Enterprises to Respect Human Rights	79
<i>A. General Responsibility</i>	79
1. The Corporate Responsibility to Respect Human Rights Under the United Nations Guiding Principles on Business and Human Rights (UNGP-BHR)	80
2. The United Nations Global Compact	83
3. The OECD Guidelines for Multinational Corporations	84
<i>B. Responsibility in the Context of Climate Change</i>	84
1. Application of the UNGP-BHR	84
2. Corporate Financial Disclosure Requirements	85
3. Principles on Climate Change Obligations of Enterprises	86
4. Responsibility of Financial Institutions	87
5. Compliance with State Regulations Regarding Climate Change	88
VIII. Carbon Majors in the Context of Climate Change	88
<i>A. Anthropogenic Contributions to Climate Change is Quantifiable and Substantial</i>	88

<i>B. The Carbon Majors Had Early Awareness, Notice, or Knowledge of their Products' Adverse Impacts on the Environment and Climate System</i>	90
<i>C. Willful Obfuscation of Climate Science and Obstruction of Global Initiatives Toward Decarbonization</i>	94
<i>D. The Carbon Majors Have the Corporate Responsibility to Undertake Human Rights Due Diligence and Provide Remediation</i>	99
<i>E. Global Dependence on Fossil Fuels</i>	102
IX. Recommendations	104
<i>A. General</i>	104
1. To Governments	105
2. To the Carbon Majors (and Other Carbon-Intensive Industries)	118
3. To Financial Institutions and Investors	121
4. To the United Nations	124
5. To National Human Rights Institutions	125
6. To Courts	128
7. To NGOs, CSOs, and the Legal Profession	131
8. To the Global Citizenry	132
<i>B. Additional / Particular Recommendations to the Philippine Government</i>	134
1. Recommendations Particular to the Executive Department	141
2. Recommendations Particular to the Legislative Department	145
3. Recommendations Particular to the Judiciary	147
Resolution	149

NATIONAL
INQUIRY
ON
*CLIMATE
CHANGE*
REPORT



**The challenge to NHRIs is to
test boundaries and create new paths;
to be bold and creative,
instead of timid and docile;
to be more idealistic or less pragmatic;
to promote soft laws into becoming hard laws;
to see beyond technicalities and
establish guiding principles that can
later become binding treaties;
in sum, *to set the bar of human rights protection
to higher standards.***

Preface

The Commission on Human Rights of the Philippines (CHRP) is an independent body established under our Constitution, with the general mandate to investigate allegations of human rights violations against our people. It was created under the banner of “Never Again!” in the aftermath of a “peaceful revolution” waged by our people more than thirty years ago, which resulted in the dramatic ouster of Ferdinand Marcos, under whose rule thousands of Filipinos’ civil and political rights were trampled upon. Thus is the context behind the constitutional command for the CHRP to investigate violations involving civil and political rights, which, later on, was to give rise to the notion that the investigation mandate of this Commission is *solely* limited to issues concerning *civil and political* rights.

In 2015, our Commission was petitioned to conduct an inquiry on the impact of climate change on the human rights of the Filipino people and the role therein of the so-called “Carbon Majors.”¹ The claim was that climate change was adversely impacting human rights and the top oil producers of the world were contributing, and knowingly continue to contribute, to this phenomenon.

Previous to the filing of this *Petition* before our Commission, different climate-related cases had been brought, as still more are being brought, by various parties before regular courts in many jurisdictions around the world: private citizens are suing governments² and carbon producers,³ governments are suing carbon producers,⁴ shareholders are suing their own carbon-producing corporations,⁵ and so on.

1 Richard Heede, *Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854-2010*, 122 CLIM. CHANGE. 229 (2014) [hereinafter *Heede Carbon Majors Study*].

2 See for instance *Urgenda Foundation v. The Netherlands* [2015] HAZA C/09/00456689 (June 24, 2015); *aff'd* (Oct. 9, 2018) [District Court of the Hague, and The Hague Court of Appeal (on appeal)]; *Leghari v. Federation of Pakistan*, W.P. No. 25501/201 (2015); & *Future Generations v. Colombia Ministry of Environment*, No. 11001 22 03 000 2018 00319 00 (2018).

3 See for instance *Lliuya v. RWE AG*, Case No. 2 O 285/15 Essen Regional Court (filed 2015) & *Native Village of Kivalina v. ExxonMobil Corp.*, Docket No. 4:08-cv-01138 (filed 2008).

4 See for instance *City of Oakland v. BP P.L.C.*, No. C 17-06011 WHA (filed 2017); & *City of New York v. British Petroleum (BP)*, No. 18-2188 (filed 2018).

5 *Cf. Abrahams v. Commonwealth Bank of Australia* (2017) (Where “shareholders of the Commonwealth Bank of Australia [CBA] sued the bank, alleging that it violated the Corporations Act of 2001 with the issuance of its 2016 annual report, which failed to disclose climate change-related business risks. [...] Before the Federal Court of Australia could issue a decision, the suit was withdrawn after the bank released a 2017 annual report that acknowledged the risk of climate change and pledged to undertake climate change scenario analysis to estimate the risks to CBA’s business,” citing <http://climatecasechart.com/non-us-case/abrahams-v-commonwealth-bank-australia/>) (last accessed on Dec. 4, 2010).

Cases before courts have been filed under different legal theories of responsibility or liability, such as those involving tort—a civil wrong consisting of a breach of duty resulting to an injury.

Many of these court cases are still undergoing trial or are on appeal. And all these efforts have so far failed to establish judicial consensus on the responsibility of parties in the context of climate change.

Amidst all the climate-related suits, governments have also been seeking to come to an agreement to avert irreversible global warming, as exemplified by the Conference of Parties (CoP) held every year, which, as many of us know, has not been progressing as effectively as many have been hoping for.

Thus, attempts have been made to explore non-judicial mechanisms for addressing this concern. One such effort is by framing climate change as a human rights issue and filing a case on that basis before a human rights institution.

The Inuit people of North America first attempted to establish the nexus between climate change and human rights in 2005, in an action before the Inter-American Commission on Human Rights,⁶ a mechanism under the Organization of American States. The Inter-American Human Rights Commission, however, refused to consider the case, holding that the information provided by the Inuit did not enable the Commission to determine whether the facts alleged characterized a violation of rights protected under the American Declaration.⁷

This *Petition* filed before the CHRP was the second attempt to frame climate change as a human rights issue and the first to be accepted as such by a National Human Rights Institution (NHRI) for investigation.

The choice of the Philippines as a venue for the filing of a climate petition was made significant by the fact that it was the immediate past Chair of the Climate Vulnerable Forum at the time of filing.

6 Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States, filed in December 2005.

7 Resolution of Petition, No. P-1413-05.

The Philippines is visited by around twenty typhoons every year. In 2013, it had the misfortune of being battered by one of the strongest typhoons in recorded history, Super Typhoon Haiyan (local: *Yolanda*), which caused the death of at least six thousand people within just a few hours from landfall.⁸ To date, we have yet to fully recover from its devastating impacts, even as we continue to suffer from the onslaught of other extreme weather events.

Aside from presenting climate change as a human rights case, the *Petition* highlighted a novel assertion, which was that private business enterprises, not just States, have the obligation to respect and uphold human rights, as advocated under the *United Nations Guiding Principles on Business and Human Rights* (UNGP-BHR). The *Petition* prayed that the “Carbon Majors” be held responsible for their contribution to climate change, which, as alleged, was negatively impacting the human rights of the Filipino people.

When this *Petition* was filed before us, there was truly no established legal precedent—as there still is none to date—to help us navigate the case. Our Commission lacked, as well, the financial and human resources necessary to handle an undertaking of such magnitude. Indeed, following the refusal of the Inter-American Commission on Human Rights to hear the case of the Inuit ten years earlier, nobody would have questioned the CHR had it refused to take cognizance of the case.

Some of those who were impleaded in the *Petition*—the big privately-owned oil companies or the so-called “Carbon Majors”—asked our Commission to dismiss the *Petition*, arguing that we were not a court of law, but just a human rights institution. They contended that we had no jurisdiction to conduct hearings involving allegations of liability. Or that, even if we had the jurisdiction to conduct such hearings, we had no jurisdiction to consider the subject matter of climate change, which they thought to be not within the realm of civil and political rights. They strongly argued that the Philippine Constitution only allowed our Commission to investigate cases involving civil and political rights.

We explained that all human rights are interrelated, interdependent, and indivisible; that one cannot consider civil and political rights separately from economic, social and cultural rights. We pointed out that such was humanity’s evolving understanding of, and consciousness about, human rights.

8 National Disaster Risk Reduction and Management Council, Final Report re Effects of Typhoon “YOLANDA” (Haiyan) (2013) available at [http://ndrrmc.gov.ph/attachments/article/1329/FINAL_REPORT_re_Effects_of_Typhoon_YOLANDA_\(HAIYAN\)_06-09NOV2013.pdf](http://ndrrmc.gov.ph/attachments/article/1329/FINAL_REPORT_re_Effects_of_Typhoon_YOLANDA_(HAIYAN)_06-09NOV2013.pdf) (last accessed Nov. 20, 2019).

Many of the respondent oil companies also raised the issue of *territoriality*—they questioned the power of our Commission to inquire into their activities since they did not operate within the territory of the Philippines.

Stripped of legal niceties, the contention was that our Commission, or, indeed, the Philippine State, in general, may only inquire into the conduct of corporate entities operating within Philippine territory, even if the corporations' operations outside our territory were negatively impacting the rights and lives of our people.

We cannot accept such a proposition.

The CHR is mandated by the Philippine Constitution with the duty to investigate and inquire into allegations of human rights violations suffered by our people.⁹

Our Commission decides on how it must perform its constitutional duty.¹⁰ And the performance of this duty is neither constrained by nor anchored on the principle of *territoriality* alone.

The challenge to NHRIs is to test boundaries and create new paths; to be bold and creative, instead of timid and docile; to be more idealistic or less pragmatic; to promote soft laws into becoming hard laws; to see beyond technicalities and establish guiding principles that can later become binding treaties; in sum, to set the bar of human rights protection to higher standards.

Even if our Commission were not invested with compulsory processes or powers of enforcement—especially so in regard to parties not doing business in the Philippines—we can proceed with any inquiry we deem appropriate in relation to our mandate, regardless of who the implicated parties might be or where they may be domiciled.

Thus, in 2015, during the 21st Climate Conference (CoP 21) in Paris in December, we announced that we were giving due course to the *Petition*.

9 PHIL. CONST. Art. XIII, § 18, paras. 1 & 3.

10 Under the doctrine of *competence de la competence*

Having agreed to admit the *Petition*, we determined that our process would be dialogical, rather than adversarial. And, recognizing the transboundary character of climate change, we likewise decided that the dialogue we would be pursuing would be global.

Proceeding from the global and dialogical process which we sought to promote, our Commission accepted *amici* briefs, research studies, and position papers from science and legal experts, professional organizations, the academe, advocates, and duty-bearers from around the globe on the various dimensions of the case.

Keenly aware that our Commission, as stated earlier, had neither the power to compel any of the parties to submit before us, nor the power to impose any kind of punitive judgment against them, we conducted our *Inquiry* upon the principle of persuasion, not compulsion. Thus, we proceeded to issue invitations in lieu of summonses and subpoenas. We were also careful to clarify that we were not entertaining notions of imposing financial judgments against any party. We declared, however, that, despite our limitations, we were determined, indeed, to proceed with our *Inquiry*.

We began the initial phases of our process by conducting interviews, roundtable discussions, expert consultations, and community dialogues. And then we proceeded to the conduct of public hearings.

Preparatory to the public hearings, we invited the parties to a pre-hearing conference, during International Human Rights Week, on 11 December 2017. We conducted our first public hearing in March and our last in December, all in 2018.

In all, we held twelve public hearings from March to December of 2018: eight hearings were held in Manila, two hearings were held in New York, at the New York City Bar Association building, and two hearings were held in London, at the London School of Economics.

In the course of the public hearings, we heard 65 witnesses and received and marked 239 documents, both scientific and legal. These numbers do not include the resource persons invited by our Commission and the documentary evidence submitted by them.

In the conduct of our public hearings, we sought to maintain our focus on the substantive aspects of the case, while adhering to internationally-recognized norms of due process of law.

Respondents were duly notified of the *Petition* filed concerning them and were strongly enjoined to participate in our hearings.

All the hearings were transparent and public, even cast live over the internet.

Teleconferencing facilities were set-up to enable parties and witnesses of all sides, even from other parts of the world, to participate in the *Inquiry*.

Testimonial and documentary evidence were received in a very organized manner, all of which were open to challenge by those who had interests in doing so.

Witnesses and resource persons were put under oath and, after giving their direct testimonies, were subjected to examination by the Inquiry Panel members, in the absence of Respondents, who, despite every opportunity to challenge the witnesses, chose not to exercise this right.

Documentary exhibits were properly identified and marked.

The public hearings we conducted in North America (in the United States) and Europe (in the United Kingdom) were not only a matter of underscoring the global nature of climate change and the global character of the dialogue we sought to pursue. It was a matter of “due process” as well—that is, if the Carbon Majors domiciled in other parts of the globe were not willing to come to our country, then we were willing to come to their regions to encourage them to participate in our processes.

We offered to engage with Respondents in special meetings, too, if that was what it would take to hear their position on the issues. For example, in our visit to the Netherlands to participate in a forum held at one of the top business universities in that region, we took the opportunity to especially invite one of them to a dialogue—closed door, if necessary.

Considering all the foregoing, it would be an understatement to say that we have endeavored to reach out to the Respondents. We have, indeed, provided every opportunity within our resources to enable all the parties to dialogue with us.

Beyond the public hearings, we participated in forums and held consultations in other parts of the globe, such as Oslo, Geneva, Bangkok, Sydney, Bonn and Berlin in Germany,

New York and New Jersey in the US, Breukelen in the Netherlands, and London, Glasgow, and Stirling in the UK.

In myriad ways, we engaged international human rights bodies and organizations in our conversations, such as the South East Asia NHRI Forum (SEANF), the Asia Pacific Forum of National Human Rights Institutions (APF), the Global Alliance of National Human Rights Institutions (GANHRI), the United Nations Working Group on Business and Human Rights (UN WGBHR), the United Nations Special Rapporteur on the Environment, the United Nations Office of the High Commissioner for Human Rights (UNOHCHR), and other institutional agencies.

Our findings and recommendations are informed by science and governance experts and may be considered by political and executive branches of government, as well as by courts, wherever they might be deemed relevant.

With our *Inquiry*, we hope to have been able to help identify, or elaborate, on basic rights and duties relative to climate change, as well as amplify standards for corporate behavior.

We hope to have been able to demonstrate, as well, a model, albeit seminal, for the broadening of NHRI mechanisms and processes for providing access to justice, especially in regard to grave human rights challenges with transboundary character and extra-territorial obligations.

COMMISSIONER ROBERTO EUGENIO T. CADIZ¹¹

National Inquiry on Climate Change Chairperson

Commission on Human Rights of the Philippines

3 May 2022

11 The CHRP's *National Inquiry on Climate Change* Chairperson acknowledges the following members of his staff and that of the CHRP Economic, Social and Cultural Rights Center for their contributions in the research, drafting, and editing of this *Report*: Jonas Rex S. Turingan, Martin Angelo L. Esguerra, Caleen Chanyungco Obias, Domnina T. Rances Lao, John Colin Yokingco, Nina Karla Botial, Mediatrix Recella, Frances Eurika M. Yu, Takahiro Kenjie Aman, Angeli Fleur Nuque, and Charles Gerald Madrid.

I. Mandate of the Commission

The Commission on Human Rights of the Philippines (CHRP) is an independent National Human Rights Institution (NHRI)¹² created by the 1987 Philippine Constitution and organized under Executive Order No. 163, series of 1987. It is constitutionally mandated to:

1. Investigate, on its own or on complaint by any party, all forms of human rights violations involving civil and political rights;¹³
2. Recommend to Congress effective measures that promote human rights and provide for compensation to survivors of human rights violations, or their families;¹⁴
3. Monitor the Philippine government's compliance with international treaty obligations on human rights;¹⁵
4. Provide appropriate legal measures for the protection of human rights of all persons within the Philippines, as well as Filipinos residing abroad; and provide for preventive measures and legal aid services to the underprivileged whose human rights have been violated or need protection;¹⁶ and
5. Adopt its operational guidelines and rules of procedure.¹⁷

II. Matter Before the Commission

Petitioners posit that, under both domestic and international law, private enterprises, not just States, have an obligation to respect and protect human rights. Underscoring the anthropogenic character of climate change and the latter's adverse impacts on human rights, Petitioners pray this Commission declare Respondents—by extracting, producing, and selling fossil fuels—accountable for either impairing, infringing, abusing, or violating human rights.

12 United Nations General Assembly, *Principles Relating to the Status of National Institutions (The Paris Principles)*, G.A. Res. 48/134, U.N. Doc. A/RES/48/134 (20 December 1993).

13 PHIL. CONST. art. XIII, § 18 (1).

14 PHIL. CONST. art. XIII, § 18 (6).

15 PHIL. CONST. art. XIII, § 18 (7).

16 PHIL. CONST. art. XIII, § 18 (3).

17 PHIL. CONST. art. XIII, § 18 (2).

III. CHRP Jurisdiction and Admissibility of the Petition

Through the combination and interplay of the five Constitutional powers of this Commission, it exercises jurisdiction over cases. Jurisdiction should not be understood only in the context of the power to render a binding decision but also in the context of having the authority to perform other non-judicial constitutional mandates.

On the issue of subject-matter jurisdiction, this Commission notes the acceptance under customary international law of the interrelatedness, interdependence, and indivisibility of human rights and, therefore, accepts the view that it may investigate the whole gamut of human rights allegedly impacted in the petition.

The United Nations General Assembly recognizes that “the enjoyment of civic and political freedoms and of economic, social and cultural rights are interconnected and interdependent’ and that ‘when deprived of economic, social and cultural rights, man does not represent the human person whom the Universal Declaration regards as the ideal of the free man.’”¹⁸ Thus, the violation of one right inevitably impacts other rights which may or may not be in the same category. In order to provide effective remedy to victims and restore their dignity, all of the rights violated must be equally addressed.

A complete consideration of all the dimensions of human rights issues is required for this Commission to effectively exercise its recommendatory, monitoring, advocacy, and other powers.

In any case, if there still be doubt of the Commission’s wisdom in accepting the *Petition*, we note the allegation that climate change adversely impacts the right to life, classified as a civil and political right under the International Covenant on Civil and Political Rights (ICCPR),¹⁹ to which the Philippines is a party. The United Nations Human Rights Committee (UNHRC), in General Comment No. 36 on the right to life, declares:

18 United Nations General Assembly, *Preparation of Two Draft International Covenant on Human Rights*, G.A. Res. 543 (VI), U.N. Doc. No. A/RES/543 (VI) (Feb. 5, 1952).

19 International Covenant on Civil and Political Rights art. 6, 1996, 999 U.N.T.S. 171 [hereinafter ICCPR].

62. Environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generation to enjoy the right of life. Obligations of States parties under international environmental law should thus inform the contents of article 6 of the Covenant, and the obligation of States parties to respect and ensure the right to life, and in particular life with dignity, depends, inter alia, on measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors. States parties should therefore ensure sustainable use of natural resource, develop and implement substantive environmental standards, conduct environmental impact assessments and consult with relevant States about activities likely to have a significant impact on the environment, provide notification to other States concerned about natural disaster and emergencies and cooperate with them, provide appropriate access to information on environmental hazards and pay due regard to the precautionary approach.²⁰

There is also no doubt that this Commission may inquire into allegations involving violations of the human rights of Filipino people, even when occurring outside Philippine territory. No international or domestic law, rule, or principle prohibits this Commission from informing itself of facts and events occurring outside of the Philippines, as long as it does so in a manner respecting domestic laws of foreign territories. This is in line with the United Nations *Principles Relating to the Status of National Institutions* or the *Paris Principles*, which recognize that NHRIs have adequate powers to investigate and gather information in order to perform their mandate to protect human rights.

As it would be challenging for courts to exercise jurisdiction over respondents who are not domiciled within the Philippines, especially for acts also committed outside the Philippines, this Commission is compelled to inquire into the human rights abuses or violations alleged by Petitioners.

In admitting the *Petition*, this Commission does not exercise adjudicative or enforcement jurisdiction, but merely fulfills its broad mandate to promote and protect human rights, which requires inquiring into the issues raised therein.

20 United Nations Human Rights Committee, *General Comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life*, U.N. Doc. CCPR/C/GC/36 (Oct. 30, 2018).

IV. History of the Climate Inquiry and Conduct of the Public Hearings

On 22 September 2015, Petitioners filed their *Petition*, urging this Commission to look into the responsibility of the world's largest investor-owned fossil fuel and cement producers for human rights violations resulting from the impacts of climate change.

On 10 December 2015, the Commission declared that it would conduct a national inquiry to look into the allegations in the *Petition*. For this purpose, the Commission constituted an Inquiry Panel composed of Commissioner Roberto Eugenio T. Cadiz, as Chair, former CHRP Chairperson Jose Luis Martin Gascon, Commissioner Karen S. Gomez-Dumpit, Commissioner Gwendolyn Ll. Pimentel-Gana, and now CHRP Chairperson Leah C. Tanodra-Armamento, as members. Dr. Peter William Walpole, S.J. joined the panel as its independent expert.

The *Inquiry* was conducted in two parts: the first part, consisting of a multi-disciplinary consultative process, and the second, consisting of public hearings. In addition to the *amici* briefs and expert testimonies proffered during the Inquiry, the Commission took administrative notice²¹ of the reports of the Intergovernmental Panel on Climate Change (IPCC), the United Nations Framework Convention on Climate Change (UNFCCC), and the United Nations Environment Programme (UNEP).

21 Commission on Human Rights, Guidelines and Procedures in the Investigation and Monitoring of Human Rights Violations and Abuses, and the Provision of CHR Assistance, rule 7, § 22 (2012) (This Section provides that, "Applicability of the Rules of Court.—In all matters of procedure not covered by the foregoing rules, the provisions of the Revised Rules of Court shall apply in a suppletory character.") & 2019 AMENDMENTS TO THE 1989 REVISED RULES ON EVIDENCE, rule 129, §§ 1-2. (Matters of Judicial Notice is provided for under Section 1 or "Judicial notice, when mandatory.—A court shall take judicial notice, without the introduction of evidence, of the existence and territorial extent of states, their political history, forms of government and symbols of nationality, the law of nations, the admiralty and maritime courts of the world and their seals, the political constitution and history of the Philippines, official acts of the legislative, executive and judicial departments of the National Government of the Philippines, the laws of nature, the measure of time, and the geographical divisions. (1a)") and is further provided in Section 2 or "Judicial notice, when discretionary.—A court may take judicial notice of matters which are of public knowledge, or are capable of unquestionable demonstration, or ought to be known to judges because of their judicial functions. (1a)").

A. Multi-disciplinary Consultative Process

In August 2017, the Inquiry Panel began conducting community dialogues, fact-finding missions, key informant interviews (KIIs), focus group discussions (FGDs), and roundtable discussions (RTDs) on climate change and human rights, as follows:

1. Two FGDs and 20 KIIs in Libon and Legazpi City in the Province of Albay from 10 to 16 August 2017;
2. Two FGDs and 6 KIIs in Tanauan and Tacloban City in the Province of Leyte from 11 to 15 September 2017, and a community dialogue and RTD from 6 to 8 December 2018 in Tacloban City;
3. Two FGDs and 7 KIIs from 13 to 14 February 2018 in the Province of Isabela;
4. Two FGDs and 4 KIIs in Alabat Island, Quezon Province, from 10 to 12 April 2018, and a community dialogue on 11 October 2018;
5. A community dialogue with the provinces along the Verde Island Passage,²² convened in Batangas City on 7 June 2018; and
6. Four FGDs and one community dialogue in the Northern Mindanao Region with the Province of Bukidnon, the City of Iligan, and Cagayan de Oro City from 30 July to 1 August 2018.²³

On 18 January 2019, the Inquiry Panel participated in a conference entitled “Climate Responsibilities of Business,” held at the Nyenrode Business University²⁴ in Breukelen, Netherlands. The conference, convened under Chatham House Rules, brought together key stakeholders, including leading scholars, lawyers, researchers, industry representatives, and NHRI experts. Further consultations with some of the authors of the *amici curiae* briefs were also conducted.

While in the Netherlands, the Inquiry Panel offered to meet separately with officers of Respondent Royal Dutch Shell and other representatives of oil industry associations. The invitation, however, was politely declined.

22 Provinces of Batangas, Occidental Mindoro, Oriental Mindoro, Marinduque, and Romblon.

23 Iligan City, Province of Bukidnon, and Cagayan de Oro City.

24 This was organized in cooperation with Worldconnectors and Stand Up for Your Rights.

On 21 April 2016, Petitioners submitted their *Amended Petition*, after having been granted leave by the Inquiry Panel to amend their original *Petition* dated 22 September 2015.

On 9 June 2016, the Inquiry Panel ordered the Petitioners “to observe the formatting requirements under Supreme Court A.M. No. 11-9-4-0SC, dated 13 November 2012, otherwise known as the ‘Efficient Use of Paper Rule,’ for pleadings, motions, and similar papers.”

On 21 July 2016, Petitioners submitted their correctly-formatted *Petition*, dated 9 May 2016. On the same day, the Inquiry Panel sent copies of the *Petition* by registered mail to the 47 Respondents,²⁵ enjoining them to submit their *Answers to the Petition* within forty-five days from receipt thereof.

On various dates, the Inquiry Panel received a total of sixteen notices and responses to its communications, consisting of *return to sender* advisories, *notices of non-participation*, *motions to dismiss*, a *letter* acknowledging the issue of climate change with corresponding information on corporate social responsibility programs, and an “*Opposition*.”

Meanwhile, the Business and Human Rights Resource Centre²⁶ (BHRRC), an independent and international non-profit organization which provides an online repository of comprehensive global business and human rights knowledge and tracking human rights policy and performance of over 6,000 companies in over 180 countries, was able to gather eleven responses, from the following parties:

1. Anglo American plc;
2. BHP Billiton;
3. BP plc;
4. ConocoPhillips (Texas mailing address);
5. Eni S.p.A.;
6. Freeport-McMoRan Inc. (for Cyprus Amax Minerals Company);
7. Glencore plc (for Xstrata, Switzerland);
8. PJSC LUKOIL;

25 From the original fifty-two (52) initially identified/included by Greenpeace, et al. in their *Petition* dated 22 September 2015.

26 Business and Human Rights Resource Centre’s Repository, available at <https://www.business-humanrights.org/en/fossil-fuel-cos-respond-to-petition-with-philippines-human-rights-commission-on-human-rights-climate-change-impacts> (last accessed Sep. 12, 2019).

9. Peabody Energy Corporation;
10. Repsol; and
11. Rio Tinto London Ltd.

On 2 December 2016, Petitioners filed a *Manifestation and Motion to Submit a Consolidated Reply on or before 14 February 2017*.

On 13 February 2017, the Inquiry Panel received Petitioners' *Consolidated Reply*, dated 10 February 2017.

On 16 March 2017, the Inquiry Panel issued a *Notice*, enjoining “parties who have not responded to the Petition, as well as those who have earlier filed their responses by way of letters, motions, manifestations, or other pleadings, to file, on or before 5 May 2017, their answers, rejoinders, or other submissions” to either the *Petition* or *Consolidated Reply*. The Inquiry Panel also encouraged interested stakeholders to submit *Amicus Curiae* briefs.

The Inquiry Panel received *Amicus Curiae* briefs from the following individuals and institutions:

1. Asia Pacific Forum of National Human Rights Institutions (APF) and Global Alliance of National Human Rights Institutions (GANHRI);²⁷
2. Center for International Environmental Law (CIEL);²⁸
3. ClientEarth;²⁹
4. Environment Law Alliance (ELAW);³⁰
5. Dr. James Hansen, Director of Climate Science, Awareness and Solutions Earth Institute, Columbia University;³¹

27 Asia Pacific Forum of National Human Rights Institutions (APF) and Global Alliance of National Human Rights Institutions (GANHRI), Amicus Brief—Human Rights and Climate Change (Submission in Support of Petitioners), available at https://www.asiapacificforum.net/media/resource_file/APF_Paper_Amicus_Brief_HR_Climate_Change.pdf (last accessed Nov. 7, 2019).

28 Center for International Environmental Law, Opinion of the Center for Environmental International Law In Support of Petitioners, dated 09 February 2019, available at <https://www.business-humanrights.org/sites/default/files/documents/CHR-NI-2016-0001%20CIEL%20Opinion%2010.2.17.R.pdf> (last accessed Nov. 7, 2019).

29 ClientEarth, Amicus Curiae Brief, dated 21 November 2016, available at <https://www.business-humanrights.org/sites/default/files/documents/ClientEarth.pdf> (last accessed Nov. 7, 2019).

30 Letter from Environmental Law Alliance Worldwide to Honorable Chairman Jose Luis C. Gascon and Fellow Commissioners, Commission on Human Rights (Nov. 7, 2016) (available at <https://www.business-humanrights.org/sites/default/files/documents/ELaw.pdf> [last accessed Nov. 7, 2019]).

31 James Hansen, Amicus Submission in Support of the Petition, dated 28 August 2017, available at https://www.business-humanrights.org/sites/default/files/documents/2017.08.28_Jim.Hansen.Amicus_Comm_Human%20Rights_0.pdf (last accessed Nov. 7, 2019); also see Our Children's Trust, Amicus Curiae Brief.

6. Maastricht Principles Drafting Group-Olivier De Shutter, former UN Special Rapporteur on the *Right to Food* and professor at the University of Louvain, Belgium; Asbjørn Eide, former Director and presently Professor Emeritus at the Norwegian Center for Human Rights at the University of Oslo; Ashfaq Khalfan, Director of Law and Policy Programme Amnesty International - International Secretariat; Marcos A. Orellana, Director of the Center for International Environmental Law's (CIEL) Human Rights and Environment Program; Ian Seiderman, Legal and Policy Director of the International Commission of Jurists; Rolf Künemann, Human Rights Director, FIAN International Secretariat; Jernej Letnar Čerňič, Associate Professor of Human Rights Law, Graduate School of Government and European Studies, Slovenia; and Bret Thiele, Co-Executive Director, Global Initiative for Economic, Social and Cultural Rights;³²
7. Mary Robinson Foundation - Climate Justice;³³
8. Our Children's Trust (OCT);³⁴
9. Timothy Crosland, Director of Plan B Earth;³⁵
10. Sabin Center for Climate Change Law - Columbia Law School;³⁶
11. Sara Seck, Faculty of Law of Western University, Ontario, Canada;³⁷
12. Dr. Kevin E. Trenberth, Senior Scientist, Climate Analysis Section of the National Center for Atmospheric Research;³⁸ and
13. United Nations Children's Emergency Fund (UNICEF) Philippines.³⁹

32 Olivier De Schutter, Asbjørn Eide, Ashfaq Khalfan, Rolf Künemann, Jernej Letnar Čerňič, Marcos A. Orellana, Ian Seiderman, & Bret Thiele, Amicus Submission, dated 05 December 2016, *available at* <https://business-humanrights.org/en/amicus-briefs> (last accessed Nov. 7, 2019).

33 Letter *from* Mary Robinson Foundation - Climate Justice *to* Hon. Roberto Eugenio T. Cadiz, Commissioner, Commission on Human Rights, dated 04 November 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/Mary%20Robinson%20Foundation.pdf> (last accessed Nov. 7, 2019).

34 Our Children's Trust, Amicus Curiae Brief, dated 06 December 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/OCT%20Amicus%20Submission.pdf> (last accessed Nov. 7, 2019).

35 Timothy Crosland, Plan B, Amicus Curiae Brief, dated 18 October 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/Plan%20B.pdf> and Plan B, Supplement to Amicus Curiae Brief, dated 23 November 2016, *available at* https://www.business-humanrights.org/sites/default/files/Submission_Plan%20B%20supplementary%20note.pdf.

36 Sabin Center for Climate Change Law, Columbia Law School, Submission in Support of the Petitioners, dated 16 December 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/Wentz-and-Burger-2016-12-Submission-Case-No.-CHR-NI-2016-0001.pdf> (last accessed Nov. 7, 2019).

37 Sara Seck, Amicus Submission, dated 12 November 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/Western%20University.pdf> (last accessed Nov. 7, 2019).

38 Kevin E Trenberth, Sc.D, Climate Analysis Section, National Center for Atmospheric Research, dated 07 November 2016, *available at* <https://www.business-humanrights.org/sites/default/files/documents/Kevin%20E%20Trenberth.pdf> (last accessed Nov. 7, 2019).

39 United Nations Children's Emergency Fund Philippines, Amicus Curiae Brief submitted by UNICEF,

In May 2017, Chevron Corporation; Chevron Philippines, Inc. and Chevron Holdings, Inc.; Chevron Geothermal Services Company; Chevron Kalinga Ltd. and Chevron Malampaya LLC; ConocoPhillips; Eni S.p.A; Repsol, S.A. and Repsol Oil and Gas Canada Inc; and The Shell Company of the Philippines Limited and Royal Dutch Shell filed their respective *Rejoinders and/or letter response to the Petitioners' Consolidated Reply*.

On 7 December 2017, CEMEX S.A.B. de C.V. filed a *Manifestation* that it was no longer requesting for a formal resolution of its motion to dismiss, dated 14 September 2016.

On 11 December 2017, the Inquiry Panel held a pre-hearing conference with the parties to identify the issues, resource persons, and documents to be presented before the *Inquiry*.⁴⁰ Despite notice, only counsels for the Petitioners and the counsel for Respondent Cemex S.A.B. de C.V. appeared, the latter on special appearance to manifest its non-participation in the proceedings.⁴¹

The Chairman of the Inquiry Panel opened the conference, affirming the Commission's decision to admit the *Petition* and the reasons therefor. The nature of the *Inquiry*, as well as other procedural matters concerning the public hearings, such as the presentation, examination, and marking of documentary evidence, were discussed.⁴²

It was also announced during the conference that, as of 18 October 2017, notices had been personally served upon the Petitioners,⁴³ while notices to the Respondents⁴⁴ were sent via registered mail.

dated December 2017, available at https://www.business-humanrights.org/sites/default/files/documents/UNICEF%20Amicus%20Brief_Child%20%20Rights_Climate_%20Philippines_FINAL.pdf (last accessed Nov. 7, 2019).

40 Transcript of Stenographic Notes [T.S.N.] Case No. CHR-NHI-2016-0001 Conference of Parties 11 December 2017.

41 T.S.N. Case No. CHR-NHI-2016-0001 Preliminary Conference 11 December 2017, at 24.

42 T.S.N. of the Meeting of the Parties dated 11 December 2017.

43 Namely: 1) Greenpeace Southeast Asia (Philippines); 2) Philippine Rural Reconstruction Movement; 3) Sentro ng mga Nagkakaisa at Progresibong Manggagawa; 4) Dakila; 5) Philippine Alliance of Human Rights Advocates; 6) Philippine Human Rights Information Center; 7) Mother Earth Foundation; 8) Ecowaste Coalition; 9) 350.Org East Asia; 10) Nagkakaisang Ugnayan ng mga Magsasaka at Manggagawa sa Niyugan; 11) Asian People's Movement on Debt & Development; 12) Alliance of Youth Organizations and Students-Bicol; 13) Philippine Movement for Climate Justice; 14) Nuclear Free Bataan Movement; 15) Von Hernandez; 16) Fr. Edwin Gariguez; 17) Naderev "Yeb" Saño; 18) Amado Guerrero Saño; 19) Carlos Celdran; 20) Angel Aquino; 21) Juan Manuel "Kokoi" Baldo; 22) Lidy Nacpil; 23) Benjamin Aceron; 24) Elma Reyes; 25) Laidy Remado; 26) Richard Lopez; 27) Constanca Lopez; 28) Lerrisa Libao; 29) Gloria Cadiz; 30) Ronie Flores; 31) Marinel Ubaldo; 32) Veronica V. Cabe.

44 Namely: 1) Chevron; 2) Chevron Geo-Local Services Corporation; 3) Chevron Philippines, Incorporated; 4) Chevron Holdings, Incorporated; 5) Chevron Texaco Malampaya LLC; 6) Chevron Kalinga Limited; 7) ExxonMobil; 8) BP PLC; 9) Castrol Philippines, Incorporated, formerly BP Philippines Incorporated; 10) Royal Dutch Shell; 11) ConocoPhillips; 12) Peabody Energy; 13) Total;

The Inquiry Panel noted that it had received various communications and responses from the following Respondents:

1. OMV Aktiengesellschaft;⁴⁵
2. Chevron Geothermal Services Company, Chevron Kalinga Ltd., and Chevron Malampaya LLC;⁴⁶
3. Chevron Philippines, Inc. and Chevron Holdings, Inc.;⁴⁷
4. Eni S.p.A;⁴⁸
5. Murphy Oil Corporation;⁴⁹
6. Encana Corporation;⁵⁰
7. Arch Coal;⁵¹
8. Consol Energy Inc.;⁵²
9. BG Group PLC;⁵³
10. Hess Corporation;⁵⁴
11. RWE Konzern;⁵⁵ and
12. Devon Energy.⁵⁶

14) Consol Energy Incorporated; 14) BHP Billiton; 15) Anglo-American PLC; 16) Anglo-American Exploration Philippines, Incorporated; 17) RWE Konzern; 18) ENI; 19) Rio Tinto; 20) Arch Coal, Incorporated; 21) Anadarko Petroleum Corporation; 22) Occidental Oil and Gas Corporation; 23) Lukoil; 24) Sasol Limited; 25) Repsol; 26) Marathon Petroleum Corporation; 27) Hess Corporation; 28) Glencore PLC; 29) Massey Energy, acquired by Alpha Natural Resources, Incorporated; 30) Alpha Natural Resources, Incorporated; 31) Cyprus Amax, Freeport-McMoRan Incorporated; 32) EnCana Corporation; 33) Devon Energy; 34) BG Group PLC; 35) Westmoreland Company; 36) Suncor Energy, Incorporated; 37) Kiewit Mining Incorporated; 38) National American Coal Corporation; 39) Ruhrkohle AG; 40) Luminant Corporation; 41) LaFarge as merged with Holcim; 42) Canadian National Resources; 43) Apache Corporation; 44) Talisman; 45) Murray Energy Corporation; 46) UK Coal Production Limited; 47) Husky Energy, Incorporated; 48) Heidelberg Cement AG; 49) Cemex; 50) Italcementi as acquired by Heidelberg Cement; 51) Murphy Oil Corporation; 52) Taiheiyō Cement, Incorporated; 53) OMV Group; 54) Rosneft.

45 Received on 28 April 2017.

46 Received on 03 May 2017 with an indication that they are returning the copies of the *Consolidated Reply*.

47 Received on 03 May 2017 with an indication that they are returning the copies of the *Consolidated Reply*.

48 Received on 04 May 2017.

49 Received on 16 November 2017.

50 Received on 17 November 2017 with an indication that they have gone away or moved from the address indicated in the *Petition*.

51 Received on 18 November 2017.

52 Received on 18 November 2017.

53 Received on 18 November 2017 with an indication that they have gone away or moved from the address indicated in the *Petition*.

54 Received on 20 November 2017.

55 Received on 22 November 2017.

56 Mail was sent on 19 October 2017 and Devon Energy refused receipt of the same.

Registry return receipts were received by the Commission from the following:

1. Apache Corporation;⁵⁷
2. Marathon Oil Corporation;⁵⁸
3. Conoco-Phillips Corporation;⁵⁹ and
4. Anglo-American Exploration.⁶⁰

During the said conference, the Petitioners were asked to submit, by 11 January 2018, a list of their witnesses and electronic copies of all the documents which they intended to present for pre-marking.

On 11 January 2018, the Petitioners filed a *Motion for Extension of Time to Submit List of Witnesses and Other Documents*, praying for an additional thirty days, or until 10 February 2018, to comply.

On 19 March 2018, a *Joint Summary of the Amicus Curiae Briefs*⁶¹ was submitted by the briefers to the Inquiry Panel.

B. Public Hearings

The Inquiry Panel conducted the hearings in a dialogic, rather than adversarial manner. It operated on the principle of persuasion. While parties were given notices of the hearings, their participation was entirely voluntary. Indeed, as one of the Respondents subsequently manifested in the *withdrawal of its Motion to Dismiss*, it found no issue with the Commission proceeding with the *Inquiry* as a non-adversarial process.⁶²

57 Received on 26 October 2017.

58 Received on 26 October 2017.

59 Received on 26 October 2017.

60 Received on 03 November 2017 with an indication that Anglo-American Exploration have gone away or moved from the address indicated in the *Petition*.

61 Submitted by the following organizations and individuals: Center for International Environmental Law (CIEL) (Erika Lennon, Carroll Muffett, Sébastien Duyck, Steven Feit & Lisa Hamilton); ClientEarth (Sophie Marjanac); Environmental Law Alliance Worldwide (ELAW) (Killian Doherty & Jennifer Gleason); Maastricht Principles Drafting Group (Kristine Perry); Our Children's Trust (Elizabeth Brown & Danny Noonan); Plan B (Tim Crosland); Sabin Center for Climate Change Law, Columbia Law School (Michael Burger & Jessica Wentz); Asia Pacific Forum of National Human Rights Institutions & the Global Alliance of National Human Rights Institutions (Dr. Annalisa Savaresi & Dr. Ioana Cismas); Dr. James E. Hansen (Dan Galpern); and Dr. Kevin E. Trenberth.

62 Received on 8 December 2017.

The Inquiry Panel focused its public hearings on the substantive aspects of the case, while adhering to general principles of due process, as guided under the provisions of its *Omnibus Rules of Procedure*.

The hearings were transparent and streamed live over the internet, allowing all parties and other stakeholders from around the world to participate. Witnesses were treated as resource speakers. They either appeared in person or gave their testimonies live via videoconferencing facilities. Everyone in attendance, including members of the general public, were given the opportunity to pose questions to the resource speakers.

On 27 and 28 March 2018, the Inquiry Panel held the first set of public hearings at the Session Hall of the CHRP in Metro Manila. Five resource persons, representing the indigenous youth;⁶³ agriculture and fishery sector;⁶⁴ and transport workers⁶⁵ gave their testimonies. Eight resource persons provided their expert opinions on the impact of greenhouse gases (GHG) on the carbon cycle and the atmosphere;⁶⁶ climate change and ocean acidification and the vulnerability of the Philippines to these;⁶⁷ Carbon Majors as a source of carbon emissions;⁶⁸ findings of the Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) in relation to climate change;⁶⁹ health impacts of climate change;⁷⁰ and CIEL's Smoke and Fumes report.⁷¹

On 23 and 24 May 2018, the second set of public hearings was held at the Session Hall of the CHRP in Metro Manila. Seven resource persons spoke about the concerns of fishermen, small business owners (fish consignment),⁷² and urban poor victims of Typhoon Ketsana (local: *Ondoy*) in Marikina and Rizal.⁷³

63 Ms. Rica Cahilig.

64 Mr. Felix "Ka Jhun" Pascua, Jr., Ms. Lerissa Libao, and Ms. Elma Reyes.

65 Mr. Ernesto Cruz.

66 Dr. Gerry Bagtasa.

67 Dr. Laura David, Dr. Perry Aliño, and Dr. Maria Lourdes San Diego-McGlone.

68 Dr. Peter Frumhoff.

69 Ms. Rosalina De Guzman.

70 Dr. Victorino Molina.

71 See Exhibit K, Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis (Center for International Environmental Law), dated November 2017; Ms. Lisa Anne Hamilton.

72 Mr. Pablo Rosales and Mr. Jonathan Delos Reyes.

73 Mr. Pablo Taon III, Ms. Francia Encinas, Mr. Isagani Molina, Mr. RJ De Ramos, and Mr. Manuel "Ka Noli" Abinales.

Six resource persons gave their expert opinions on the liability or accountability of Carbon Majors;⁷⁴ the legal framework of human rights responsibility of transnational corporations;⁷⁵ analysis of the Inter-American Human Rights Court's opinion on the right to a healthy environment;⁷⁶ and climate change impacts on the agriculture sector, fish and seaweed supplies, reef ecology, and food chain supply in relation to the Philippines' food security.⁷⁷

On 29 and 30 August 2018, the third set of public hearings was held at the Session Hall of the CHRP in Metro Manila, where six resource speakers shared their stories and concerns. A transgender woman who survived Super Typhoon Haiyan (local: *Yolanda*) shared how climate change compounded gender-based discrimination;⁷⁸ fisherfolks and farmers from Capalonga, Camarines Norte⁷⁹ narrated how their lives were impacted; and indigenous people from Ifugao Province articulated how climate change impacted their rice terraces in Banawe, which in turn adversely affected their cultural traditions.⁸⁰ Eight expert resource persons tackled topics relating to recent climate scenarios; the vulnerabilities and specific impacts of climate change on children;⁸¹ the GHG contributions of the individual Carbon Majors;⁸² the documented corporate actions and communications on climate change of ExxonMobil⁸³ and Shell;⁸⁴ the vulnerability of the Philippines' biodiversity to climate change;⁸⁵ the health impacts of climate change and the pathophysiology of heat stress, air pollution, and the Zika virus;⁸⁶ valuing climate change impacts, financial policies and climate change as risk multipliers for agricultural livelihoods;⁸⁷ and extreme weather attribution science and climate litigation.⁸⁸

74 Mr. Carroll Muffett.

75 Dr. Michael Addo.

76 Dr. Marcos Orellana.

77 Undersecretary Sigfredo Serrano of the Department of Agriculture and Dr. Mudjekeewis Santos.

78 Ms. Jean Golong, a transgender woman.

79 Mr. Elicer G. Lauce and Ms. Delia A. Tulagan.

80 Ms. Delia A. Tulagan, Mr. Buucan Hangdaan, Ms. Dalia Nalliw, and Mr. William Mamanglo.

81 Dr. Rosa Perez and Dr. Celine Vicente.

82 Mr. Richard Heede.

83 Dr. Geoffrey Supran.

84 Mr. Carroll Muffett.

85 Dr. Neil Aldrin Mallari.

86 Dr. Jonathan Moses Jadloc.

87 Mr. Glenn Stuart Hodes.

88 Ms. Sophie Marjanac.

On 27 and 28 September 2018, the fourth set of public hearings was conducted in New York City. The Petitioners presented three youth survivors of Super Typhoon Haiyan (local: *Yolanda*) and Hurricane Sandy, who spoke on how these extreme weather events impacted their lives and livelihood.⁸⁹ Four resource persons discussed economic, social, and cultural rights in the context of climate change; how climate change acts as a threat multiplier;⁹⁰ the fossil fuel industry and trade associations' actions and response to climate change;⁹¹ the 1999 *United States of America v. Philip Morris USA Inc., et al.* case in relation to corporate product liability;⁹² and attribution science identifying Carbon Majors as significant contributors to climate change.⁹³

The Inquiry Panel also heard six resource persons of its own invitation, namely: Professor David Estrin and Professor Cynthia Williams, who spoke on corporate accountability and disclosure principles; Dr. James Hansen, who briefly discussed the case of *Juliana et al. v. United States of America*;⁹⁴ Professor Erin Daly, who spoke on dignity rights; Professor Radley Horton, who discussed the effect of climate change on weather patterns; and Daniel Zarrilli, who discussed how the government of New York City was addressing climate change.

On 6 and 7 November 2018, the fifth set of public hearings was conducted at the London School of Economics. The Petitioners presented two resource persons who shared their stories as typhoon survivors. One, as a survivor of Typhoon Ketsana (local: *Ondoy*)⁹⁵ and a young survivor of Super Typhoon Haiyan (local: *Yolanda*).⁹⁶ The Petitioners also presented seven expert resource persons: Mark Campanale, Andrew Grant, Prof. Henry Shue, Dr. Roda Verheyen, Dr. Dylan Tanner, Dr. Myles Allen, and Dr. Paul Ekins OBE. These experts spoke about topics on how much carbon dioxide (CO₂) was released in the atmosphere and whether supply options of Carbon Majors were aligned with demand levels consistent with various scenarios of carbon constraint; the ethical aspects of the Carbon Majors' responsibility for climate change; climate litigation cases and their relevance to the *Inquiry*; European corporate influence on climate policy and action; attribution science of climate

89 Ms. Marinel S. Ubaldo, Ms. Cristina Cocadiz, and Ms. Candice Sering.

90 Ms. Katherine Lofts.

91 Mr. Kert Davies.

92 Ms. Sharon Eubanks.

93 Dr. Brenda Ekwurzel.

94 Docket No. 18-36082, 9th Circuit Court.

95 Ms. Mariel Trixie Bacason.

96 Ms. Veronica Cabe.

change (modelling) and assessing these changes with future climate simulations; and a model that contains estimates of the quantities, locations, and nature of the world's oil, gas, and coal reserves and resources.

The Inquiry Panel heard seven experts of its own invitation: Joni Pegram, who discussed children's rights in relation to climate change; Adam Matthews,⁹⁷ as co-chair of Transition Pathways Initiative,⁹⁸ who discussed the Church of England's responsible investment practice; Dr. Jaap Spier, who discussed the Oslo Principles on Global Climate Change Obligations; Lene Wendland,⁹⁹ who discussed human rights responsibilities of business in the context of the United Nations Guiding Principles on Business and Human Rights; Ben Schachter,¹⁰⁰ who discussed climate change and its impact on the effective enjoyment of human rights, and human rights obligations of States; Dr. Swenja Surminski,¹⁰¹ who discussed climate change and its impact on the human rights of the Filipino; and Linda Siegele,¹⁰² who discussed the provisions of the UNFCCC and the Paris Agreement as they relate to adaptation, loss, and damage.

On 11 and 12 December 2018, the final set of public hearings was conducted at the Session Hall of the CHRP in Metro Manila. Three resource persons¹⁰³ were presented to share their stories as typhoon survivors who lost loved ones to Typhoon Washi (local: *Sendong*), and a Disaster Risk Reduction officer, who shared how Camotes Island in Cebu survived Super Typhoon Haiyan (local: *Yolanda*) with zero casualties.

Six expert witnesses discussed the following topics: human rights responsibilities in relation to climate change; the Commission's role in this global issue; the concept of a "just transition" and the corporate requirements on Carbon Majors to ensure that they act responsibly in relation to climate change; the health impacts of climate change and the development of a health adaptation strategy by the State in relation to climate change; how the United Nations Guiding Principles on Business and Human Rights provide an analytical

97 Director of Ethics and Engagement of the Church of England's Pensions Board.

98 An initiative that assesses companies' preparedness for the transition to a low carbon economy (*citing* <https://lse.ac.uk/granthaminstitute/tpi>, last accessed Nov. 13, 2019).

99 Chief of Directorate at the United Nations Office of the High Commissioner on Human Rights, Economic and Social Issues Section.

100 Focal Point on Climate Change of the Office of the UN High Commissioner for Human Rights.

101 Head of Adaptation Research, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

102 Senior Teaching Fellow, Climate Change Law and Policy, SOAS University of London.

103 Ms. Amalia Bahian, Ms. Monica Piquero-Tan, and Ms. Honeylyn Gonzales.

lens on what may constitute adequate human rights protection from climate harms in the Philippines, including the role of businesses in addressing these harms and the identification of policy gaps that should be addressed by the Philippine government; and the Climate Compensation Act and principles of liability for large-scale GHG emitters. Kumi Naidoo, Laura Gyte, Dr. Glenn Roy Paraso, former Commissioner of the Climate Change Commission Naderev Saño; former Chair of this Commission Loretta Ann Rosales, and Dr. Margaretha Wewerinke-Singh testified as expert resource persons for the Petitioners.

On 26 June 2019, the Inquiry Panel asked Petitioners to submit their *Formal Offer of Evidence* on or before 5 July 2019, and their *Memorandum*, on or before 31 August 2019.

On 4 July 2019, the Petitioners filed an *Ex-Parte Motion for Extension*, dated 3 July 2019, requesting for an extension of fifteen days each within which to file the two pleadings, specifically by 20 July 2019, for the *Formal Offer of Evidence*, and by 15 September 2019, for the *Memorandum*, which motion was granted on 5 July 2019.

On 19 July 2019, the Petitioners filed their *Ex-Parte Formal Offer of Documentary Exhibits and Manifestation*.

On 13 September 2019, Petitioners filed an *Ex-Parte Manifestation and Additional Formal Offer of Documentary Exhibit* requesting the admission of evidence omitted in their formal offer of 19 July 2019.

On 19 September 2019, the Petitioners submitted their *Memorandum*.

V. Findings

A. Climate Change is Real

The Inter-Governmental Panel on Climate Change (IPCC) defines climate change as the “change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer.” Climate change may be “due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic

eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use.”¹⁰⁴ This definition was derived from the observations of the scientific community through their research.

The United Nations Framework Convention on Climate Change (UNFCCC), which the Philippines signed on 12 June 1992 and ratified on 2 August 1994, has adopted a more nuanced definition, emphasizing the influence of human activities. It defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”¹⁰⁵ Philippine statutes have adopted a definition that reflects the one provided by the IPCC. These statutes define climate change as “a change in climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period typically decades or longer, whether due to natural variability or as a result of human activity.”¹⁰⁶

The reports of the IPCC provide unequivocal evidence of global warming. The particular indicators are changes in the atmosphere, oceans, cryosphere, and frequency of extreme weather and climate events. Over the past several decades, these changes have been at levels unseen in centuries to millennia, and are changing at rates unprecedented in the last 2000 years.¹⁰⁷

104 Intergovernmental Panel on Climate Change, *2013: Annex III: Glossary* [Planton, S. (ed.)]. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, at 1450.

105 United Nations Framework Convention on Climate Change, Chapter XXVII, art. 1, ¶ 2, *adopted* May 9, 1992, 1771 U.N.T.S. 107, *available at* https://treaties.un.org/doc/Treaties/1994/03/19940321%2004-56%20AM/Ch_XXVII_07p.pdf.

106 An Act Mainstreaming Climate Change into Government Policy Formulations, Establishing the Framework Strategy and Program on Climate Change, Creating for this Purpose the Climate Change Commission, and for other Purposes [Climate Change Act of 2009], Republic Act No. 9729, § 3 (d) (2009); An Act Strengthening the Philippine Disaster Risk Reduction and Management System, Providing for the National Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and for other Purposes [Philippine Disaster Risk Reduction and Management Act of 2010], Republic Act No. 10121, § 3 (d) (2010); An Act Establishing the People’s Survival Fund to Provide Long-term Finance Streams to Enable the Government to Effectively Address the Problem of Climate Change, amending for the Purposes Republic Act No. 9729, otherwise known as the “Climate Change Act of 2009”, and for other Purposes, Republic Act No. 10174, § 2 (2011).

107 Intergovernmental Panel on Climate Change, *2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [MassonDelmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press [hereinafter IPCC, *AR 6, WG1, SPM*].

The indicators, meticulously monitored and studied by the scientific community, as evidence of the reality of climate change, are as follows:

1. Atmospheric Warming

The temperature of the atmosphere increases due to excess heat being trapped by GHG instead of being released back into space. The IPCC reported that the mean global surface temperatures of each of the last four decades has been successively warmer than any decade that preceded it since 1850.¹⁰⁸ From the years 2001 to 2020, the global surface temperature was 1.09°C higher than the 1850 to 1900 baseline conditions.¹⁰⁹ This increase in temperature is being experienced in all regions of the world. Even accounting for natural climate variabilities, the rate of warming has been unlike anything in the past 800,000 years.¹¹⁰

2. Oceanic Indicators

Ocean Warming

Oceans, much like the atmosphere, absorb excess heat that fails to escape into space. The IPCC reports state that ocean surface temperature has been increasing over the past decades. The global ocean has warmed unabated, and its heat content has increased since 1970 and is projected to continue to increase over the 21st century. Furthermore, the rate of ocean warming has doubled since 1993. It has, on average, increased by 0.88°C from 1850-1900 to 2011-2020, with 0.60°C of this warming having occurred since 1980.¹¹¹ Marine heatwaves¹¹² have become more frequent over the 20th century, and since the 1980s, have approximately doubled in frequency and have become longer and more intense.¹¹³

108 *Id.*

109 *Id.*

110 *Id.*

111 Intergovernmental Panel on Climate Change, *2019: Summary for Policymakers. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3-35. <https://doi.org/10.1017/9781009157964.001> [hereinafter IPCC *SROCC SPM*].

112 Sustained periods of anomalously high near-surface temperatures that can lead to severe and persistent impacts on marine ecosystems.

113 IPCC, *AR 6, WG1, SPM*, supra note 107.

Sea Level Rise

Sea level rise is caused by thermal expansion of water in the seas due to their warming, as well as the increase of the amount of water due to the melting of the cryosphere. From 2006-2015, the sum of ice sheets and glacier melt contributions has been the dominant source of sea level rise, exceeding that of thermal expansion.¹¹⁴ The findings of the IPCC provide that the rise of global mean sea level (GMSL) in the 20th century is at a rate faster than any preceding century in at least the last three millennia. Between 2006 and 2018, the average rate of sea level rise was 3.7 mm per year.¹¹⁵ Since 1901, GMSL has risen by 0.20 [0.15-0.25] m, and the rate is accelerating¹¹⁶ due to the combined increased ice loss from the Greenland and Antarctic ice sheets.

Ocean Acidification

Ocean acidification occurs when oceans absorb CO₂. The IPCC reports provide that the ocean has been absorbing more CO₂ and has undergone increasing surface acidification. The ocean has taken up between 20 to 30 percent of total anthropogenic CO₂ emissions since the 1980s.¹¹⁷ This has resulted in ocean surface pH declining globally over the past four decades and in all ocean basins in the ocean interior over the past two to three decades.¹¹⁸

3. Cryosphere Loss

The cryosphere refers to the portions of the Earth System that is frozen such as glaciers, ice sheets, icebergs, sea ice, snow cover, and the like.¹¹⁹ It is inherently reactive to temperature changes and “provides some of the most visible signatures of climate change.”¹²⁰ Over the last few decades, the cryosphere has seen widespread

114 IPCC *SROCC SPM*, *supra* note 111.

115 IPCC, *AR 6, WG1, SPM*, *supra* note 107.

116 *Id.*

117 IPCC *SROCC SPM*, *supra* note 111.

118 IPCC, *AR 6, WG1, SPM*, *supra* note 107.

119 IPCC *SROCC SPM*, *supra* note 111.

120 Intergovernmental Panel on Climate Change, *Observations: Cryosphere*, in *CLIMATE CHANGE 2013 – THE PHYSICAL SCIENCE BASIS: WORKING GROUP I CONTRIBUTION TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 317-382* (Cambridge University Press, 2014). doi:10.1017/CBO9781107415324.012 [hereinafter referred to us IPCC *Observations: Cryosphere*].

shrinking due to global warming.¹²¹ Ice sheets and glaciers worldwide have lost mass worldwide. The mass loss from the Antarctic ice sheet in 2007-2016 was triple that lost in 1997-2006. While the mass loss in Greenland was doubled over the same period. Snow cover and arctic sea ice extent and thickness have been reduced, and permafrost temperatures have increased.¹²²

4. Extreme Weather and Climate Events

Climate change has also significantly affected the frequency, intensity, extent, duration, and timing of extreme weather and climate events.¹²³ Since the 1950s, there have been clear changes in many types of extreme events, including droughts, heavy precipitation, tropical cyclones, and heat waves. The IPCC has found that hot extremes such as heatwaves have become more frequent and intense across land regions while cold extremes have become less frequent and severe.¹²⁴ Other events, such as heavy precipitation, tropical cyclones, and droughts, have increased in frequency and intensity. Compound extreme events such as flooding and fire weather have also increased due to the influence of climate change on precipitation, droughts, and cyclones.¹²⁵

The enumerated indicators, when taken together, all point to the conclusion that the climate has indeed changed. The Commission accepts this unequivocal truth, as established by peer-reviewed science, that climate change is real and happening on a global scale.

121 *IPCC SROCC SPM, supra note 111.*

122 *Id.*

123 Intergovernmental Panel on Climate Change, *2012: Summary for Policymakers. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 3-21.

124 IPCC, *AR6, WG1, SPM, supra note 107.*

125 IPCC, *AR6, WG1, SPM, supra note 107.*

B. Anthropogenic Dimension of Climate Change

The scientific community has long achieved a consensus that climate change is induced by human activity.

In the past, scientific uncertainty, as communicated in scientific research such as the IPCC assessment reports,¹²⁶ were used to sow doubt and confusion in public perception on how much of climate change is attributable to anthropogenic or human activities.¹²⁷ However, in 2021-2022, the IPCC released its latest reports, the Sixth Assessment Reports (AR6), stating that it is unequivocal that the climate change that is currently being experienced is anthropogenic in origin, foregoing the use of their previous method of communicating uncertainty. Human influence has warmed the climate, atmosphere, ocean and land at a rate that is unprecedented in the last 2000 years.¹²⁸ The report of Working Group I of AR6 states that global atmospheric concentrations of the GHG responsible for warming, such as CO₂, methane (CH₄), and nitrous oxide (N₂O), have all risen significantly in the last few thousand years.¹²⁹ In particular, atmospheric CO₂ concentrations are higher than at any time in at least two million years, and concentrations of CH₄ and N₂O are higher than at any time in at least 800,000 years.¹³⁰ These increases in GHG concentrations have been unequivocally caused by human activities since around 1750.¹³¹

126 The IPCC Fifth Assessment Report [AR5] relied on two (2) metrics for communicating the degree of certainty in key findings: a) confidence in the validity of a finding based on the type, amount, quality and consistency of evidence, and the degree of agreement; and b) quantified measures of certainty in a finding expressed probabilistically. The following terms are used to describe the available evidence: limited, medium or robust; and for the degree of agreement: low, medium or high. A level of confidence is expressed using five (5) qualifiers: very low, low, medium, high and very high. If uncertainties can be quantified probabilistically, the following terms are used to indicate the assessed likelihood: virtually certain (99-100% probability), extremely likely (95-100% probability), very likely (90-100% probability), likely (66-100% probability), more likely than not (>50-100% probability), about as likely as not (33-66% probability), unlikely (0-33% probability), very unlikely (0-10% probability), extremely unlikely (0-5% probability), and exceptionally unlikely (0-1% probability) (*citing* IPCC, 2013: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, p. 36).

127 Kyun Soo Kim, *Public Understanding of the Politics of Global Warming in the News Media: The Hostile Media Approach*, 20 PUBLIC UNDERST SCI. 690-705, doi:10.1177/0963662510372313 (2011) & Aaron M. McCright & Riley E. Dunlap, *Anti-reflexivity: The American Conservative Movement's Success in Undermining Climate Science and Policy*, 27 THEORY CULT. SOC 100-133, doi:10.1177/0263276409356001 (2010).

128 IPCC, *AR 6, WG1, SPM*, *supra* note 107.

129 *Id.*

130 *Id.*

131 *Id.*

The key global indicators, as previously discussed, also point to the conclusion that human activities have caused significant changes. The IPCC found that the warming of the atmosphere and oceans, the acidification of the ocean, sea-level rise, the decrease of the cryosphere, and the changes in climate and weather events can all be traced back to the influence of human activities on the climate.¹³²

All these considered, the Commission accepts that climate change is primarily anthropogenic or caused by human activities.

C. Climate Change: A Grave and Urgent Human Rights Concern

1. Adverse Impacts of Climate Change on Human Rights

In General

Anthropogenic climate change is “the greatest human rights challenge of the 21st century.”¹³³ It negatively affects a host of, if not all, human rights.¹³⁴ Climate change impacts, including the degradation of the environment; deprivation of resources; prevalence of life-threatening diseases; widespread hunger and malnutrition; and extreme poverty, among others, prevent an individual from living a dignified life.

Some of the individual rights adversely impacted are the rights to life, food, water, sanitation, and health. Collective rights are also affected, including the rights to food security, development and sustained economic growth, self-determination, preservation of culture, equality and non-discrimination.

132 *Id.*

133 As remarked by Former High Commissioner for Human Rights, Mary Robinson, now President of the Mary Robinson Foundation – Climate Justice, during the panel discussion on human rights and climate change during the 28th session of the Human Rights Council.

134 See United Nations Human Rights Council, *Human Rights and Climate Change*, U.N. Doc. No. A/HRC/RES/41/21 (July 23, 2019) (Some of the previous Council resolution underlining the wide range of implications of climate change on the effective enjoyment of human rights include RES/7/23, RES/10/4, RES/18/22, among others) & Office of the High Commissioner for Human Rights, *Understanding Human Rights and Climate Change* (Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change).

Vulnerable sectors are also impacted, such as women and children, indigenous peoples, older adults, and persons with disabilities.

Climate change also impacts the rights of future generations, which brings to fore the duty of stewardship upon the present.

Climate change is also now a major cause of migration, and a threat to global security.

Professor Erin Daly, CHRP resource person, explains the relationship of climate change impacts and human dignity, which is at the core of all human rights, as follows:

Focusing on human dignity helps us see the interdependence, the interrelatedness, the indivisibility of our human rights, which is in fact how deprivation of rights are experienced by people. When a typhoon hits, it is not just independently the loss of a house, the loss of a school, the loss of family, the loss of health care, the lack of water, food insecurity or the end of hope that needs to be vindicated, but all of these churning together in combination and in turmoil that makes the experience of climate impacts so devastating and so threatening to human dignity.¹³⁵

Petitioner Veronica Cabe, a survivor of Typhoon Ketsana (local: *Ondoy*), testified:

... The floods have changed our lives. I felt like parts of our dignity was lost because we felt displaced.

We felt displaced, we didn't have our own space. We were forced to live with friends who were willing to share their homes with us. We were separated from each other. My nephews lived in another relative's house. We relied on relief goods and donations for months. I recall every day I had to queue in line and wait for hours, half a day every day waiting for possible relief. We did not know if relief would come and then line up again for another day. And then relief foods were thrown at us, and I saw my neighbors struggling against each other just to get their share. It was chaotic that time. The government was not ready for an *Ondoy* flood that time. And one important thing is that we had to borrow money from everyone because we did not have money.¹³⁶

135 T.S.N. of the Fourth Inquiry Hearing dated 27-28 September 2018, at 157.

136 T.S.N. of the Fifth Inquiry Hearing dated 6-7 November 2018, at 110-111.

Marinel Ubaldo, a survivor of Super Typhoon Haiyan (local: *Yolanda*), narrated:

I went back to our house even though the winds were still strong, as I wanted to see if we still have a home to go back to. Though it was still dangerous for me to go back, I also wanted to save a box that has a sentimental value to me. That box was very special to me because it was filled with my personal things, my literary works, the medals and certificates I earned in school. For me, that box symbolizes who I am. My achievements, my self-worth. Nothing was left of our home and losing that box also felt like losing my identity, my dreams, my significance as a person.¹³⁷

The aftermath of extreme weather events attributed to climate change dehumanizes the human person. The combination of loss of lives, deprivation of basic needs, material loss, emotional trauma and hopelessness that these survivors experience strip them of their dignities.

2. Adverse Impacts of Climate Change in the Philippines

Long-term data over a 20-year period places the Philippines as the fifth most climate change-affected country in the Global Climate Risk Index.¹³⁸ Yet, the country only accounts for 0.3 percent of global emissions.¹³⁹ It is evident that the burden of climate change falls disproportionately on the Filipino people.

Culled from the testimonies of resource persons presented during the *Inquiry* hearings, fact-finding missions, community dialogues, KIIs, and FGDs, this section illustrates how the brunt of climate change has prevented many Filipinos from living their lives with dignity.

137 T.S.N. of the Fourth Inquiry Hearing dated 27-28 September 2018, at 7.

138 David Eckstein, Marie-Lena Hutfils & Maik Winges, *Global Climate Risk Index 2019: Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2017 and 1998 to 2017* (Briefing Paper Published by Germanwatch e.V. (2018), available at https://germanwatch.org/sites/germanwatch.org/files/Global%20Climate%20Risk%20Index%202019_2.pdf).

139 World Bank, *Getting a Grip on Climate Change in the Philippines: Executive Report*, available at <https://openknowledge.worldbank.org/handle/10986/16525> [hereinafter World Bank, *Getting a Grip*].

i. Right to Life

No human right is more fundamental and universal than the inherent right to life. It essentially means the right to exist. Its recognition is enshrined in Article 3 of the United Nations Declaration of Human Rights¹⁴⁰ (UDHR), Article 6 of the ICCPR, and in various international treaties and instruments and State constitutions. In the Philippines, it is protected by Article III, Section 1 of the Constitution.

UNHRC General Comment No. 36 to Article 6 of the ICCPR recognizes climate change as one of the most pressing and serious threats to life.¹⁴¹ The UNEP further explains that climate change, through sudden onset events, poses a direct threat to human lives and safety, and, through gradual forms of environmental degradation, undermines critical resources that support human life.¹⁴² A study commissioned by the Climate Vulnerable Forum found that climate change is responsible for an estimated 400,000 deaths per year due to the direct effects associated with extreme weather events, flooding, heat waves, disease, and water and food insecurity.¹⁴³ The World Health Organization (WHO) reported that between 1998 and 2017, more than 166,000 people died from brutal heat waves,¹⁴⁴ a figure that, given the projected increase of populations¹⁴⁵ especially in urban areas where climate models predict intense warming due to continued emissions,¹⁴⁶ will exponentially increase in the coming decades. Climate change is also expected to cause approximately 250,000 additional deaths per year between 2030 and 2050 due to an increase in malnutrition, malaria, dengue, diarrhea, and heat stress.¹⁴⁷

140 United Nations General Assembly, Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217 (III) (Dec. 10, 1948) [hereinafter UDHR].

141 United Nations Human Rights Committee, *General Comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life*, UN Doc. CCPR/C/GC/36 (Oct. 30, 2018) ¶ 62.

142 Michael Burger & Jessica Wentz, Climate Change and Human Rights (United Nations Environment Programme in cooperation with Columbia Law School: Sabin Center for Climate Change Law), available at http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=011917_en (last accessed Nov. 20, 2019).

143 DARA and Climate Vulnerable Forum, *Climate Vulnerability Monitor 2012: A Guide to the Cold Calculus of a Hot Planet* (Madrid: Fundación DARA Internacional, 2012) (citing Sabin Center for Climate Change Law, *supra* note 36, at 15).

144 World Health Organization, Heatwaves, available at https://www.who.int/health-topics/heatwaves#tab=tab_1.

145 Statista Research Department, *Urbanization by Continent 2020* (as of 02 December 2020), available at <https://www.statista.com/statistics/270860/urbanization-by-continent/>.

146 Zhao, L., Oleson, K., Bou-Zeid, E. et al. (2021) *Global multi-model projections of local urban climates*. NAT. CLIM. CHANG. 11, 152–7. <https://doi.org/10.1038/s41558-020-00958-8>

147 World Health Organization, *Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s* (Geneva: World Health Organization, 2014) (citing Sabin Center for Climate Change Law, *supra* note 36, at 15).

Climate change's impact on the right to life of the Filipino people is most pronounced in the death toll and trauma left by extreme weather events. The deadliest in recent history, Super Typhoon Haiyan (local: *Yolanda*) in 2013 resulted in 6,300 individuals dead, 28,688 injured and 1,062 missing in one swoop.¹⁴⁸

Emilio Oñate, a Haiyan survivor, recounted what he saw—the water had carried away everything in its path, even humans and animals.¹⁴⁹ Emilio saw people drown. He said it was the most traumatic scene—one moment people were reaching above the water, fighting for their lives, and the next moment, they were gone.¹⁵⁰

Other survivors of extreme weather events that claimed the lives of thousands of Filipinos shared the same experience of profound loss and grief. Amalia Bahian, a survivor of Tropical Storm Washi (local: *Sendong*) narrated:

I can say that typhoon *Sendong* was one of its kind. There were several typhoons that hit us, but never as strong as such typhoon. We seemed unaware of a looming disaster that would befall our family. I never thought this would kill thousands of lives including my three (3) children, one (1) son-in-law, and four (4) grandchildren. I did not know that day was the last time that I will see them. But the saddest part was that their bodies remain missing up to this day.¹⁵¹

Honeylyn Gonzales, who was only eighteen years old when Tropical Storm Washi struck in 2011, testified:

My older brother and I together with our two (2) younger siblings decided to cross the street even if the flood was already at the chest level to get to the waiting shed. We saw a house with a second floor where we went to, after that, my older brother left us to go back to our parents to help them get to where we were at since our parents needed help too as they are disabled. My two (2) younger siblings and I waited for our parents and older brother but they never came, later on I found out from a neighbor who survived that the three of them were able to move to another house that was quite high. On December 17 at around 2:00 AM, my older brother sent our neighbor where the three of us were [a text message] to ask how

148 National Disaster Risk Reduction and Management Council, *supra* note 8.

149 Emilio Oñate, Leyte Fact Finding Mission.

150 *Id.*

151 Exhibit CCCCCCCC, *Salaysay ni Gng. Amalia Bahian* (with English Translation) at 2.

we were doing, my older brother's message was "how are my three (3) siblings?" Then our neighbor tried calling my older brother, but his phone could not be reached, little did we know that the house where he and my parents were staying at had already collapsed. The following morning, together with my two (2) siblings we immediately [sic] left the place we stayed at to go to where my parents and older brother, while on our way there we never thought that they had died. While heading to the said place, we saw a lot of dead people on the road, a lot of houses and properties were wrecked but [we] didn't find our missing family members. Then I decided to temporarily leave my two (2) siblings in the church to continue looking for my parents and older brother. After looking for the entire day, I still was not able to find any of them. We continued to look for them, we went to funeral homes, any place where people said that there were survivors, but no one from my six (6) missing family members could be found.¹⁵²

These are just three of the thousands of similar stories spanning decades of extreme weather events. Filipinos carry the brunt of anthropogenic climate change by paying with their lives.

ii. Right to Health

The right to health is recognized by several international and regional human rights instruments including, the UDHR, International Convention on Economic, Social, and Cultural Rights (ICESCR),¹⁵³ International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW),¹⁵⁴ and the Convention on the Rights of the Child (CRC),¹⁵⁵ among others. WHO defines "health" as "a state of complete physical, mental and social well-being and not merely the absence

152 T.S.N. of the Sixth Inquiry Hearing dated 11-12 December 2018, at 49-50.

153 United Nations General Assembly, International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3, available at <https://www.refworld.org/docid/3ae6b36c0.html> (last accessed May 3, 2022) [hereinafter ICESCR].

154 United Nations General Assembly, Convention on the Elimination of All Forms of Discrimination Against Women, Dec. 18, 1979, 1249 U.N.T.S. 13, available at <https://www.refworld.org/docid/3ae6b3970.html> (last accessed May 3, 2022) [hereinafter CEDAW].

155 United Nations Commission on Human Rights, Convention on the Rights of the Child, Mar. 7, 1990, E/CN.4/RES/1990/74, available at <https://www.refworld.org/docid/3b00f03d30.html> (last accessed May 3, 2022) [hereinafter as CRC].

of disease or infirmity.”¹⁵⁶ The Committee on Economic, Social and Cultural Rights (CESCR) further provides that the right to health is “closely related to and dependent upon the realization of other human rights.”¹⁵⁷ It “embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health.”¹⁵⁸

Climate change negatively affects the right to health because humans are vulnerable to shifts in weather patterns.¹⁵⁹ An increase in heat, for instance, affects humans in multiple ways. Directly, extreme heat can create physiological stress on the body causing dehydration, heat cramps, and heat stroke. More serious implications include hospitalization and increased risk of death from respiratory, cardiovascular, and other chronic diseases.¹⁶⁰ Indirectly, heat can subject populations to increased transmission of food and waterborne diseases and to poor air and water quality.¹⁶¹ This is also true for extreme weather events that severely degrade water and sanitation infrastructure leading to outbreaks of diseases.¹⁶² Variable rainfall affects freshwater supply which in turn compromises hygiene and leads to increased diarrheal diseases.¹⁶³ Changes in climatic conditions can also lengthen the transmission season and widen the geographic range of diseases,¹⁶⁴ and increase instances of “water-borne diseases and diseases transmitted through insects, snails or other cold-blooded animals.”¹⁶⁵

156 Constitution of the World Health Organization, 36 AM. J. PUBLIC HEALTH 1315, doi:10.2105/AJPH.36.11.1315 (1946) (Preamble).

157 United Nations Committee on Economic, Social and Cultural Rights, *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Article 12 of the Covenant)*, E/C.12/2000/4 (Aug. 11, 2000), para. 3.

158 *Id.* at para. 4.

159 Intergovernmental Panel on Climate Change, *2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1132 [hereinafter IPCC, *AR5 WGII*].

160 World Health Organization, Heat and Health (June 1, 2018), available at <https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health>.

161 *Id.*

162 United Nations Office of the High Commissioner for Human Rights, *Analytical Study on the Relationship Between Climate Change and the Human Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health: Report of the Office of the United Nations High Commissioner for Human Rights, A/HRC/32/23* (2016) [hereinafter UNOHCHR, *2016 Report on Climate Change and the Right to Health*].

163 World Health Organization, *supra* note 160.

164 UNOHCHR, *2016 Report on Climate Change and the Right to Health*, *supra* note 162.

165 World Health Organization, *supra* note 160.

Climate change also impacts the mental health of individuals and communities. It has been reported that “people who experienced the loss of homes or loved ones or were exposed to life-threatening situations faced higher risks of developing stress and anxiety-related conditions, including post-traumatic stress disorder or depression.”¹⁶⁶ Finally, climate change also causes the collapse of all determinants of health “such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment.”¹⁶⁷

In the Philippines, Article II, Section 15 of the Constitution protects and promotes the right to health of its people. Yet, climate change has and continues to impinge on the Filipinos’ right to health. Filipinos suffer from illnesses resulting from severe temperature increase, extreme weather conditions, air pollution, food and water shortage, and population displacement. Water and food-borne diseases and vector-borne and rodent-borne diseases have also increased.¹⁶⁸ Heavy rainfall during the wet season,¹⁶⁹ combined with the shortened incubation period of viruses due to elevated ambient air temperatures during droughts,¹⁷⁰ has multiplied the incidence of dengue in the Philippines.

In August 2019, the Philippine Department of Health declared a national dengue epidemic owing to the 98 percent increase in cases from January to July 2019.¹⁷¹ There was also an emergence of *Chikungunya*, a vector-borne disease which may cause debilitating symptoms for up to around three months, in the southern Philippines just months after Typhoon Haiyan (local: *Yolanda*). Dr. Jonathan Moses Jadloc, National Chair of the Climate Change Committee of the Philippine College of

166 United Nations Office of the High Commissioner for Human Rights, *Outcome of the Panel Discussion on the Adverse Impact of Climate Change on States’ Efforts to Progressively Realize the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health and Related Policies, Lessons Learned and Good Practices: Summary Report of the Office of the United Nations High Commissioner for Human Rights*, A/HRC/32/24 (2016).

167 *Id.*

168 Exhibit JJ to JJ-8, Printed PowerPoint Presentation of Dr. Molina. Victorio B. Molina, PhD, an Associate Professor at the Department of Environmental and Occupational Health, College of Public Health at the University of the Philippines-Manila.

169 Precipitation value and incidence of dengue have been trending together positively (citing Asian Development Bank, Accounting for Health Impacts of Climate Change, Figure 3 [Monthly Rainfall and Number of Cases of Dengue Fever in the Philippines, 2009-2008] (2011), at 5).

170 Assaf Anyamba, Jean-Paul Chretien, Jennifer Small, Compton J Tucker & Kenneth J Linthicum, *Developing Global Climate Anomalies Suggest Potential Disease Risks for 2006–2007*, 5:60 INT. J. HEALTH GEOGR., doi:10.1186/1476-072X-5-60 (2006).

171 Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc. & Climate Change Commission, 2017 Philippine Climate Change Assessment: Impacts, Vulnerabilities and Adaptation (2017), available at <https://climate.gov.ph/files/PhilCCA-WG2.pdf> (last accessed Nov. 20, 2019) [hereinafter PhilCCA WG2].

Physicians, testified that “this *Aedes aegypti* vector came from the environment, which was brought about by *Yolanda*.”¹⁷² There are also documented cases of *Schistosomiasis*, an acute and possibly chronic disease caused by parasitic flatworms that are released by infected snails during floods.¹⁷³

Rising temperatures have also led to heat-related illnesses such as heat exhaustion and heat stroke. The majority of the fisherfolk who participated in the KIIs and FGDs complained of the intense heat. Among them, Lowell Factor shared that he has to brave the intense heat and sun even if it causes extreme discomfort and severe sunburns.¹⁷⁴

Extreme weather events have severely affected Filipinos’ mental health. Most survivors of extreme weather events suffer from psychological distress. During the *Inquiry*, Joy Tomes shared that her children were in a state of shock after Super Typhoon Haiyan (local: *Yolanda*) and did not want to go home from the evacuation center because of the trauma.¹⁷⁵ Marinel Ubaldo, a survivor of the same typhoon, narrated:

...We couldn’t also bear the thought of eating fish that may have fed on the dead bodies of our dead neighbors and the people we know... As time passed, my father [a fisherman] suffered from depression. He barely ate and slept. He couldn’t bear to go fishing anymore and he became suicidal. Knowing that your family is in that painful situation made things worse, but I had to remain strong.

Five (5) years after, my nerves still get the best of me whenever I hear the crash of ocean waves. I get anxious and restless when it rains because I fear that another Haiyan will happen again. It took me three years before I was able to go to the ocean again. It’s sad because the ocean was our childhood friend.¹⁷⁶

Climate change has also overwhelmed the Philippines’ public health systems. In Southern Mindanao, mental health services were exhausted after typhoons.¹⁷⁷

172 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, at 255-256. Dr. Jonathan Moses Jadloc, the National Chair of the Climate Change Committee of the Philippine College of Physicians (PCP) and the Foundation of PCP.

173 Focus Group Discussion, Northern Mindanao, at 45.

174 Lowell Factor, Case Study: Verde Island Passage, at 30.

175 Joy Tomes, Community Dialogue in Tacloban, at 11.

176 T.S.N. of the Fourth Inquiry Hearing dated 27-28 September 2018, at 8.

177 Focus Group Discussion, Northern Mindanao, at 25.

Provinces had to ask help from external organizations to respond to the demand.¹⁷⁸ It is clear that climate change has deleterious systemic and widespread effects on the realization of the right to health of Filipinos.

iii. Right to Food Security

The UDHR and the ICESCR protect the right to food as part of the right to a dignified standard of living.¹⁷⁹ The CESCR in its General Comment No. 12 states that this right is “realized when every man, woman and child, alone or in community with others, have physical and economic access at all times to adequate food or means for its procurement.”¹⁸⁰ While the Philippine Constitution does not explicitly mention the right to food, the recognition of such a right may be inferred from various provisions on human dignity as well as in Article XV, Section 3 which requires the State to, among others, defend children’s right to proper nutrition.

The impacts of climate change on food availability, accessibility, adequacy and sustainability are outlined in a report by the Special Rapporteur on the right to food.¹⁸¹ Citing the IPCC, the report warns that the rising temperatures and increased frequency of extreme weather events will negatively affect crop, livestock, fisheries and aquaculture productivity, and will in turn impact food availability.¹⁸² Food accessibility will be more difficult—especially for the poor and socially-vulnerable groups—due to changes in food production and market prices.¹⁸³ Food distribution during emergencies will also become increasingly complicated because of more frequent and intense extreme weather events.¹⁸⁴ The Food and Agriculture Organization (FAO) of the United Nations also warns that the number of people battling hunger and undernourishment will continue to rise if we fail to tackle climate change.¹⁸⁵

178 *Id.*

179 UDHR, *supra* note 140, art. 25 (1) & ICESCR, *supra* note 153, art. 11 (1).

180 United Nations Committee on Economic, Social and Cultural Rights, *General Comment No. 12: The Right to Adequate Food (Article 11 of the Covenant)*, E/C.12/1999/5 (May 12, 1999), para. 6.

181 Hilal Elver, *Interim Report of the Special Rapporteur on the Right to Food*, A/70/287 (2015).

182 *Id.*

183 *Id.*

184 *Id.*

185 Food and Agriculture Organization of the United Nations, *The State of Food Security and Nutrition in the World: Building Climate Resilience for Food Security and Nutrition* (2018).

Expert resource speakers¹⁸⁶ all confirmed that in the Philippines, there is dwindling fish catch and reduction in agricultural produce due to climate change. Production of rice, the staple food of Filipinos, is reduced by ten percent (10%) for every one degree centigrade (1°C) increase in night temperatures. For corn, there is a one-point seven percent (1.7%) yield reduction for each day above thirty degrees centigrade (30°C) under drought conditions. Fruits and vegetables also have substantial yield reductions. As for livestock, aside from the negative impacts on animal fertility, there is a three to five percent (3-5%) reduction in feed intake for every one centigrade (1°C) above thirty centigrade (30°C). These result in food supply challenges, higher food prices, higher malnutrition, and food insecurity.¹⁸⁷

This is confirmed by the consistent experience of community resource persons¹⁸⁸ in their respective localities. Elicer Lauce, both a farmer and fisherfolk, described his situation as follows:

When we were fishing in the ocean from the seventies to the eighties, we'd catch seven kilos within less than three hours. But lately, in the year 2000, there is a decreasing volume and sizes of the varieties of fishes we are getting. That is why we had an idea to create other strategies. We placed *payao* fish aggregating devices in the sea, wherein we go far from shorelines so that we can create a sanctuary-habitats of fishes so there would be sources of fish.

In our coconut field, on the other hand, we have lots of coconuts and other trees, as well before. But now, when 1990s until 2000s came, lots of coconuts were struck by diseases. There is what we call *kadang-kadang* (coconut scale insect disease), and aside from that, there are *Brontispa*. In other places, there are *cocolisap*. This is the reason why lots of coconut trees were cut down because of the *kadang-kadang* disease where trees and leaves turn yellow and eventually die.

In our rice fields, since we are also farming almost nine thousand square meters (9,000 sq. m.), during 1970s to 1980, we were able to harvest seventy to eighty (80) cavans. The fifty (50) cavans are being used as capital because we don't have investment money.

186 Laura T. David, PhD, Maria Lourdes San Diego-McGlone, PhD, Porfirio Miel Aliño, PhD, Mudjekeewis D. Santos, PhD, Undersecretary Sigfredo Serrano, and Vincent V. Hilomen, PhD.

187 See Exhibit UUU to UUU-8, Printed PowerPoint Presentation of Undersecretary Sigfredo Serrano of the Policy and Planning, Project Development, Research and Regulation of the Department of Agriculture.

188 Rica Diamzon Cahilig, Felix "Ka Jhun" Pascua, Jr, Lerissa Libao, Elma Reyes, Pablo Rosales, Jonathan Delos Reyes, Delia Tulagan, Buucan Hangdan, Dalia Naliw and William Mamanglo.

Lately, because of the intense heat of the sun, we are only harvesting sixty (60) cavans. That is why we just deduct the capital from the remaining ones. But you cannot always harvest because farming is like a gamble. There would be seasons wherein you can't harvest due to flood or extreme heat.¹⁸⁹

iv. Right to Water and Sanitation

The United Nations General Assembly recognizes “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.”¹⁹⁰ In its General Comment No. 15, the CESCR provided that “the human right to water is indispensable for leading a life in human dignity [and] it is a prerequisite for the realization of other rights.”¹⁹¹ It also affirms that both the rights to water and sanitation are essential components of the right to the highest attainable standard of health.¹⁹² However, as the former Special Rapporteur on the human right to safe drinking water stated:

climate change presents a serious obstacle to the realization of the rights to water and sanitation. ... The impacts of climate change need to be seen in light of its direct effects on water resources as well as its indirect influence on other external drivers of change, in particular increasing population pressures and changing consumption patterns.¹⁹³

Extreme weather events, sea level rise and rising temperatures result in water scarcity and increased competition for clean water resources, disruption to sanitation systems, contamination of drinking water and exacerbation of spread of diseases. There is also a resulting increase in the cost of water and sanitation provisions, which threatens

189 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, at 93-94.

190 The Human Right to Water and Sanitation, G.A. Res. 64/292, U.N. Doc. No. A/RES/64/292 (Aug. 3, 2010).

191 United Nations Committee on Economic, Social and Cultural Rights, *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, U.N. Doc. No. E/C.12/2002/11 (Jan. 20, 2003), para. 1.

192 *Id.* at para. 3 & United Nations Committee on Economic, Social and Cultural Rights, *Statement on the Right to Sanitation*, U.N. Doc. No. E/C.12/2010/1 (Mar. 18, 2011).

193 *Climate Change and the Human Rights to Water and Sanitation* Position Paper (undated), available at https://www.ohchr.org/Documents/Issues/Water/Climate_Change_Right_Water_Sanitation.pdf; & The United Nations Special Rapporteurs on the rights of persons with disabilities, Ms. Catalina Devandas Aguilar; the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy, and sustainable environment, Mr. John H. Knox; extreme poverty and human rights, Mr. Philip Alston; the human right to safe drinking water and sanitation, Mr. Léo Heller; and the Independent Expert on human rights and international solidarity, Ms. Virginia Dandan, *The Effects of Climate Change on the Full Enjoyment of Human Rights* (Apr. 30, 2015).

people's access—particularly the poor and vulnerable—to these rights.¹⁹⁴ All these are currently being experienced by Filipinos. Smaller islands and coastal communities with limited freshwater resources are especially susceptible as sea level rise causes saltwater intrusion into the fresh water source. Jesiderio Delos Reyes, a community resource person, shared that in their town in Calatagan, saltwater seeped into deep wells, preventing access to drinking water, and burdening families with the added cost of buying potable water from commercial dealers.¹⁹⁵

The rise in temperature and extreme heat has caused drinking water sources to dry up. Elicer Lauce testified that it is now difficult to acquire drinking water because the springs are drying-up.¹⁹⁶ In Alabat Island, Quezon Province, residents would install pipes but have no water sources to connect the pipes to.¹⁹⁷ In Marinduque, communities are left without a water source as the river has dried up.¹⁹⁸ The Philippines' National Economic Development Authority (NEDA) projects that climate change will impact domestic water prices.¹⁹⁹ A rise in prices will impede access to potable water, especially in urban areas where the population is dependent on commercial water systems.

Extreme weather events damage water and sanitation infrastructure. Victims of typhoons and flooding commonly lack access to water, sanitation, and hygiene (WASH) facilities. Marielle Trixie J. Bacason, a survivor of Super Typhoon Haiyan (local: *Yolanda*) testified that while they could prepare before the typhoon by stockpiling canned goods, they did not have clean water. She narrated that after the typhoon, she had to walk several miles to a relative's house, passing dead bodies on the way, just to access clean water.²⁰⁰ While evacuation centers were providing safe drinking water, they did not have sufficient toilets, garbage collection, or vector control management.²⁰¹ Without the appropriate WASH infrastructure,

194 *Climate Change and the Human Rights to Water and Sanitation* Position Paper.

195 NICC Community Dialogue/Fact-finding Mission in Verde Island Passage, Batangas, 6-8 June 2018 Documentation Report, at 10.

196 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, at 94.

197 Alabat Community Dialogue, at 30.

198 Rolando Jusue, Provincial Gov't Environment and Natural Resources Office - Marinduque. June 2018, Key Informant Interview - Verde Island Passage, at 42.

199 National Economic Development Authority in PhilCCA WG2, *supra* note 171.

200 T.S.N. of the Fifth Inquiry Hearing dated 6-7 November 2018, at 98-99.

201 Ruth Alma Ramos, Vikki Carr de los Reyes, Ma Nemia Sualdito, & Enrique Tayag, *Rapid Health Assessments of Evacuation Centres in Areas Affected by Typhoon Haiyan*. 6 (Supple 1) WESTERN PAC SURVEILL RESPONSE J., 39-43, doi:10.5365/WPSAR.2015.6.2.HYN_003 (2015).

the survivors of extreme weather events are again victimized by the violation of their rights to water and sanitation.

v. Right to Livelihood

Article 6 of the ICESCR recognizes “the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts.”²⁰² Meanwhile, Article II, Section 9 of the Philippine Constitution provides that the State shall “promote full employment, a rising standard of living, and an improved quality of life for all,”²⁰³ and Sections 3 and 9 of Article XIII thereof recognize and promote the importance of equal employment opportunities for all.

However, the IPCC notes that climate change affects both access to and the quality of natural resources that sustain livelihoods.²⁰⁴ In the agricultural sector, farmers experience a higher incidence of pests and diseases, low crop productivity/yield, stunted growth, delays in fruiting and harvesting, declining quality of produce, increased labor costs, and low farm income.²⁰⁵ Increased rainfall has also caused prolonged inundation and destruction of crop fields—particularly rice, which is especially vulnerable to water stress.²⁰⁶ The weather unpredictability has “made rice-planting less exact and more like guesswork.”²⁰⁷ Yields of other crops were also drastically reduced, making farming less viable as a source of livelihood, and forcing communities to shift to other industries such as construction work.²⁰⁸

Buacan Hangdan, an indigenous farmer of the Ifugao tribe residing in the Banaue Rice Terraces, described the disruption in this manner:

202 ICESCR, *supra* note 153, art. 6, para. 1.

203 PHIL. CONST. art. II, § 9.

204 IPCC, *AR5 WGII*, *supra* note 159, at 1068.

205 Lutgarda L. Tolentino & Leila D. Landicho (2013). *Climate Change Adaptation Strategies of Selected Smallholder Upland Farmers in Southeast Asia: Philippines And Indonesia*, 3 APN Sci. BULL. 61 (2013).

206 L. M. Peñalba, D. D. Elazegui, M. G. C. Amit, F. P. Lansigan, & F. J. G. Faderogao, Meeting the Challenges to Food Security and Livelihood in a Changing Climate (Center for Strategic Planning and Policy Studies Working Paper No. 2012-01, 2012).

207 Ma. Lourdes P. Kempis, 15 December 2017, Leyte Community Dialogue, at 9.

208 *Id.*

Another change is that before, we knew when the rainy season would be. We could plan our planting schedule because we knew the period of good weather when it did not rain that much. So we planted on the month when we predicted good weather to plant, and when we need to transplant. But the problem now is the sudden change in weather. You cannot predict anymore when it will rain. When it rains, it is continuous and torrential; sometimes to the point that the rice fields cannot accommodate the volume of water.

We used to work in our rice fields from about five o'clock in the morning until evening. Our only break was when we chew betel nut or just merely rest. When we went home, we felt fine. But these days, we work at seven but we need to leave the rice fields by 11 because the heat is different. It is painful on our skin.²⁰⁹

The fisheries and aquaculture sector are also greatly affected by climate change. Rising sea surface temperatures and changing ocean circulation,²¹⁰ ocean acidification and coral bleaching,²¹¹ and the alteration of the physiological processes and the seasonality of biological rhythms that alter food webs and fish production in the coral triangle all contribute to the worsening experience of fisherfolk.²¹² Significant impacts on fisherfolk include reduced fish abundance and catch, damage to fishing gear and fishing infrastructure, and increased risks to safety—all threatening the livelihood of fisherfolk. As Pablo Rosales narrated, fisherfolk “were deprived of our livelihood because the water becomes warmer, which resulted in fish kill. Of course, that is our livelihood, and if these occur, that is a problem to us.”²¹³ Elma Reyes, a fish vendor whose husband is a fisherman, recounted that:

My child once asked me, “Mama, it’s already Holy Week, why is the weather still bad? It wasn’t like this before.” I said, “Yes, child, this is what I have been taught at the seminar. This is what they called climate change.” We know that every Holy Week the sea would be very still. Now it’s different. It’s been a week now that my husband could not go out to the sea. It has a huge effect on me.

209 *Id.* at 181.

210 Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, Region-Wide Early Action Plan for Climate Change Adaptation for the Nearshore Marine and Coastal Environment and Small Island Ecosystems (REAP-CCA) (Jakarta: CTI Interim Regional Secretariat) (2011).

211 *Id.*

212 *Id.*

213 T.S.N. of the Second Inquiry Hearing dated 23-24 May 2018, at 55-56.

It ruins our budget. Sometimes we have no choice but to use our child's allowance, and we have no way of replacing it. Where do we get the money?²¹⁴

Workers in urban areas are not spared. Ernesto Cruz, president of the National Confederation of Transport Workers Union, narrated that jeepney drivers in urban areas who used to work for twelve to fourteen hours a day could now only work for a few hours in the morning during the summer months. The intense heat, compounded by heavy traffic and vehicle emissions, makes it too dangerous to work.²¹⁵ Meanwhile, they cannot ply their routes during heavy rains because floodwaters would damage their engines, making “heat and rain ... both enemies.”²¹⁶ These workers, who could barely make enough to sustain a family of five even when they were driving twelve-hour shifts, are left with almost nothing to feed their families.

Indubitably, the impacts of climate change rob individuals and communities of their ability to make a living. It places a heavy burden on workers across industries who face job insecurity, lower income, poor working conditions, and increased poverty.

vi. Right to Adequate Housing

The right to housing is enshrined in the ICESCR as a component of the right to an adequate standard of living.²¹⁷ The CESCR clarifies that the right to housing “should not be interpreted in a narrow or restrictive sense which equates it with, for example, the shelter provided by merely having a roof over one's head or views shelter exclusively as a commodity. Rather it should be seen as the right to live somewhere in security, peace and dignity.”²¹⁸ Thus, adequate housing should include: legal security of tenure; availability of services, materials, facilities and infrastructure; affordability; habitability; accessibility; location; and cultural adequacy.²¹⁹ Climate change denies people of all of these. Particularly, the IPCC has stated that coastal settlements and

214 T.S.N. of the First Inquiry Hearing dated 27-28 March 2018, at 113.

215 *Id.* at 61.

216 *Id.* at 163.

217 ICESCR, *supra* note 153, art. 11 (1).

218 United Nations Committee on Economic, Social and Cultural, *General Comment No. 4: The Right to Adequate Housing (Article 11 (1) of the Covenant)*, E/1992/23 (Dec. 13, 1991).

219 *Id.*

low-lying island States will be directly impacted by sea level rise and storm surges.²²⁰ Eroded livelihoods and shelters in the aftermath of disasters will propel migrants to move to informal settlements in hazardous areas.²²¹ The former Special Rapporteur on adequate housing cautions that the poor, already living in danger zones, are most especially threatened by these impacts.²²²

In the Philippines, while the right to adequate housing is recognized under Article XIII Section 9 of the Constitution, climate change is driving internal displacement and homelessness. This is experienced by around 60 percent of the Philippine population living in the 832 coastal municipalities and 25 coastal cities throughout the country.²²³ In Marinduque, sea level rise and soil erosion have displaced coastal communities.²²⁴ With the ocean eating up the coast, residents in these communities felt unsafe, leading many to relocate.²²⁵ In the Verde Island Passage, islets that served as natural barriers have been slowly submerging, increasing the coast's vulnerability to storm surges.²²⁶ Fisherfolk are the most adversely affected. Pablo Rosales, chairperson of *Pagkakaisa ng mga Samahang Mangingisda* or *Pangisda Pilipinas*, related that:

When unusual calamities occur, we used to say, why is there signal number 4, when before signal number 3 seldom hit the Philippines. But now, if it hits, almost all houses near the shores are washed away, and even the implements of fishermen get damaged, because fishermen generally live near the shores and they have all their implements near them. Thus, when the typhoon gets stronger, waves go bigger, fishing boats get damaged, houses are also damaged, we also lose our livelihood.

220 IPCC, *AR5 WGII*, *supra* note 159.

221 United Nations High Commissioner for Human Rights, *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights*, A/HRC/10/61 (2009) [hereinafter *Relationship Between Climate Change and Human Rights Report*]; also see Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-Discrimination in this Context.

222 *Id.*

223 Department of Environment and Natural Resources, Department of the Interior and Local Government, Department of Agriculture-Bureau of Fisheries and Aquatic Resources and Coastal Resources Management Project, *LEGAL AND JURISDICTIONAL GUIDEBOOK FOR COASTAL RESOURCE MANAGEMENT IN THE PHILIPPINES* (1997).

224 Rolando Jusue, Provincial Government Environment and Natural Resources Office - Marinduque, June 2018, Key Informant Interview - Verde Island Passage.

225 *Id.*

226 Reynald Pamatian, 7 June 2018, Community Dialogue, Verde Island Passage Fact-finding Mission, at 13.

One of the major burdens we are facing is we do not have permanent houses because we are fishermen. They said our residential lots are considered danger zones, that's why the tendency is to clean us up, we are moved to far-flung areas for the sake of what they say is keeping us away from danger. Because it is a danger zone and climate changes, typhoons are stronger, waves are stronger, we are told to leave our houses. The problem is we are fishermen. We have many experiences that some of our members were told to evacuate, some were transferred to the foot of mountains in Bulacan, mountain in Cavite. But still, they return to the coastal areas, live in their boats, find shelter and sleep there, then, they go home to their houses in Cavite or Bulacan.

Sometimes they cannot take it any longer, they sell their houses in Bulacan or their house in Cavite for them to fish again. We think the worsening poverty experienced by fisherfolks, one of the biggest factor is climate change. Our homes were taken away from us...²²⁷

The right to adequate housing is also drastically impacted by extreme weather events. In the aftermath of Typhoon Haiyan, people were forced to stay in evacuation centers for prolonged periods. Most of these centers were overcrowded and poorly resourced. Some stayed in tents and other temporary structures for months.²²⁸ Nicolas Starkey, a survivor of Typhoon Haiyan, had to live with relatives in a tent. The tent had no floor and was frequently inundated by mud and rainwater. Although the tent was only intended to fit two families, five lived in it. They lacked the resources to rebuild quickly, so they lived in dreadful conditions.²²⁹ The worst is when survivors of extreme weather events have to rebuild their homes as consecutive typhoons repeatedly beset them.

vii. Right to Preservation of Culture

The ICESCR expressly recognizes the right of every individual to “take part in cultural life.”²³⁰ Meanwhile the ICCPR guarantees that “in those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied

227 T.S.N. of the Second Inquiry Hearing dated 23-24 May 2018, at 55-56.

228 Marjanna Bergman, *Typhoon Haiyan Anniversary: Three Generations Under One Roof in Tent City*, UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES, Nov. 7, 2014, available at <https://www.unhcr.org/afr/news/latest/2014/11/545cce276/typhoon-haiyan-anniversary-three-generations-under-roof-tent-city.html> (last accessed Nov. 20, 2019).

229 *Id.*

230 ICESCR, *supra* note 153, art 15.

the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language.”²³¹ Other international instruments including the Convention Concerning the Protection of the World Cultural Heritage, Convention for the Safeguarding of the Intangible Cultural Heritage, Convention Concerning the Protection of the World Cultural and Natural Heritage, Universal Declaration on Cultural Diversity, among others, recognize the importance of cultural rights.

In the Philippines, the Constitution mandates the State to protect the rights of indigenous cultural communities to their ancestral lands to ensure their economic, social and cultural well-being,²³² while Republic Act No. 7356²³³ recognizes that “culture is a manifestation of the freedom of belief and of expression and is a human right to be accorded due respect and allowed to flourish.”²³⁴

The preservation of culture, however, is in danger because of the impacts of climate change. Indeed, the Special Rapporteur in the field of cultural rights²³⁵ warns that “the cultural identities and traces of entire nations may be at risk, facing the threat of cultural extinction, including through the total disappearance of human settlements and related ancestral cultures.”²³⁶

Katherine Lofts testified that climate change particularly impacts cultures closely connected with the natural environment. Traditional livelihoods and ancestral traditions of many indigenous peoples’ communities which are dependent on natural resources are threatened or may even be extinguished by climate change. Furthermore, she also maintained that climate change related displacement and migration also infringe upon the right to culture. Cultural practices and social cohesion are disrupted when communities are dispersed and forced to relocate.²³⁷

231 ICCPR, *supra* note 19, art 27.

232 PHIL. CONST. art. XII, § 5. *See also* PHIL. CONST. art. II, § 22.

233 An Act Creating the National Commission for Culture and the Arts, Establishing a National Endowment Fund for Culture and the Arts, and for Other Purposes [Law Creating the National Commission for Culture and the Arts], Republic Act No. 7356 (1992).

234 *Id.* Title I, § 2.

235 Karima Bennoune, *Report of the Special Rapporteur in the Field of Cultural Rights, A/75/298* (Aug, 10 2020) [hereinafter *Report on Cultural Rights*].

236 *Id.* at 11.

237 T.S.N. of the Fourth Inquiry Hearing dated 27-28 September 2018, at 54.

Bae Inatlawan, the overall chieftain of the Daranghuyan Ancestral Domain in Mt. Kitanglad in southern Philippines, highlighted the value of the environment to her tribe, sharing that they regularly perform rituals and prayers to appease the spirits for sins committed against the environment.²³⁸ However, some of their cultural practices, including planting rituals that depend on cues from nature, have been rendered unreliable and ineffective due to the erratic changes in weather.²³⁹

Rica Diamzon Cahilig, a member of the Aeta-Ambala indigenous community, shared her fear of losing the cultural traditions of her people because their natural resources could no longer provide the food and medicine they have relied on since time immemorial. The same is true for the tradition of *Baki*— a ritual practiced by Ifugao people before planting and after harvesting to prevent pests from eating rice grains. Dalia Naliw, an Ifugao culture bearer, explains that “the *Baki* tradition is observed by not taking a bath for a month” which has become unbearable because of the scorching heat.²⁴⁰ With these, it is clear that climate change adversely affects the Filipinos’ cultural rights and threatens their cultures’ very existence.

viii. Right to Self-Determination and Right to Development

Article 1 of the ICCPR and the ICESCR declare that “All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.” Related thereto is the right to development. Article 1 of the Declaration on the Right to Development²⁴¹ states that “the right to development is an inalienable human right” and that “the human person is the central subject of development.” The Rio Declaration on Environment and Development (Rio Declaration) further puts the human being “at the center of concerns for sustainable development,”²⁴² encompassing environmental protection.²⁴³

238 Bae Inatlawan, Northern Mindanao Community Dialogue, at 10.

239 Bae Inatlawan, Focus Group Discussion in Northern Mindanao, at 40.

240 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, at 183-184.

241 United Nations General Assembly, *Declaration on the Right to Development*, A/RES/41/128 (Dec. 4, 1986).

242 United Nations Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26 (Vol. I) (Aug. 12, 1992) [hereinafter *Rio Declaration*] (Principle 1).

243 *Id.* (Principle 4).

Climate change prevents the realization of the right to self-determination and development when victims thereof are trapped in an endless cycle of dealing with its adverse impacts. Their lives are spent surviving one climate change impact after another, effectively nullifying any opportunity they may have to participate in, contribute to, enjoy and pursue their political, economic, social and cultural development. Veronica Cabe, a survivor of typhoon Ketsana (local: *Ondoy*), articulated this seemingly endless cycle of being victimized by extreme weather events in the following sentiment:

Our daily life was disrupted. Unfortunately, our sufferings did not end with *Ondoy*. The story didn't end with *Ondoy*. Unfortunately, the suffering that we have through, continued at the time when we were rebuilding our live. The series of floods brought about by monsoon rains have caused flooding. Again, I clearly remember three (3) incidents of flooding. We lost everything again, everything that mattered to us. After years of struggling, rebuilding and recovering, I knew the typhoon would come in and wreck everything we have put up over the years. When would this situation, when would this devastation stop? How can we survive?
When would this process of recovering and rebuilding end?²⁴⁴

A fellow Typhoon Ketsana survivor, Manuel “Ka Noli” Abinales, echoed the experience of the vicious cycle:

Ondoy did not seem to be a “one-shot-deal” because, I remember, after *Ondoy*, we were still recovering when typhoon Falcon happened and, then, *Pedring* in 2011. Then in 2012, we had *habagat* (southwest monsoon). We did not understand the actions of the nature anymore.

This is the usual scenario: when it rains and will cause flashflood, we will evacuate to the evacuation centers. When the rain stops, people will get bored in the evacuation center and will decide to go out, then attempt to return to their homes near the rivers when the floods subside; then it will rain again, and the people will evacuate again. That happened four (4) times in our community in 2012 because of southwest monsoon. I even received text messages about people getting tired of the repeated experience. We have evacuated, then returned home, then evacuated again. It's like playing *patintero* [similar to a game of tag]. I do not know anymore how we are supposed to move in the community.

Modesty aside, we continue to make boats and we have given boats to those areas that are usually flooded. But our efforts are not enough. People living near the rivers are growing in numbers. Typhoons are getting stronger, floods are getting more severe. When will this end? What will happen to the people? Do we just need to undertake rescue operation or must this end? There must be a long-term solution to this problem. That is all. Thank you for your time.²⁴⁵

In a macro analysis, these individual experiences taken together exacerbate underdevelopment and hampers development. Susceptibility to repetitive extreme weather events render development efforts to alleviate poverty an exercise in futility. These in turn, have catastrophic effects on many direct and indirect factors of economic growth, potentially undoing current progress and undermining prospects.

ix. Right to Equality and Non-Discrimination

Article 2 (1) of the ICCPR and Article 2 (2) of the ICESR guarantee non-discrimination in the enjoyment of rights of all persons. Climate change infringes on the right to equality and non-discrimination because, as the IPCC reports, people who are already socially, economically, or otherwise marginalized are the most vulnerable to its impacts due to their high dependence on natural resources, heightened exposure to climate change impacts, and lack of resources to adapt.²⁴⁶ These vulnerable sectors include women, children, indigenous peoples, older adults, people living in poverty, and members of the LGBTQIA+, among others. Indeed, segments of the population already in vulnerable situations owing to geography, poverty, gender, age, indigenous or minority status, and disability, among others, are the ones most acutely affected.²⁴⁷

a. Women

The IPCC stresses that “existing gender inequalities are increased or heightened by climate-related hazards” and that these “gendered impacts result from customary and

245 T.S.N. of the Second Inquiry Hearing dated 23-24 May 2018, at 244-245.

246 IPCC, *AR5 WGII*, *supra* note 159; Joint Summary of the Amicus Curiae dated 19 March 2018, *supra* note 61, at 28.

247 United Nations General Assembly, *Human Rights and Climate Change*, U.N. Doc. A/HRC/RES/41/21 (July 12, 2019); United Nations Human Rights Council, *Human Rights and Climate change*, HRC/RES/10/4 (Mar. 25, 2009) (The Human Rights Council also recognizes that environmental damage, not solely due to climate change, is similarly felt most acutely by those segments of the population already in vulnerable situation); *see Human Rights and the Environment*, U.N. Doc. A/HRC/RES/16/11 (Apr. 12, 2011).

new roles in society, often entailing higher workloads, occupational hazards indoors and outdoors, psychological and emotional distress, and mortality in climate-related disasters.”²⁴⁸ Women, particularly pregnant women, older women, and girls, are left more defenseless during different phases of natural disasters. In fact, mortality due to disasters, including droughts, floods and storms, is higher among women than men.²⁴⁹

Climate change impacts Filipino women in several significant areas including agriculture production, climate-induced migration, and post-disaster gender-based violence. The Philippine Commission on Women lists gender-based discrimination aggravated by climate change as follows: “insecure land and tenure rights; lack of access to and control of economic and natural resources; limited opportunities to participate in environmental decision-making; lack of access to markets, capital, training and technologies; multiple burden of women being the primary caregivers of affected family members, additional income earners, and community workers; exposure to contracting diseases due to limited reproductive health services and facilities and unhygienic water and lack of private spaces for personal hygiene needs; and gender-based violence risks in the form of physical abuse, rape and sexual harassment in evacuation centers and sexual exploitation in the form of sex trafficking and post-disaster prostitution.”²⁵⁰ Over the last two decades, 15 times as many infants have died in the 24 months after typhoons than in the typhoons themselves. Of those infants, 80 percent were girls.²⁵¹

Climate impacts on women from rural areas are even more severe because (a) women have fewer assets to fall back on in case of crop failure due to extreme weather events; (b) women are tasked with managing household expenses and often fall into chronic indebtedness to bridge resource gaps; and (c) women prioritize the food needs of male household members and children during food shortages.²⁵²

248 IPCC, *AR5 WGII*, *supra* note 159.

249 *Id.*

250 Philippine Commission on Women, Environment Sector, available at <https://pcw.gov.ph/environment/>.

251 World Meteorological Organization, *Statement of the State of the Global Climate 2017* (2018), at 31.

252 Commission on Human Rights of the Philippines, Inputs to the Questionnaire in Relation to the Human Rights Council Resolution A/HRC/RES/38/4 on Human Rights and Climate Change (2018), available at https://www.ohchr.org/Documents/Issues/ClimateChange/GenderResponsive/HRC_Philippines.pdf (citing Athena Peralta, Gender and Climate Change Finance: A Case Study from the Philippines, available at <https://us.boell.org/2008/11/01/gender-and-climate-change->

This often pushes women to migrate overseas to supplement the family income,²⁵³ making them more vulnerable to trafficking, sexual exploitation, and other abuses.²⁵⁴

b. Children

The Committee on the Rights of the Child, in its General Comment No. 15, states that climate change “is one of the biggest threats to children’s health and exacerbates health disparities.”²⁵⁵ The United Nations Children Fund (UNICEF) even declares that “there may be no greater, growing threat facing the world’s children—and their children—than climate change.”²⁵⁶ The IPCC confirms that children have an increased risk of climate-related injuries and illnesses as they are more vulnerable to diseases and food insecurity.²⁵⁷ Beyond immediate mortal dangers posed by extreme weather events, the right to access basic necessities like water, food and shelter disproportionately jeopardizes children.²⁵⁸

Joni Pegram testified on the various climate-related impacts on child rights in the Philippines as follows:

In the case of typhoon Haiyan, we know that almost six (6) million of the fourteen (14) million people affected were children. Although information on the final death toll is not available, the government did confirm that ninety-two percent (92%) of fatalities occurred in Leyte. And according to the 2010 census, children between the ages of ten (10) and fourteen (14) years old comprise the largest group on this province... The next two (2) largest age group are between five (5) and nine (9) and from zero (0) to four

[finance-case-study-philippines](#)).

253 *Id.* citing PhilCCA WG2, *supra* note 171.

254 *Id.* citing Rina Chandran, As Wild Weather Worsens, Philippines Migration Takes on a Female Face, (Reuters, Mar. 30, 2018), available at <https://www.reuters.com/article/us-migration-philippines-women/as-wild-weather-worsens-philippines-migration-takes-on-a-female-face-idUSKBN1H600J> (last accessed Oct. 18, 2018).

255 United Nations Committee on the Rights of the Child, *General Comment No. 15 (2013) on the Right of the Child to the Enjoyment of the Highest Attainable Standard of Health (Art. 24)*, CRC/C/GC/15 (Apr. 17, 2013).

256 United Nations International Children’s Emergency Fund, *Unless We Act Now: The Impact of Climate Change on Children* (2015).

257 IPCC, *AR5 WGII*, *supra* note 159.

258 John Knox, United Nations Human Rights Council, *Report of the UN Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, A/HRC/37/58 (Jan. 24, 2018).

(4). We are looking at a large number of children among the highly affected. And drowning was found to be the principal cause of these deaths.

National outcomes in their future livelihoods...Modelling suggests that an estimated additional seventy thousand (70,000) Filipino children will be malnourished by 2050 due to the impact of climate change, representing an increase of four percent (4%)...

Now if we look at disease and the right to health, children are also highly susceptible to many infectious waterborne diseases that become more prevalent in the context of droughts, floods, and extreme weather, particularly when damage to essential water and sanitation infrastructure occurs. Diarrheal diseases are another major cause of mortality for children, responsible for over half a million deaths of children under five (5) in 2015, the fourth leading cause of death under five (5)-year-olds in the Philippines.

Rising temperatures also increase the incidence of vector-borne diseases, such as malaria and dengue fever. The global burden of these diseases is already heavily concentrated on children. Seventy percent (70%) of all deaths from malaria in 2015 occurred in children under the age of five (5). The World Health Organization projects that climate change will cause an additional 60,000 deaths from malaria among children under the age of fifteen (15) by 2030. In the Philippines, malaria is already endemic in certain province [sic], but WHO projects over one hundred fifty (150) million people will be at risk of malaria by 2017, under both high and low emission scenarios.

Climate change can exacerbate air pollution. It does not cause air pollution, but it can exacerbate the toxicity of certain pollutants, including ozone, and it increases the frequency of wildfires and drought. Air pollution causes approximately six hundred thousand (600,000) deaths of children under five (5) every year. Many more suffer from disease and disability with lifelong consequences and children, again, are more susceptible to air pollution than adults for many reasons. They have smaller airways, they have a developing immune system, and these are easily overwhelmed by infections. They breathe more quickly than adults and they take more air per unit of body weight as well. Acute respiratory infection has been identified as one of the top three (3) causes of mortality in children under five (5) in the Philippines.

The final impact is on the right to education. Climate change has been recognized as an emerging and persistent barrier to the right to education in the Philippines. Impacts include destruction of school infrastructure, loss of nutrition, which means that children

find it hard to concentrate during the day, and loss of school days due to physical and mental health impact, and higher dropout rates due to pressure on household incomes, for example. The government has identified damages incurred from disasters as one of the key causes of shortages of classrooms and school materials as well. Typhoon Haiyan damaged or destroyed over three thousand (3,000) schools and day care center. Many large schools were also taken over as evacuation centers, and this resulted in a sudden disruption in education for more than a million preschool and school-aged children.²⁵⁹

c. Indigenous Peoples

The UN recognizes that indigenous peoples are at the “front lines of climate change” because they understand what climate change means for societies, ecosystems, and cultures as inheritors and practitioners of unique cultures.²⁶⁰ Despite their unique role in conservation, indigenous communities are uniquely at risk because of the changing climate. Indigenous people are significantly impacted by climate change owing to their dependence on climate-sensitive resources and deep cultural relationships with the environment.²⁶¹

Between 14-17 million Filipinos belong to more than a hundred ethno-linguistic groups.²⁶² Environmental degradation due to climate change doubly affects indigenous communities as the environment is a natural extension of their livelihood, survival, and cultural identity. For instance, the Mangyans, an indigenous group that relies on fruit farming for their livelihood, have been heavily affected by climate change. Due to extreme heat, the group has been unable to produce and sell their usual agricultural products—bananas and coconuts. Often, banana trees wilt and die or produce fruits that are too thin to sell while coconut trees bear fruits with no coconut meat.²⁶³

259 T.S.N. of the Fifth Inquiry Hearing dated 6-10 November 2018, at 4-6.

260 United Nations Framework Convention on Climate Change, *Indigenous Empowerment is Vital for Climate Action* (Aug. 9, 2017), available at <https://unfccc.int/news/indigenous-empowerment-is-vital-for-climate-action>.

261 United Nations Department of Economic and Social Affairs – Indigenous Peoples, *Climate Change: The Effects of Climate Change on Indigenous Peoples*, available at <https://www.un.org/development/desa/indigenouspeoples/climate-change.html> (last accessed Nov. 11, 2019).

262 United Nations Development Programme Philippines, *Fast Facts - Indigenous Peoples in the Philippines* (2013), available at <https://www.undp.org/content/dam/philippines/docs/Governance/fastFacts6%20-%20Indigenous%20Peoples%20in%20the%20Philippines%20rev%201.5.pdf>.

263 Norberto Escares, *Community Dialogue in Verde Island Passage*, June 2018.

Climate change has also caused the disappearance of native species in indigenous lands. A representative from an indigenous community in southern Philippines, Bae Priscilla Cariaga, reported that *Gangis*, a type of beetle which is a staple in their diets, has become scarce due to changes in the onset and duration of the summer season.²⁶⁴ Droughts and water shortage has also become a problem in indigenous lands. Agricultural yield is reduced, water and sanitation are sacrificed, and health is compromised. Further, community members, particularly the Mangyans, have tussled amongst themselves in the struggle to get water from drying springs.²⁶⁵

d. Older Persons

The UN Principles for Older Persons recognizes the rights of older persons to adequate food, water, shelter, clothing and health care.²⁶⁶ It states that “older persons should be able to live in environments that are safe and adaptable to personal preferences and changing capacities.”²⁶⁷ Older adults are among the most vulnerable during extreme weather events, particularly when separated from their families and caregivers.²⁶⁸ Immobility, difficulty crossing terrain, pre-existing conditions, and declining health often lead to inadequate access to food, water, safe housing, and healthcare.

In November 2020, a 78-year-old man was reported to have suffered a stroke and died as he was being evacuated during Typhoon Goni (local: *Ineng*). In the same month, Typhoon Vamco (local: *Ulysses*) claimed the lives of at least three older persons including one who died after slipping and falling to the floor, and another who was killed after a tree fell on his house due to strong winds.²⁶⁹ A few weeks later, during Tropical Storm Krovanh (local: *Vicky*) a 67-year-old woman and 62-year-old

264 Bae Priscilla Cariaga, Focus Group Discussion in Northern Mindanao, at 44.

265 *Id.*

266 United Nations General Assembly, *United Nations Principles for Older Persons*, A/RES/46/91 (Dec. 16, 1991) [hereinafter *UN Principles for Older Persons*].

267 *Id.*

268 ACAPS, Secondary Data Review: Philippines Typhoon Yolanda, available at <https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/assessments/140111%20SDR%20Yolanda%20Philippines%20final.pdf> (last accessed Jan. 13, 2020) (citing United Nations Children’s Emergency Fund Philippines, Typhoon Haiyan Strategic Response Plan, 10 December 2013, available at <https://reliefweb.int/sites/reliefweb.int/files/resources/Strategic%20Response%20Plan%20-%20Philippines%2010-Dec-2013.pdf> [last accessed Jan. 13, 2020]) [hereinafter ACAPS Data Review].

269 CNN Philippines, *Typhoon Ulysses Kills at Least 13, Leaves 15 Missing*, CNN PHILIPPINES, Nov. 12, 2020, available at <https://www.cnnphilippines.com/news/2020/11/12/ulysses-death-toll.html> (last accessed July 21, 2021).

man died due to a landslide caused by the storm. Meanwhile, older persons who are able to relocate often contract illnesses in evacuation centers.²⁷⁰

The livelihoods of older adults are likewise affected by climate change. Older persons are forced to rely on a government pension or financial support from family.²⁷¹ However, in some southern Philippines provinces, older persons are excluded from cash-for-work schemes despite having had gainful employment prior to typhoons.²⁷² Loss of documentation also poses a challenge to accessing state-subsidized healthcare benefits, with some older persons being overlooked for support to meet aging and pre-existing conditions.²⁷³

Social and cultural activities of older persons are also limited by climate change. In the province of Romblon for instance, the local government has limited the participation of older persons in outdoor activities due to the warning of local government social workers on the health effects of extreme heat on them.²⁷⁴

e. People Living in Poverty

The former Special Rapporteur on extreme poverty and human rights reports that:

people in poverty tend to live in areas more susceptible to climate change and in housing that is less resistant; lose relatively more when affected; have fewer resources to mitigate the effects; and get less support from social safety nets or the financial system to prevent or recover from the impact. Their livelihoods and assets are more exposed and they are more vulnerable to natural disasters that bring disease, crop failure, spikes in food prices, and death or disability.²⁷⁵

270 Constanca Lopez, Community Dialogue in Alabat, Quezon, April 2018.

271 Fact-finding mission in Verde Island Passage.

272 ACAPS Data Review, *supra* note 268.

273 *Id.*

274 Fe D. Firmalo, Head of the Office of Senior Citizens Affairs - Odiongan, Romblon, Community Dialogue, Verde Island Passage.

275 Philip Alston, United Nations Human Rights Council Special Rapporteur on Extreme Poverty and Human Rights, *Climate Change and Poverty: Report of the UN Special Rapporteur on Extreme Poverty and Human Rights*, A/HRC/41/39 (July 17, 2019), at 4.

In 2018, 16.6 percent of the Philippine population already lived below the national poverty line.²⁷⁶ This will continue to rise if the impacts of climate change are not mitigated. An analysis released by the Asian Development Bank states that:

disasters can push non-poor households into poverty and the poor even deeper into poverty. In terms of relative mobility, our findings suggest that households that experienced typhoons are more likely to fall into a lower income quantile than those who didn't experience typhoons. In terms of absolute mobility, the incomes of households that were hit by typhoons are more likely to grow more slowly than the incomes of households that were not hit. These results are intuitive as disasters bring damage to life, property, and livelihood. As these damages affect the households' capacity to cope and recover, a disaster can push families into a downward income spiral.²⁷⁷

The country's poorest communities are especially vulnerable because of the shortage of socio-economic resources necessary to cope with climate impacts. The poor are more likely to forego food, health, or education in order to finance their recovery from climate disasters.²⁷⁸

The loss of productive assets and livelihood is even more pronounced among farmers and fisherfolk who are highly dependent on natural resources.²⁷⁹ The fisheries sector, comprising about 70 percent of the Philippine population, "are considered 'poorest of the poor'".²⁸⁰ Marginalization, insecure housing, limited assets, high costs of fishing equipment, and reliance on uncertain production systems all contribute to the poverty of fisherfolk. This is exacerbated by climate change—the underlying cause of a decline in marine capture and consequently, the decrease in their income.²⁸¹

276 Asian Development Bank, Poverty Data: Philippines, available at <https://www.adb.org/countries/philippines/poverty>.

277 Shikha Jha, Arturo Martinez, Pilipinas Quising, Zemma Ardaniel, & Limin Wang, Natural Disasters, Public Spending, and Creative Destruction: A Case Study of the Philippines (Asian Development Bank Institute Working Paper Series No. 817) (2018), available at <https://www.adb.org/sites/default/files/publication/408351/adbi-wp817.pdf>.

278 Brian Walsh & Stephane Hallegatte, Measuring Natural Risks in the Philippines: Socioeconomic Resilience and Wellbeing Losses (World Bank Group Policy Research Working Paper 8723) (2019), available at <http://documents1.worldbank.org/curated/en/482401548966120315/pdf/WPS8723.pdf>.

279 World Bank, Getting a Grip, *supra* note 139, at 24.

280 Exhibit 4G, Mudjekeewis D. Santos, Impacts of Climate Change to Philippine Fisheries, May 2018.

281 IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegria, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II*

The agricultural sector is similarly affected. An estimated 413,456 farmers were directly affected by El Niño-associated dry spells during the last El Niño period.²⁸² As agriculture is highly dependent on a stable environment, climate change impacts—whether prolonged droughts or intense rain and flooding—disrupt crop productivity and directly affects the farmer and farm workers’ income. Increased poverty, dangerous working conditions, lack of access to basic needs, food insecurity, and even loss of tradition all infringe on the Filipino farmers’ human rights.

People living in informal urban settlements are also affected. They account for 45 percent of the Philippines’ urban population and they are particularly vulnerable to floods due to less secure infrastructure, reduced access to clean water, and lack of health insurance.²⁸³

f. LGBTQIA+

The LGBTQIA+ community, because of social stigma and discrimination, is especially vulnerable to exclusion, violence, and exploitation.²⁸⁴ Their already vulnerable situation is aggravated by the impacts of climate change, as members of the LGBTQIA+ community are frequently denied access to various social opportunities and infrastructure needed to cope with the impacts of climate change.²⁸⁵

There is minimal data on LGBTQIA+ rights in the Philippines, particularly in the context of climate change. Much of what has been said remains anecdotal. For instance, Jean, a transgender woman from Tacloban, Leyte, recounted that she was compelled to drop her lived name and revert to her registered birth name in order to be listed as a recipient of government relief goods.²⁸⁶ Moreover, according to Jean, the livelihood

to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press [hereinafter referred to as IPCC, AR6, WGII, SPM].

282 Climate Change Commission, National Integrated Climate Change Database and Information Exchange System, Climate Change Impacts, available at <http://mpmc.minda.gov.ph/climate-change-impacts>.

283 World Bank, Getting a Grip, *supra* note 139.

284 Cara Thuringer, *Left Out and Behind: Fully Incorporating Gender into the Climate Discourse*, NEWSSECURITYBEAT, Aug. 22, 2016, available at <https://www.newsecuritybeat.org/2016/08/left-behind-fully-incorporating-gender-climate-discourse/>.

285 Anuj Behal, *How Climate Change is Affecting the LGBTQIA+ Community*, DOWNTOEARTH, Jan. 11, 2021, available at <https://www.downtoearth.org.in/blog/environment/how-climate-change-is-affecting-the-lgbtqia-community-74988>.

286 *Salaysay ni Jean Golong*, Aug. 14, 2018, at 4, available at <http://chr.gov.ph> (last accessed

programs initiated by the government were not gender-inclusive, recognizing only cisgender orientations.²⁸⁷

The lack of data on the impact of disasters caused by climate change on LGBTQIA+ people worldwide exacerbates their plight, making them “largely invisible in relief and development programs.”²⁸⁸

x. Right to Safe, Clean, Healthy and Sustainable Environment

On 8 October 2021, during its forty-eighth session, the United Nations Human Rights Council adopted the resolution on the Human Right to a Safe, Clean, Healthy and Sustainable Environment. The resolution “recognizes the right to a safe, clean, healthy and sustainable environment as a human right that is important for the enjoyment of human rights.”²⁸⁹ This recognition is borne out, among others, of the acknowledgement of the

the impact of climate change, the unsustainable management and use of natural resources, the pollution of air, land and water, the unsound management of chemicals and waste, the resulting loss of biodiversity and the decline in services provided by ecosystems interfere with the enjoyment of a safe, clean, healthy and sustainable environment, and that environmental damage has negative implications, both direct and indirect, for the effective enjoyment of all human rights.²⁹⁰

The recognition of this human right affirms the Filipinos’ constitutionally-guaranteed right to a balanced and healthful ecology in accord with the rhythm and harmony of nature.²⁹¹ However, with climate change, this rhythm and harmony has been disrupted. Lowell Factor recounted how corals, once “big and colorful” and

July 30, 2021).

287 *Id.* at 5.

288 Zoe Tabary, *Women, LGBT People ‘Invisible’ Victims of Disasters—Experts*, THOMSON REUTERS FOUNDATION NEWS, Mar. 8, 2018, available at <https://news.trust.org/item/20180308114259-otaio/>.

289 United Nations Human Rights Council, *Draft Resolution: Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development*, A/HRC/48/L.23.1, available at <https://undocs.org/a/hrc/48/l.23/rev.1>.

290 *Id.*

291 PHIL. CONST. art. II, § 16.

visible from his house, have been reduced by 80 percent due to runoff flooding.²⁹² This example of loss of biodiversity, together with other instances of degradation of ecological processes previously discussed, diminishes the capacity of the environment to provide life-sustaining services, consequently impacting human well-being and the enjoyment of human rights. Dalia Naliw, a culture bearer from Ifugao, thus shared: “Within our surroundings, we could get fruits, herbal medicines, and vegetables that sprouted in our yard before. We used them and cooked them for our viand. This time, these are slowly diminishing.”²⁹³

This disruption in the rhythm and harmony of nature may best be summed by Felix “Ka Jhun” Pacua, Jr., a farmer and national spokesperson for *Pambansang Katipunan ng Makabayang Mambubukid*, when he said that “the weather is getting senile”.²⁹⁴

xi. Rights of Future Generations and Intergenerational Equity

Numerous international instruments recognize intergenerational equity. Among these are the 1992 Rio Declaration, which stresses that “the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations;”²⁹⁵ and the UNESCO declaration which states that “the present generations should strive for sustainable development and preserve living conditions, particularly the quality and integrity of the environment” so that the future generations benefit from the Earth’s ecosystems.²⁹⁶ The UNFCCC also calls on Parties to “protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.”²⁹⁷ More recently, the Paris Agreement, emphasized the responsibility of States to consider intergenerational equity in taking action to address climate change. In the Philippines, the concept of intergenerational equity is well-entrenched in the right to

292 Lowell Factor, Fact-Finding Mission Verde Island Passage, at 32.

293 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, p. 183.

294 *Id.* at 77.

295 *Rio Declaration*, *supra* note 242, princ. 3.

296 United Nations Educational, Scientific and Cultural Organization, *Declaration on the Responsibilities of the Present Generation Towards Future Generations* (Adopted by the General Conference of the UN Educational, Scientific and Cultural Organization) (Nov. 12, 1997), art. 3, available at <https://unesdoc.unesco.org/ark:/48223/pf0000110220.page=75>.

297 United Nation Framework Convention on Climate Change.

a balanced and healthful ecology that is constitutionally guaranteed for present and future generations.²⁹⁸

Climate science has established with certainty that the impacts of climate change are long-term and widespread, and that GHGs persist in the atmosphere for centuries—thus denying future generations of their “right to inherit the same diversity in natural and cultural resources enjoyed by previous generations and to equitable access to the use and benefits of these resources.”²⁹⁹ This has been recognized by the UN General Assembly as early as 1988, when it expressed its concern “that certain human activities could change global climate patterns, threatening present and future generations with potentially severe economic and social consequences.”³⁰⁰

Climate change goes against the principle of intergenerational equity as it unfairly shifts burdens onto future generations.³⁰¹ It “is an inherently intergenerational problem with extremely serious implications for equity between ourselves and future generations and among communities in the present and the future.”³⁰² Former United Nations Secretary-General Ban Ki-Moon noted in his report on intergenerational solidarity that “fairness between generations is embedded in the concept of sustainable development.”³⁰³ Even the religious sector has recognized the concept of intergenerational equity. In his encyclical, *Laudato Si'*, Pope Francis makes various references to “justice between generations.” He instructs that:

The notion of the common good also extends to future generations. The global economic crises have made painfully obvious the detrimental effects of disregarding our common destiny, which cannot exclude those who come after us. We can no longer speak of sustainable development apart from intergenerational solidarity. Once we start to think about the kind of world we are leaving to future generations, we look at things differently; we realize that the world is a gift which we have freely received

298 Oposa v. Factoran, Jr., G.R. No. 101083, 224 SCRA 792 (1993).

299 J. K. Summers & L. M. Smith, *The Role of Social and Intergenerational Equity in Making Changes in Human Well-Being Sustainable*, 43 *AMBIO* 718 (2014), doi:10.1007/s13280-013-0483-6.

300 United Nations General Assembly, *Protection of Global Climate for Present and Future Generations of Mankind*, A/RES/43/53 (Dec. 6, 1988).

301 IPCC, *AR5 WGII*, *supra* note 159, at 926.

302 Edith Brown Weiss, *Climate Change, Intergenerational Equity, and International Law*, 9 *Vt. J. ENVTL. L.* 615 (2008).

303 Ban Ki-moon, United Nations General Assembly, *Intergenerational Solidarity and the Needs of Future Generations: Report of the Secretary-General*, A/68/322 (Aug. 15, 2013), para. 10.

and must share with others. Since the world has been given to us, we can no longer view reality in a purely utilitarian way, in which efficiency and productivity are entirely geared to our individual benefit. Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who will follow us.³⁰⁴

The deleterious impacts of climate change go beyond the specific rights of the groups of persons and sectors discussed above.³⁰⁵ The narratives and stories they weave are more than enough to understand the harrowing situation of the Filipino people who have suffered, will continue to suffer, and have yet to suffer as they are deprived of their human rights by the myriad effects of climate change.

VI. Duty of States to Protect Human Rights

A. General Duty

States are the primary duty-bearers for upholding human rights obligations under treaties and customary international law, the rules of which are laid out under the International Bill of Human Rights³⁰⁶ and other core universal human rights treaties. In general, States are obliged to respect, protect, and fulfill human rights.³⁰⁷ A State's duty to respect prohibits it from interfering or curtailing the enjoyment of human rights.³⁰⁸ The obligation to protect requires States to adopt and implement legislative, administrative, or judicial measures to prevent human rights violations and abuses³⁰⁹ and ensure their effective implementation.³¹⁰ Finally, the duty of States to uphold and fulfill human rights

304 Pope Francis, Encyclical Letter *Laudato Si'* of the Holy Father Francis on Care for Our Common Home (2015) [hereinafter *Laudato Si'*].

305 See the *Memorandum for the Petitioners* (dated 19 September 2019 and received by the Commission on Human Rights on the same date) for more narratives and discussion on these rights and vulnerable groups. The Petitioners also claim that their discussions “do not represent all of the human rights harms. Continued research and monitoring are necessary to understand the full scope of the climate crisis unfolding in the country” (citing *Memorandum for the Petitioners*, at 87, para. 8.43).

306 Composed of the United Nations Declaration of Human Rights, International Convention on Civil and Political Rights, and International Convention on Economic, Social, and Cultural Rights.

307 OLIVIA DE SCHUTTER, *INTERNATIONAL HUMAN RIGHTS LAW* 279-90 (2nd ed. 2014).

308 Frédéric Mégret, *Nature of Obligations*, in *INTERNATIONAL HUMAN RIGHTS LAW* (3rd ed.) (Daniel Moeckli, Sangeeta Shah & Sandesh Sivakumaran, eds., 2017) [hereinafter *INTERNATIONAL HUMAN RIGHTS LAW: Nature of Obligations*].

309 *Id.*

310 Markus Krajewski, *The State Duty to Protect Against Human Rights Violations Through Transnational Business Activities*, 23 *Deakin LR* 19 (2018) [hereinafter *Krajewski (2018)*]; see Urgenda Foundation

involves taking positive actions that encourage, enable, or provide essential services and infrastructure to facilitate the enjoyment of fundamental human rights.³¹¹

The abovementioned duty necessarily includes that of regulating the conduct of non-State actors. Article 2, paragraph 1 of the ICCPR provides that:

Each State Party to the present Covenant undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

The United Nations Human Rights Committee state that this obligation can only be fully satisfied if individuals were also protected from abuses by non-State actors.³¹² The obligation to protect human rights from the abuses of non-State actors is made especially significant by the global expansion of private enterprises, which highlights the impact of businesses on human rights.³¹³

On 21 March 2011, the United Nations issued the Guiding Principles on Business and Human Rights (UNGP-BHR),³¹⁴ providing a framework on business and human rights built on three pillars: (1) the State duty to protect human rights; (2) the corporate responsibility to respect human rights; and (3) the imperative of providing access to remedies for victims of human rights violations and abuses.

The UNGP-BHR did not create new State obligations, but codified existing standards and practices for States and businesses, elaborated their implications, and integrated them within a “single, logically coherent and comprehensive template.”³¹⁵

v. The State of the Netherlands, ILDC 2456 (NL 2015), 24 June 2015, par. 5.3.3

311 INTERNATIONAL HUMAN RIGHTS LAW: *Nature of Obligations*, *supra* note 308.

312 United Nations Human Rights Committee, *General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, U.N. Doc. No. CCPR/C/21/Rev.1/Add.13 (2004), para. 8.

313 United Nations Human Rights Council, *Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and other Business Enterprises*, John Ruggie, *Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework*, U.N. Doc. A/HRC/17/31 (2011) [hereinafter UNGP-BHR].

314 *Id.*

315 *Id.* at 5.

The UNGP-BHR provides that States must fulfill their duty to protect human rights by creating laws, policies, and regulations to ensure that businesses respect human rights and refrain from committing abuses. States must provide effective judicial and non-judicial remedies for victims who seek accountability for abuses by businesses, thus:

The State duty to protect is a standard of conduct. Therefore, States are not per se responsible for human rights abuse by private actors. However, States may breach their international human rights law obligations where such abuse can be attributed to them, or where they fail to take appropriate steps to prevent, investigate, punish and redress private actors' abuse. While States generally have discretion in deciding upon these steps, they should consider the full range of permissible preventive and remedial measures, including policies, legislation, regulations and adjudication. States also have the duty to protect and promote the rule of law, including by taking measures to ensure equality before the law, fairness in its application, and by providing for **adequate accountability, legal certainty, and procedural and legal transparency.**³¹⁶

The UNGP-BHR provides that States should set out a clear expectation that all business enterprises domiciled in their territory must respect human rights.³¹⁷ This expectation should cover all aspects of business operations. This may involve requiring corporations to fully disclose their global operations, including the operations of their subsidiaries.³¹⁸ Thus, States should provide guidance to business enterprises on how to respect human rights, and to encourage compliance, States should enforce laws that require enterprises to do so.³¹⁹ Whenever States contract with or legislate for business enterprises to provide services that may impact the enjoyment of human rights, States should exercise adequate oversight in order to meet their international human rights obligations.³²⁰

Enterprises have a responsibility to respect human rights under the UNGP-BHR. States must operationalize how enterprises are to meet the requirements for fulfilling the said responsibility. This may be comprised of regulations requiring enterprises to put in place policies and processes that include: (a) a commitment to meet their responsibility to respect human rights; (b) a human rights due diligence process to identify, mitigate and account

316 *Id.* at 6 (Commentary on Principle 1, emphasis supplied).

317 *Id.* (Principle 2).

318 *Id.* (Commentary on Principle 2; Principle 3 (d) Encourage, and where appropriate require, business enterprises to communicate how they address their human rights impacts).

319 *Id.* (Principle 3 (a)).

320 *Id.* (Principle 5).

for how they address their impacts on human rights; and (c) processes to enable the remediation of adverse human rights impacts they cause or to which they contribute.³²¹

The jurisdiction of States to enact protective measures are limited within their own territories. Some may equate this to the inability of States to exact accountability for human rights abuses committed abroad by companies domiciled within their territories. However, the duty of States to prevent human rights abuses may extend beyond its territory as applied in the case of *Al-Skeini v. UK*.³²² The UNGP-BHR conveys the view that States are allowed to regulate the behavior of private actors with respect to their impacts on human rights abroad:

At present States are not generally required under international human rights law to regulate the extraterritorial activities of businesses domiciled in their territory and/or jurisdiction. Nor are they generally prohibited from doing so, provided there is a recognized jurisdictional basis. Within these parameters some human rights treaty bodies recommend that home States take steps to prevent abuse abroad by business enterprises within their jurisdiction.³²³

The customary international law rule of *sic utere tuo ut alienum*³²⁴ is also a rule that imposes upon States a duty to prevent extraterritorial harm. States must not let anything within their territory or control harm other States or their citizens. This principle has been effectively applied to human rights by the Inter-American Court of Human Rights. The Inter-American Court of Human Rights explains in its Advisory Opinion that when a State causes transboundary harm to the citizens of another State, the individuals whose rights are violated are understood to be under the control of the State that caused the damage, if there is a causal connection between the action and the negative impact. This theory is founded on the idea that the State in whose territory or under whose jurisdiction the activities were carried out has effective control over them. States can prevent them from curtailing the enjoyment of human rights by people outside its borders.³²⁵

321 *Id.* (Principle 15).

322 *Al-Skeini and Others v. United Kingdom*, Council of Europe: European Court of Human Rights, Application No. 55721/07 (July 7, 2011).

323 UNGP-BHR, *supra* note 313 (Commentary on Guiding Principle 2).

324 T.R. Subramanya & Shuvro Prosun Sarker, *Emergence of Principle of Sic Utere Tuo Ut Alienum Non-Laedes in Environmental Law and Its Endorsement by International and National Courts: An Assessment*, 5 KATHMANDU SCHOOL OF LAW REVIEW (2017)

325 Inter-American Court of Human Rights, Advisory Opinion Concerning the Interpretation of Article 1(1), 4(1) and 5(1) of the American Convention on Human Rights, OC-23/17 (2017) [hereinafter IACHR Advisory Opinion 23/17].

The Advisory Opinion further says that States have a responsibility to ensure that activities under their jurisdiction or control, whether their own or those of non-State actors,³²⁶ do not harm people in other countries or areas outside their national jurisdiction,³²⁷ and to use all their available resources to do so. It states:

The obligations to respect and to ensure human rights require that States abstain from preventing or hindering other States Parties from complying with the obligations derived from the Convention. Activities undertaken within the jurisdiction of a State Party should not deprive another State of the ability to ensure that the persons within its jurisdiction may enjoy and exercise their rights under the Convention. The Court considers that States have the obligation to avoid transboundary environmental damage that can affect the human rights of individuals outside their territory.³²⁸

The Inter-American Court of Human Rights held that the jurisdiction of States concerning the protection of human rights under the American Convention is not limited to their territorial space:

In international law, the bases of jurisdiction are not exclusively territorial, but may be exercised on several other bases as well. In this sense, [...] “under certain circumstances, the exercise of its jurisdiction over acts with an extraterritorial locus will not only be consistent with but required by the norms which pertain.” Human rights are inherent in all human beings and are not based on their citizenship or location. **“Under Inter-American Human Rights Law, each American State is obligated therefore to respect the rights of all persons within its territory and of those present in the territory of another State but subject to the control of its agents.”**³²⁹

The *No Harm Rule* is another principle that is now considered as part of customary international law.³³⁰ It supports the view that States have an extraterritorial obligation to protect human rights. It provides that a State is duty-bound to prevent, reduce and control

326 *Id.*

327 David Boyd, *Report of the UN Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, A/74/161 (2019) [hereinafter *Safe Climate Report*].

328 IACHR Advisory Opinion 23/17, *supra* note 325.

329 Inter-American Commission on Human Rights, Franklin Guillermo Aisalla Molina (Ecuador v. Colombia), Admissibility Report No. 112/10 of 21 October 2011, para. 91 & Inter-American Commission on Human Rights, Case of Coard et al. v. United States, Merits Report No. 109/99 of 29 September 1999, para. 37 (emphasis supplied).

330 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Rep 226 (1996).

the risk of environmental harm to other States.³³¹ This rule is equally applicable in the context of human rights and has been widely discussed and relied on by the Inter-American Court of Human Rights to explain jurisdiction in matters involving cross-border damages. Indeed, it advances that States have a general obligation to ensure that activities within their territory do not cause damage to the environment of another State and relates this concept to the general duty of States to protect human rights. It logically follows that States are obliged to act if activities in their territory cause serious human rights violations in the territory of another State.³³²

The Maastricht Principles on Extraterritorial Responsibilities of States in the Field of Economic, Social, and Cultural Rights (“Maastricht Principles”)³³³ address any potential confusion regarding a State’s extraterritorial jurisdiction. The Maastricht Principles are based on two main concepts that serve as primary guides in extraterritorial human rights obligations. These are:

1. That international human rights law requires that States must ensure that they respect, protect, and fulfill rights when conducting themselves in a way that has real and foreseeable effects on human rights beyond borders,³³⁴ and
2. That international law, particularly in economic, social, and cultural rights, demands States to realize rights extraterritorially through “international assistance and cooperation.”³³⁵

Finding its basis on varied sources of international human rights law³³⁶ and evolving international human rights jurisprudence recognizing exceptions to the territoriality aspect of jurisdiction under international law,³³⁷ the Maastricht Principles provide that a

331 Ian Brownlie in PRINCIPLES OF PUBLIC INTERNATIONAL LAW, 7th ed., 2008, pp.275-285; Patricia Birnie, Alan Boyle and Catherine Redgwell in: INTERNATIONAL LAW AND THE ENVIRONMENT, 3rd ed., Oxford 2009, pp.143-152 (citing

332 Krajewski (2018), *supra* note 310.

333 ETO Consortium, *Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights* (2013), available at https://www.etoconsortium.org/nc/en/main-navigation/library/maastricht-principles/?tx_drblob_pi1%5BdownloadUid%5D=23 [hereinafter *Maastricht Principles*].

334 Margot E. Salomon & Ian Seiderman, *Human Rights Norms for a Globalized World: The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social, and Cultural Rights*, 3 GLOB. POLICY 458 (2012) [hereinafter Salomon & Seiderman (2012)].

335 *Id.*

336 *Maastricht Principles*, *supra* note 333 (General Principle No. 6).

337 Salomon & Seiderman (2012), *supra* note 332.

State’s human rights obligations extend beyond its borders.³³⁸ Thus, “all States have obligations to respect, protect and fulfill human rights, including civil, cultural, economic, political and social rights, both within their territories and extra-territorially.”³³⁹

The extraterritorial application of the human rights obligation of States is further applied in the revised edition of the Organization for Economic Co-operation and Development (OECD)³⁴⁰ Guidelines for Multinational Companies (OECD Guidelines). An international instrument adopted by 49 countries in 2011, the OECD Guidelines³⁴¹ promote responsible business conduct. It requires that States-parties create National Contact Points (NCP) which are offices tasked to promote adherence to the guidelines as a non-judicial grievance mechanism. The revised edition now includes a chapter on human rights consistent with the UNGP-BHR.

The Committee on the Rights of the Child (CRC) and the CESCR have both issued General Comments³⁴² declaring that States have an obligation to respect, protect, and fulfill human rights in the context of the extraterritorial activities of business. This obligation may be pursued, provided there is a reasonable link³⁴³ between the State and the conduct concerned.³⁴⁴ Furthermore, the CESCR reiterates that States are required to take steps to

338 However, the exercise of extraterritorial jurisdiction, according to the Maastricht Principles, is only proper where the State:

- a. has effective control over the territory or persons on that foreign territory;
- b. has brought about foreseeable effects on the exercise of its rights outside of its territory through its conduct; and
- c. is either under an international obligation or in a position to exercise decisive influence to actively support the realization of people’s economic, social, and cultural rights outside of its territory. (Maastricht General Principle 9).

339 *Maastricht Principles*, *supra* note 333 (General Principle No. 3).

340 The OECD is an intergovernmental organization founded in 1961 to stimulate economic progress and world trade.

341 The OECD Guidelines are recommendations on responsible business conduct addressed to multinational enterprises operating in the 49 adhering States. It provides non-binding principles and standards for responsible business conduct in a global context consistent with applicable laws and internationally recognized standards (citing Organisation for Economic Co-operation and Development, *OECD Guidelines for Multinational Enterprises* (2011) at 31, available at <https://www.oecd.org/daf/inv/mne/48004323.pdf> (last accessed Oct. 23, 2021) [hereinafter OECD Guidelines].

342 Committee on the Rights of the Child, *General Comment No. 16 on State Obligations Regarding the Impact of Business Sector on Children’s Rights*, U.N. Doc. CRC/C/GC/16 (Apr. 17, 2013) [hereinafter CRC General Comment 16]; Committee on Economic, Social and Cultural Rights, *General Comment No. 24 on State Obligations Under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities*, U.N. Doc. E/C.12/GC/24 (June 23, 2017) [hereinafter CESCR General Comment 24].

343 A reasonable link, according to the Committee on the Rights of the Child, exists “when a business enterprise has its center of activity, is registered or domiciled or has its main place of business or substantial business activities in the State concerned” (citing CRC General Comment 16, at 13).

344 CRC General Comment 16, *supra* note 342.

prevent human rights violations abroad by corporations domiciled within their territory and/or within their jurisdiction.³⁴⁵

However, it should be noted that the States' exercise of extraterritorial jurisdiction, following its human rights obligations, does not justify interference with the internal affairs of another State. Exceptional situations³⁴⁶ necessitating the exercise of extraterritorial jurisdiction must be examined in a restrictive manner, based on the specific circumstances of each case. The obligation to respect and ensure human rights does not allow States to act in violation of principles of international law, particularly that of non-intervention enshrined in the United Nations Charter.³⁴⁷

In other words, a balance must be maintained between respecting the sovereignty of States in handling their internal affairs in accordance with the principle of non-intervention and in requiring States to comply with their treaty obligations.³⁴⁸

The universality principle of international law acknowledges that actions which are uniformly harmful to States and their subjects, necessitate the recognition of authority of all States to punish such acts wherever they occur, even if there is no relation between the State and the parties or the acts in question. This supports the view that the States' duty to protect is not confined to territorial jurisdiction.³⁴⁹ There is a rising consensus that this concept extends to abuses against human rights.³⁵⁰

B. Special Duty of States to Protect Human Rights in the Context of Climate Change

Climate change directly and indirectly impacts the whole gamut of human rights under international law.³⁵¹ The duty of States to protect human rights encompasses the impacts

345 CESCR General Comment 24, *supra* note 342.

346 See, *inter alia*, ECHR, Case of Al-Skeini and Others v. The United Kingdom [GS], No. 55721/07, Judgment of 7 July 2011, paras. 131 and 133 to 139; ECHR, Case of Ilaşcu and Others v. Republic of Moldova and Russia [GS], No. 48787/99, Judgment of 8 July 2004, paras. 311 to 319; ECHR, Case of Catan and Others v. Republic of Moldova and Russia [GS], Nos. 43370/04, 8252/05 and 18454/06, Judgment of 19 October 2012, para. 105; ECHR, Case of Chiragov and Others v. Armenia, [GS], No. 13216/05, Judgment of 16 June 2015, para. 168, & ECHR, Case of Banković and Others v. Belgium [GS], Decision on admissibility of 12 December 2001, para. 66.

347 UNITED NATIONS CHARTER, 1 UNTS XVI.

348 I.C.J., Case Concerning the Gabčíkovo-Nagymaros Project (Hungary c. Slovakia), Judgment of 25 September 1997, para. 142.

349 Joaquin Bernas, *Introduction to PUBLIC INTERNATIONAL LAW* 157 (2009).

350 *Id.*

351 United Nations Office of the High Commissioner for Human Rights, Understanding Human Rights

of climate change. The OHCHR maintains that “States (duty-bearers) have an affirmative obligation to take effective measures to prevent and redress these climate impacts, and therefore, to mitigate climate change and to ensure that all human beings (rights-holders) have the necessary capacity to adapt to the climate crisis.”³⁵² Although human rights obligations concerning climate change are still evolving, various international laws, treaties, and principles already confirm that States have the responsibility to mitigate climate change impacts in a manner anchored on human rights, “irrespective of whether or not climate change effects can be construed as human rights violations. Human rights obligations provide important protection to individuals whose rights are affected by climate change.”³⁵³

Because it is generally viewed that climate change is a type of environmental harm, the human rights obligations in environmental harm also generally apply to climate change.³⁵⁴ The framework principles on human rights and the environment clarify three categories of State obligations: procedural, substantive, and special obligations towards those in vulnerable situations.³⁵⁵

Procedurally, States are obliged to put safeguards in place, such as prior assessment of environmental impacts, dissemination of environmental information, full and informed participation by those affected, and effective remedies for States’ failure to comply with their obligations.³⁵⁶

Substantively, States must adopt legal frameworks to protect against environmental harm that interferes with the enjoyment of human rights, including harm caused by State and non-State actors.³⁵⁷ States must strike a fair balance between environmental security and other legitimate societal interests, while ensuring that such a balance does not result in violations of human rights.

and Climate Change (Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change) (2015) [hereinafter OHCHR, CoP 21 Submission].

352 *Id.* at 2.

353 *Relationship Between Climate Change and Human Rights Report*, *supra* note 221.

354 John Knox, *Report of the UN Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, U.N. Doc. A/HRC/37/59 [hereinafter Framework Principles on Human Rights and the Environment].

355 *Safe Climate Report*, *supra* note 327, at 17.

356 Framework Principles on Human Rights and the Environment, *supra* note 354, at 6.

357 *Id.*

These principles must be similarly applied and operationalized when addressing climate change. Thus, States have the procedural obligation to:

1. Provide the public with accessible, affordable, and understandable information regarding the causes and consequences of the global climate crisis, including incorporating climate change into the educational curriculum at all levels;
2. Ensure an inclusive, equitable, and gender-based approach to public participation in all climate-related actions, with a particular emphasis on empowering the most affected populations, namely women, children, young people, indigenous peoples and local communities, persons living in poverty, persons with disabilities, older persons, migrants, displaced people, and other potentially at-risk communities;
3. Enable affordable and timely access to justice and effective remedies for all, to hold States and businesses accountable for fulfilling their climate change obligations;
4. Assess the potential climate change and human rights impacts of all plans, policies, and proposals, including both upstream and downstream effects (i.e., both production- and consumption-related emissions);
5. Integrate gender equality into all climate actions, enabling women to play leadership roles;
6. Respect the rights of indigenous peoples in all climate actions, particularly their right to free, prior, and informed consent; and
7. Provide strong protection for environmental and human rights defenders working on climate-related issues, from land use to fossil fuels. States must vigilantly protect defenders from harassment, intimidation, and violence.³⁵⁸

Moreover, States have the substantive obligation to:

1. Abstain from all actions that infringe on a person's basic human rights as a result of their environmental consequences;
2. Establish climate change mitigation programs and implement punitive laws against environmental harm to protect basic human

358 *Safe Climate Report*, *supra* note 327, at 30.

rights from being violated by third parties, particularly businesses (non-grant or denial of subsidies or incentives to carbon-intensive industries, regulation of carbon footprints left not only by private and state-owned companies but also by consumers, and so on are examples of these programs); and

3. Repeal and modify discriminatory policies that target vulnerable groups.

Finally, concerning vulnerable sectors, States have a general duty to consider additional protections and apply environmental laws without discrimination.

These principles on the three categories of State obligations must govern all of States' climate actions, including obligations related to mitigation, adaptation, finance, and loss and damage.³⁵⁹

The principles behind the three categories of State obligations are reflected in the Rio Declaration,³⁶⁰ which was adopted in 1992. The Rio Declaration consists of 27 principles defining the people's right to development and the States' obligation to protect the shared environment. Though non-binding by itself, the Declaration has been the source of standards to help guide States in fulfilling their obligations towards the environment. The principles in the declaration have been crystallized into a binding treaty, namely the Aarhus Convention.³⁶¹ The European Union and 47 of the 50 European countries are parties to the convention, which is open to accession by non-EU States. Hence, the three categories of State obligations on the environment are not only obligatory to a good number of powerful States, but can also be binding on other States through the development of norms under customary international law.³⁶²

The United Nations High Commissioner for Human Rights³⁶³ also enumerates particular human rights obligations of States in the context of climate change. States have an obligation

359 *Id.* at 18.

360 *Rio Declaration*, *supra* note 242.

361 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Depository, Chapter XXVII-13, *available at* <https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXVII/XXVII-13.en.pdf>.

362 Sec. 102 of the Restatement of United States Foreign Relations provides that: "International agreements create law for the states parties thereto and may lead to the creation of customary international law when such agreements are intended for adherence by states generally and are in fact widely accepted."

363 *Relationship Between Climate Change and Human Rights Report*, *supra* note 221.

to ensure the widest possible enjoyment of economic, social and cultural rights under any given circumstance irrespective of the additional strain which climate change-related events may place on available resources. States must also seek to satisfy core obligations and protect groups in society who are in a particularly vulnerable situation, as a matter of priority.³⁶⁴ States also have an obligation to protect individuals against foreseeable threats to human rights posed by climate change, such as extreme weather events.³⁶⁵ In such cases, States could be held accountable for failure to protect an individual against a harm affecting the enjoyment of human rights.³⁶⁶

The CESCR warned in 2018 that a State's failure to prevent foreseeable human rights harm caused by climate change or to mobilize the maximum available resources to do so, could be a breach of its obligation to respect, protect, and fulfill all human rights for all.³⁶⁷ States must allocate substantial financial and material resources to renewable energy and ecological farming and control deforestation and soil deterioration.³⁶⁸ States should also prioritize the needs of the vulnerable and marginalized segments of the population through programs that increase their adaptive capacities as they transition to a low-carbon economy.

A State's legal obligation to respond to climate change is neither directly related nor proportional to its contribution to climate change. States may not claim that they have not "caused" climate change to escape the obligation to address global warming. Human rights law requires each State to do more than merely refrain from interfering with human rights itself.³⁶⁹ It also requires each State to protect against such harms that others may cause actively. Hence, even if it is not possible to connect a particular emission of GHG to a specific infringement of human rights, States are still obliged to protect against the harm caused by climate change.³⁷⁰

364 Committee on Economic, Social and Cultural Rights, *Statement on An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources" Under an Optional Protocol to the Covenant*, E/2008/22-E/C.12/2007/1, annex VIII (2007).

365 *Relationship Between Climate Change and Human Rights Report*, *supra* note 221.

366 *Id.*

367 Committee on Economic, Social and Cultural Rights, *Climate Change and the International Covenant on Economic, Social and Cultural Rights: Statement by the Committee on Economic, Social and Cultural Rights*, E/C.12/2018/1 (2018)

368 *Safe Climate Report*, *supra* note 327, at 19.

369 *Id.*

370 *Id.*

The Advisory Opinion of the Inter-American Court of Human Rights declares that States are obliged to protect human rights impacted by environmental degradation, even if such are beyond their territorial jurisdiction. This principle flows from the *erga omnes*³⁷¹ nature of States' duty to protect human rights:

The States Party to the Convention [American Convention] have *erga omnes* obligations to respect protective provisions and to ensure the effectiveness of the rights set forth therein under any circumstances and regarding all persons. The effect of these obligations of the State goes beyond the relationship between its agents and the persons under its jurisdiction, as it is also reflected in the positive obligation of the State to take such steps as may be necessary to ensure effective protection of human rights in relations amongst individuals. The State may be found responsible for acts by private individuals in cases in which, through actions or omissions by its agents when they are in the position of guarantors, the State does not fulfill these *erga omnes* obligations embodied in Articles 1(1) and 2 of the Convention.³⁷²

In conjunction with the *erga omnes* nature of States' duty to protect human rights, the duty to act on climate change is also necessarily implied in each State's duty of international cooperation in addressing human rights issues as provided in the United Nations Charter: "All UN Member States pledge themselves to take joint and separate action in cooperation with the Organization for the achievement of universal respect for, and observance of, human rights and fundamental freedoms for all."³⁷³

Likewise, the CESCR affirms that States have extraterritorial obligations to ensure that human rights are given due attention in international agreements.³⁷⁴

Cooperation among States is critical to mitigating climate change. It is in fulfillment of this duty to cooperate that States came together through UNFCCC to address the global problem of climate change, particularly to "achieve stabilization of greenhouse gas concentrations in

371 *Erga Omnes* Obligations are obligations owed by states to the international community as a whole, intended to protect and promote the basic values and common interests of all. The principle was recognized in the Barcelona Traction Case (citing Barcelona Traction, Light and Power Company, Limited, Judgment, I.C.J. Reports 1970, p. 3. Question of Admissibility-Capacity of Applicant Government to Act).

372 *Cf.* Case of the "Mapiripán Massacre" v. Colombia, Judgment of 15 September 2005. Series C No. 134, para. 111.

373 *Relationship Between Climate Change and Human Rights Report*, *supra* note 221; U.N. CHARTER, 1 UNTS XVI.

374 *See* Committee on Economic, Social and Cultural Rights General Comments Nos. 12, 13, 14, & 15.

the atmosphere at a level that would prevent dangerous anthropogenic interference in the climate system.”³⁷⁵ Thus:

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law ... the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.³⁷⁶

The 1997 Kyoto Protocol, despite having had limited impact on global emissions,³⁷⁷ was a milestone in climate action because it was the first legally binding step toward implementing the UNFCCC’s principles and goals.³⁷⁸

On 1 March 2015, international legal experts adopted the Oslo Principles on Global Climate Obligations (Oslo Principles).³⁷⁹ The Oslo Principles established specific obligations for States and businesses to combat climate change, the most noteworthy of which being the commitment to ensure that the rise in average world temperature does not exceed 2 degrees Celsius,³⁸⁰ and that “the measures required ... should be adopted without regard to the cost, unless that cost is completely disproportionate to the reduction in emissions that will be brought about by expending it.”³⁸¹ The obligations elaborated in the Oslo Principles, like the UNGP-BHR, are codifications of well-established principles of international environmental law, international human rights law, and, to some extent, tort law.³⁸²

375 United Nations Framework Convention on Climate, Preamble.

376 *Id.*

377 Stavins R., J. Zou, T. Brewer, M. Conte Grand, M. den Elzen, M. Finus, J. Gupta, N. Höhne, M.-K. Lee, A. Michaelowa, M. Paterson, K. Ramakrishna, G. Wen, J. Wiener, and H. Winkler, 2014: International Cooperation: Agreements and Instruments. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter13.pdf (last accessed Mar. 18, 2021).

378 Peter Jackson, *From Stockholm to Kyoto: A Brief History of Climate Change*, GREEN OUR WORLD!, No. 2 Vol. XLIV, 2007, available at <https://www.un.org/en/chronicle/article/stockholm-kyoto-brief-history-climate-change> (last accessed Mar. 18, 2021).

379 Expert Group on Global Climate Obligations, Oslo Principles on Global Climate Obligations (2015) [hereinafter Oslo Principles].

380 *Id.* princ. 6.

381 *Id.* princ. 1.

382 *Id.*

On 4 November 2016, the Paris Agreement³⁸³ was adopted through the continued cooperation and efforts of UNFCCC member states. The Agreement acknowledged the link between climate change and the enjoyment of human rights, albeit implicitly:

Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.³⁸⁴

The entry into force of the Paris Agreement was a momentous occasion in the multilateral process of climate action. For the first time, a binding agreement brought all nations together to make ambitious efforts in the reduction of emissions to combat climate change and to adapt to its effects.

However, it should be noted that in implementing emissions reduction targets and adaptation strategies, States should comply with the tenets of climate justice.³⁸⁵ The Sustainable Development Goals³⁸⁶ promote the view that States should pursue justice in addressing climate change. In particular, climate justice is essential in Goal 13: Climate Action.³⁸⁷ Climate justice demands fairness and equity in the way people are treated, linking development and human rights to achieve a rights-based approach in addressing climate change.³⁸⁸

All the above-mentioned instruments and principles clearly point to the imperative obligation of States to mitigate climate change in order to fully protect human rights. States must address the harm caused by climate change, as it is a critical human rights concern

383 Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 [hereinafter Paris Climate Agreement].

384 *Id.* Preamble.

385 IPCC, *AR6, WGII, SPM*, *supra* note 281.

386 United Nations General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1 (2015).

387 Target 13.b seeks to “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” and “acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.” The focus on those most vulnerable to climate change promotes the goals of climate justice.

388 IPCC, *AR6, WGII, SPM*, *supra* note 281.

and obligation under international law.³⁸⁹ States should regulate everything within their territory such that emissions are drastically reduced, the standard being limiting warming to well below 2 degrees Celsius from pre-Industrial levels, as stated in the Paris Agreement. This target has been increased to below 1.5 degrees, as recommended by the IPCC³⁹⁰ in order to prevent the worst-case scenarios that could impact human rights. States must hence drastically reduce the carbon footprint of not only State activities, but also of non-State actors. This involves drastic reductions in the use of fossil fuels and the transition to renewable energy sources by 2030.³⁹¹

C. Refusal of Governments to Engage in Meaningful Action to Mitigate Climate Change may be Categorized as a Human Rights Violation

Citizens may hold their governments accountable for failure to mitigate—not just adapt to—climate change. The pursuit of the State obligation to mitigate climate change cannot just be framed as aspirational, where the standard of fulfillment is vague and the timeline uncertain. Concrete metrics must be set against which States may be held accountable. Failing in this, States enable the human rights of their citizens to be harmed, which equates to a violation of their duty to protect human rights.

For the purpose of holding States in failure of their human rights obligations in the context of climate change, which failure may, itself, be categorized as a human rights violation, it is sufficient to establish the absence of meaningful State resolve and action to address the major anthropogenic actors and factors driving global warming. That science cannot yet establish to a high degree of accuracy the causal relationship between GHGs and specific climate-related effects on particular parties is a problematic only in establishing legal

389 Relationship Between Climate Change and Human Rights Report, *supra* note 221.

390 IPCC, (2018). *Global warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

391 IPCC, 2022: *Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001 [hereinafter referred to as IPCC, *AR6, WGIII*].

liability for the purpose of claiming awards for damages from specific parties, which is a matter for courts to determine.

The obligation of States to address climate change includes the enactment of laws to regulate businesses. These laws should hold enterprises within their jurisdictions legally liable for acts harming the environment and the climate system.

In general, States must establish a general regulatory or policy environment that would incentivize the discovery, development, and use of clean energy. Dependence on carbon fuel should be discouraged. Incentives and subsidies should not be given to carbon producers.

The current debate on whether the effects of climate change may be qualified as human rights violations has no bearing on the clear obligation of States under International Law, including International Human Rights Law, to protect their citizens from the negative impacts of climate change.

VII. Responsibility of Business Enterprises to Respect Human Rights

Although States have the duty to enact and enforce appropriate laws to ensure that businesses respect human rights,³⁹² a State's failure to perform this duty does not render business enterprises free from the responsibility of respecting human rights. Private actors, including business entities, must respect human rights, regardless of whether domestic laws exist or are fully enforced domestically.³⁹³ The responsibility of business enterprises to respect human rights is distinct from issues of legal liability and enforcement of national law provisions.³⁹⁴

A. General Responsibility

There is a growing number of international standards, guidelines, and principles that restate and codify existing binding obligations from treaties and customary international

392 See United Nations Economic and Social Council, *Statement on the Obligations of States Parties regarding the Corporate Sector and Economic, Social and Cultural Rights*, E/C.12/2001/1 (July 12, 2011).

393 See CESCR General Comment 24, *supra* note 342.

394 UNGP-BHR, *supra* note 313.

law, emphasizing and specifying the human rights responsibility of business enterprises. The responsibilities of corporations regarding human rights are further expounded in the following: 1) the UNGP-BHR; 2) the United Nations Global Compact; and 3) the Organization for Economic Co-operation and Development Guidelines for Multinational Corporations. Article 29 of the UDHR is instructive regarding the human rights obligations of everyone in general. It provides that:

Everyone has duties to the community in which alone the free and full development of his personality is possible.

In the exercise of his rights and freedoms, **everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others** and of meeting the just requirements of morality, public order and the general welfare in a democratic society.

These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations. (Emphasis supplied)

It is clear from the UDHR that the obligation to respect rights and freedoms is applicable to everyone, not just States. Hence, the UDHR speaks of the general obligation of everyone, including corporations, to respect human rights

1. The Corporate Responsibility to Respect Human Rights Under the UNGP-BHR

The UNGP-BHR now embodies the global standard of practice expected of States and businesses with regard to business and human rights.³⁹⁵ Its key elements have been accepted by the Organization for Economic Cooperation and Development, the European Union, the International Organization of Standardization, the International Finance Corporation, the Human Rights Commission of the Association of Southeast Asian Nations, the General Assembly of the Organization of American States, and the African Union, as well as by scores of individual states

395 United Nations Office of the High Commissioner of Human Rights, *The Corporate Responsibility to Respect Human Rights: An Interpretative Guide*, U.N. Doc. HR/PUB/12/01 (2012), at 1 [hereinafter *UNGP Interpretative Guide*].

and businesses. Additionally, “some of the measures that have already been adopted include binding legal and policy requirements, with penalties for non-compliance.”³⁹⁶

i. Foundational Principles of the Corporate Responsibility to Respect

The corporate responsibility to respect human rights, as the second pillar of the UNGP-BHR, implements the preambular proclamation in the UDHR that every individual and every organ of society shall strive by progressive measures to secure the universal and effective recognition and observance of human rights.³⁹⁷ To this end, its foundational principles expound on the parameters of this corporate responsibility, stating first that all business enterprises should respect human rights.³⁹⁸ These rights, at a minimum, refer to internationally-recognized human rights, as expressed in the International Bill of Rights and the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work.³⁹⁹ To respect these human rights, business enterprises, including every entity within their value chains under a theory of enterprise liability, must: a) avoid contributing to adverse human rights impacts, and address them when they occur; and b) seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services.⁴⁰⁰ Such is required of all business enterprises, regardless of size, sector, operational context, ownership, and structure.⁴⁰¹ To meet this responsibility, business enterprises should have appropriate policies and processes, including: a) a policy commitment to meet their responsibility to respect human rights; b) a human rights due-diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights; and c) processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute.⁴⁰²

396 John Ruggie, *Life in the Global Public Domain: Response to Commentaries on the UN Guiding Principles and the Proposed Treaty on Business and Human Rights*, SSRN (2015), available at <http://dx.doi.org/10.2139/ssrn.2554726>.

397 UDHR, *supra* note 140, Preamble.

398 UNGP-BHR, *supra* note 313 (Principle 11).

399 *Id.* (Principle 12).

400 *Id.* (Principle 13).

401 *Id.* (Principle 14).

402 *Id.* (Principle 15).

ii. Operational Principles of the Corporate Responsibility to Respect

To operationalize the corporate responsibility to respect human rights, business enterprises should act with due diligence to avoid infringing on the rights of others and to address adverse impacts of their operations. To do so, business enterprises must first understand their human rights risks. Thus, the operational principles of the corporate responsibility to protect call on business enterprises to conduct due diligence processes⁴⁰³ and survey their entire business landscapes as a means to effect policy commitments⁴⁰⁴ that reduce adverse impacts on human rights, and design remedial measures where needed.⁴⁰⁵ In general, the operationalization of corporate human rights responsibilities must include a) the investigation and evaluation of business activities and assessment of corporate policies that may lead to possible human rights abuses;⁴⁰⁶ b) integration of “findings about each salient human rights issue into decision-making processes and actions” through company policies and practices;⁴⁰⁷ and c) addressing each issue or providing remedy for harms caused “by its actions or decisions in relation to a salient human rights issue.”⁴⁰⁸ Due diligence processes, when done correctly, will provide business enterprises with the understanding of the harm its activities may cause, and define the ways these harms may be addressed. It does not, however, end at undertaking due diligence procedures. The findings must be made public,⁴⁰⁹ reported to investors and stockholders, and submitted to appropriate government agencies.

iii. The UNGP Reporting Framework

The UN Guiding Principles (UNGP) Reporting Framework provides a comprehensive guide for companies to identify and report issues that

403 *Id.* (Principle 17).

404 *Id.* (Principle 16).

405 *Id.* (Principle 22).

406 *Id.* (Principle 18).

407 *Id.* (Principle 19).

408 *Id.* (Principle 20).

409 *Id.* (Principle 21).

detract from their responsibility to respect human rights. It tasks corporations to ask questions and report on “human rights issues associated with [their] activities and business relationships during the reporting period.”⁴¹⁰ The questions, as they are framed, focus on saliency and bring into light human rights risks to the individual rather than the material risks to the business. The Framework also guides companies in the disclosure of any “severe human impacts that occurred or were still being addressed.”⁴¹¹ The “know and show” strategy of the UNGP Reporting Framework catalyzes behavior changes. By bringing into light what should be reported to demonstrate respect for human rights, corporations are guided accordingly in the determination and implementation of corporate policies and activities.

2. The United Nations Global Compact

The United Nations Global Compact is a forerunner of the UNGP-BHR. It was proposed by then United Nations Secretary General Kofi Annan in an address to the World Economic Forum on 31 January 1999.⁴¹² It espouses corporate social responsibility and seeks to help businesses align their strategies and operations with the Ten Principles on human rights, labor, environment, and anti-corruption.⁴¹³ The Ten Principles—all derived from international treaties and principles—encourage corporations to, among others, “support and respect the protection of internationally-proclaimed human rights” (Principle 1); “not [be] complicit in human rights abuses” (Principle 2); “support a precautionary approach to environmental challenges” (Principle 7); “undertake initiatives to promote greater environmental responsibility” (Principle 8); and “encourage the development and diffusion of environmentally friendly technologies” (Principle 9).

410 Human Rights Reporting and Assurance Framework Initiative, UN Guiding Principles Reporting Framework with Implementation Guidance (2017) [hereinafter UNGP Reporting Framework].

411 *Id.*

412 Press Release by Kofi Atta Annan, Secretary General of the United Nations, *Secretary-General Proposes Global Compact on Human Rights, Labour, Environment, in address to World Economic Forum in Davos*, U.N. Doc. No. SG/SM/4881 (Feb. 1, 1999), available at <https://www.un.org/press/en/1999/19990201.sgs6881.html> (last accessed Oct. 23, 2021).

413 This includes the Universal Declaration of Human Rights, the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

3. The OECD Guidelines for Multinational Corporations

The OECD Guidelines for Multinational Corporations is a multilaterally agreed and comprehensive code of responsible business conduct that governments have committed to promoting. Its human rights chapter was drawn from the UNGP-BHR and thereby similarly provides that enterprises should:

1. Respect human rights, which means they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved.
2. Within the context of their own activities, avoid causing or contributing to adverse human rights impacts and address such impacts when they occur.
3. Seek ways to prevent or mitigate adverse human rights impacts that are directly linked to their business operations, products or services by a business relationship, even if they do not contribute to those impacts.
4. Have a policy commitment to respect human rights.
5. Carry out human rights due diligence as appropriate to their size, the nature and context of operations and the severity of the risks of adverse human rights impacts.
6. Provide for or co-operate through legitimate processes in the remediation of adverse human rights impacts where they identify that they have caused or contributed to these impacts.⁴¹⁴

B. Responsibility in the Context of Climate Change

1. Application of the UNGP-BHR

The corporate responsibility to respect human rights includes the responsibility to avoid causing or contributing to adverse human rights impacts through harm to the environment and our climate system.⁴¹⁵ Employing the foundational and

414 OECD Guidelines, *supra* note 341.

415 Framework Principles on Human Rights and the Environment, *supra* note 354.

operational principles of the UNGP-BHR in the context of climate change, business enterprises must:

1. Acknowledge, in their statement of policy created under Principle 16, the effect of climate change on the enjoyment of human rights;
2. Include climate change as an element of human rights due diligence undertaken in accordance with Principle 17;
3. Identify and assess the specific human rights impacts of climate change arising from their operations and product;
4. Take appropriate action to mitigate the greenhouse gas emissions from their operations and products, as defined in Principle 19; and
5. Track the effectiveness of their measures and adequately report on their total greenhouse gas emissions (including across the full life-cycle of their products). Actions to mitigate the emissions in the future, including appropriate emissions reduction targets and diversification of energy sources must, also be reported. The process should be transparent and documented to fully comply with UNGP-BHR Principles 20-21.⁴¹⁶

Further, following Principle 22, when, through the conduct of human rights due diligence, a business enterprise is discovered to have caused or contributed to an adverse climate-related human rights impact, a remediation mechanism or process which is accessible, predictable, transparent, and legitimate must be made available. This may be through internal remediation mechanisms or other legal processes.

2. Corporate Financial Disclosure Requirements

The UNGP Reporting Framework of “knowing and showing” human rights due diligence requirements must comply with the highest standards of transparency. Transparency in financial reporting will allow shareholders, investors, and other stakeholders to engage companies to mitigate adverse impacts on human rights and the climate system.

416 Joint Summary of Amicus Curiae, *supra* note 61.

Climate-related financial disclosures “could promote more informed investment, credit, and insurance underwriting decisions” and “help financial market participants understand their climate-related risks.”⁴¹⁷ Climate-related financial disclosures can

help build consideration of the effects of climate change into routine business and financial decisions, and their adoption can help companies demonstrate responsibility and foresight. Better disclosure will lead to a more informed and more efficient capital allocation and help facilitate the transition to a more sustainable, lower-carbon economy.⁴¹⁸

The Commission supports the recommendation that business enterprises disclose their: a) governance regarding climate-related risks and opportunities (governance); b) actual and potential impacts of climate-related risks and opportunities on the organization’s business strategies and financial planning (strategy); c) identification, assessment, and management of climate-related risks (risk management); and d) metrics and targets used to assess and manage relevant climate-related risks and opportunities (metrics and targets).⁴¹⁹ In addition, business enterprises must quantify and disclose the following: a) risks from physical impacts of climate change; b) risks from transitioning to low to zero-carbon economies, including the possibility of stranded assets; and c) associated litigation risks.

3. Principles on Climate Change Obligations of Enterprises

More specific than the UNGP-BHR and specifically crafted to guide enterprises on their corporate responsibilities vis-a-vis climate change, experts in international, environmental, tort, human rights, and corporate law have formulated the Principles on Climate Change Obligation of Enterprises (EP). The EP is based on the interpretation of current international law as it stands or will likely develop.⁴²⁰ Most notably, it directs businesses to take the following measures, among others:

417 Financial Stability Board, Proposal for a Disclosure Task Force on Climate-Related Risks (2015) (citing Task Force on Climate-Related Financial Disclosures, Recommendations of the Task Force on Climate-related Financial Disclosure (2017)).

418 Letter from Michael R. Bloomberg, Chair, Task Force on Climate-Related Financial Disclosures, to Mr. Randal K. Quarles, Chair, Financial Stability Board (Sep. 22, 2020) (citing Task Force on Climate-related Financial Disclosures, 2020 Status Report (2020)).

419 Bernd Kasemir & Manuela Huck-Wettstein, What Is the TCFD and Why Is It Important, Sustainerv.com (2021) available at <https://sustainerv.com/en/insights/what-is-the-tcfid-and-why-is-it-important/>.

420 Climate Principles for Enterprises, available at <https://climateprinciplesforenterprises.org/about/> (last accessed Oct. 23, 2021).

1. Reduce their GHG emissions to, at the minimum, the percentage required under the Oslo Principles or a country's permissible quantum (Principle 2);
2. Ensure that all entities within its direct or indirect control comply with its obligations to reduce GHG emissions (Principle 6);
3. Undertake GHG reducing measures that incur no relevant additional costs like switching from fossil fuel-based energy sources to renewable energy sources, eliminating excessive energy consumption, using more efficient transport (Principle 7.1) and "take all measures to improve the energy efficiency of its products and services as can be taken without incurring relevant additional costs" (Principle 7.2);
4. Take measures to reduce GHG emissions if the additional costs will, "beyond reasonable doubt, be offset by future financial savings or gains" (Principle 8);
5. Avoid activities that "will or are likely to cause excessive GHG emissions, including, for example, operating coal-fired power plants, without taking countervailing measures." (Principle 9.1)
6. Avoid creating products, including packaging, that cause excessive GHG emissions, or render services that cause excessive GHG emissions, without taking into consideration countervailing measures." (Principle 10.1)

4. Responsibility of Financial Institutions

In 2003, private financial institutions adopted the Equator Principles, a framework for determining, assessing, and managing environmental and social risks in project finance, frequently used for major infrastructure and industrial projects.⁴²¹ The Equator Principles require financial institutions to refuse loans to borrowers who will not or cannot follow their respective social and environmental policies and processes.⁴²² Although the principles are not legally binding, they have become an industry standard and are frequently referred to as good practice.⁴²³

421 The Equator Principles (2020), available at <https://equator-principles.com/> (last accessed Aug. 21, 2021) [hereinafter The Equator Principles].

422 *Id.*

423 *Id.*

5. Compliance with State Regulations Regarding Climate Change

Lastly, enterprises must comply, cooperate, and not hinder State regulations involving climate change and human rights. This is in accordance with the responsibility laid out in the UNGP-BHR, which provides that:

In all contexts, business enterprises should:

1. Comply with all applicable laws and respect internationally recognized human rights, wherever they operate;
2. Seek ways to honour the principles of internationally recognized human rights when faced with conflicting requirements;
3. Treat the risk of causing or contributing to gross human rights abuses as a legal compliance issue wherever they operate.⁴²⁴

Hence, enterprises must comply with the Nationally Determined Commitments of States who are parties to the Paris Agreement and, in general, comply with the targets set by science such as those provided by the IPCC as previously discussed.

VIII. Carbon Majors in the Context of Climate Change

A. Anthropogenic Contributions to Climate Change is Quantifiable and Substantial

The IPCC AR5 attributes climate change predominantly to anthropogenic increases in GHG concentrations.⁴²⁵ It states that more than half of the increase in global mean surface temperature (GMST) from 1951 to 2010 is very likely due to such an increase in anthropogenic GHG concentrations.⁴²⁶ It also observed that the atmospheric concentration of carbon dioxide, methane, and nitrous oxide has increased to unprecedented levels in at least the last 800,000 years. Carbon dioxide concentrations, primarily from fossil fuel emissions, have increased by 40 percent since pre-industrial times and about 30 percent

424 UNGP-BHR, *supra* note 313 (Principle 23).

425 IPCC AR5 WG1 at 60 & 869.

426 *Id.* at 869.

of this emitted carbon dioxide was absorbed by the ocean, causing ocean acidification.⁴²⁷ The IPCC AR5 also singled out the increase in atmospheric carbon dioxide as the largest contributor to total positive radiative forcing (RF).⁴²⁸ RF quantifies the change in energy fluxes caused by changes in natural and anthropogenic substances and processes that alter the earth's energy budget for 2011 relative to 1750. Positive RF leads to surface warming while negative RF, leads to cooling.⁴²⁹

Significantly, the IPCC AR5 reported that from 1750 to 2011, carbon dioxide emissions from fossil fuel combustion and cement production have released 375 [345 to 405] gigatons of carbon (GtC) into the atmosphere.⁴³⁰ As 1 GtC equals 3.67 GtCO₂, this translates to approximately 1.376.25 [1,266.15 to 1,486.35] GtCO₂ of global emissions.

Published and peer-reviewed studies⁴³¹ and updates⁴³² thereon (collectively, The Carbon Majors Study) presented to the Commission by its author⁴³³ found that roughly 368 GtCO₂e or 21.4 percent of these global emissions from fossil fuel combustion and cement production were from products sold by the Carbon Majors. It must, however, be stated that the study, updated as of 2016, did not use the global emissions data from the IPCC, but rather used the Carbon Dioxide Information Analysis Center's (CDIAC) data listing 1,545 GtCO₂ emissions from 1751 to 2016 in a study covering the period from 1854 to 2016.

The climate model used in their analysis was based on the impulse response function approach presented in IPCC AR5, and covered the periods from 1880 to 2010 and 1980 to 2010. The study reported the following:

427 IPCC AR5 WG1, at 11.

428 *Id.* at 13.

429 *Id.*

430 *Id.* at 12.

431 See Exhibit VVVV to VVVV-14, Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854-2010; Exhibit UUUU to UUUU-103, Carbon Majors; Accounting for Carbon and Methane Emissions 1854-2010 Methods and Results Report; Exhibit WWWW to WWWW-9, Supplementary Materials.

432 See Exhibit D, Updated Details of Carbon Major Publications; Exhibit TTTT to TTTT-1, Climate Accountability Institute, Press Release on Update of Carbon Majors Project.

433 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, pp.53-86; See Exhibit QQQQ to QQQQ-11, Profile and Statement of Richard Heede dated 7 August 2018; Exhibit RRRR to RRRR-5, Curriculum Vitae of Richard Heede; Exhibit SSSS to SSSS-11, Printed PowerPoint Presentation of Richard Heede, Climate Accountability Institutes' work to quantify the contributions of carbon producers to climate change and climate change damages.

1. “Emissions traced to the 90 largest carbon producers contributed approximately 57 percent of the observed rise in atmospheric carbon dioxide, nearly 50 percent of the rise in global average temperature, and around 30 percent of global sea level rise between 1880-2010;”⁴³⁴
2. Emissions linked to the Carbon Majors “were responsible for roughly 16 percent of the global average temperature increase from 1880 to 2010, and around 11 percent of the global sea level rise during the same time frame;”⁴³⁵ and
3. Emissions tied to the Carbon Majors “from 1980 to 2010, a time when fossil fuel companies were aware their products were causing global warming, contributed approximately 10 percent of the global average temperature increase and about 4 percent sea level rise.”⁴³⁶

B. The Carbon Majors Had Early Awareness, Notice, or Knowledge of their Products’ Adverse Impacts on the Environment and Climate System

Petitioners allege that the fossil fuel industry already had actual knowledge of the harms resulting from the extraction, sale, and use of their products in the 1960s, if not earlier. Petitioners presented: 1) copies of internal documents⁴³⁷ from the

434 Exhibit R to R-8, Profile and statement of Peter Frumhoff, PhD, dated 16 March 2018, at 4.

435 *Id.* at 5.

436 *Id.*

437 Exhibit NN to NN-3, Exxon Research and Engineering Company (Corporate Research Science Laboratories) dated 2 September 1982; Exhibit OO to OO-11, Inter-Office Correspondence dated 31 October 1977 (Re: Environmental Effects of Carbon Dioxide); Exhibit FFF to FFF-30, American Petroleum Institute Medical Advisory Committee 28th Meeting (1959); Exhibit GGG to GGG-74, Energy Resources (A Report to the Committee on Natural Resources) dated December 1962; Exhibit HHH to HHH-13, Final Report (Sources, Abundance and Fate of Gaseous Atmospheric Pollutants) prepared for the American Petroleum Institute (1968); Exhibit III to III-40, Supplemental Report (Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants) prepared for the American Petroleum Institute dated June 1969; Exhibit JJJ to JJJ-215, Environmental Conservation (The Oil and Gas Industries/Volume Two) by National Petroleum Council dated February 1972; Exhibit KKK to KKK-16, Exxon Research and Engineering Company Letter to Mr. Turpin dated 6 June 1978; Exhibit LLL to LLL-20, Review of Environmental Protection Activities for 1978-1979 (Imperial Oil Limited); Exhibit MMM to MMM-1, Exxon Research and Engineering Company Letter to Mr. Natkin dated 2 September 1982; Exhibit NNN to NNN-45, The Greenhouse Effect (Prepared for Shell Environmental Conservation Committee) dated May 1988 (completion of the study on April 1986); Exhibit JJJJ to JJJJ-5, Accomplishment in Air Pollution Control by the Petroleum Industry by Dr. Jerry McAfee dated 15 November 1958; Exhibit KKKKK to KKKKK-33, The Greenhouse Effect, J.F. Black, Products Research Division, Exxon Research and Engineering Co.

fossil fuel industry, including the Carbon Majors; 2) publications⁴³⁸ compiling these and similar internal documents;⁴³⁹ 3) a peer-reviewed study⁴⁴⁰ analyzing the internal communications of one particular carbon major;⁴⁴¹ and 4) early scientific publications on carbon dioxide⁴⁴² and a publication on the fossil industry's early knowledge.⁴⁴³

Scientists, including those under the employ of the Carbon Majors, already knew about the harms that carbon dioxide from fossil fuels posed on the climate as early as the 1930s, with 1965 being the latest year that the fossil fuel industry can claim ignorance of such knowledge.

In November 1965, the government of the United States of America published “Restoring the Quality of our Environment,” a report submitted to President Lyndon Johnson by the President’s Science Advisory Committee. The report warned that carbon dioxide from

dated 6 June 1978; Exhibit LLLLL to LLLLL-1, CO2 Position Statement dated 15 May 1981 with attached Preliminary Statement of Exxon’s Position of the Growth of Atmospheric CO2; Exhibit AAAAAAA to AAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents; & See TSN of the Fourth Inquiry Hearing dated 27-28, 2018, at 82-4.

- 438 Exhibit K, Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis (Center for International Environmental Law) dated November 2017; Exhibit QQ to QQ-28, The Climate Deception Dossiers (Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation) by Union of Concerned Scientists; Exhibit IIII to IIII-15, A Crack in the Shell (New Documents Expose a Hidden Climate History) by the Center for International and Environmental Law dated April 2018.
- 439 T.S.N. of the First Inquiry Hearing dated 27-28 March 2018, Testimony of Lisa Hamilton, at 181-217; T.S.N. of the Second Inquiry Hearing dated 23-24 May 2018, Testimony of Carrol Muffett, at 12-28; T.S.N. of the Fourth Inquiry Hearing dated 27-18 September 2018, Testimony of Kert Davies, at 63-84.
- 440 Exhibit J, Assessing ExxonMobil’s Climate Change Communications (1977-2014) dated 23 August 2017.
- 441 T.S.N. of the Third Inquiry Hearing dated 29-30 August 2018, Testimony of Geoffrey Supran, at 124-45.
- 442 Exhibit UU to UU-21, On the influence of Carbonic Acid in the Air upon the Temperature of the Ground by Svante Arrhenius dated April 1896; Exhibit VV to VV-8, The Artificial Production of Carbon Dioxide and its Influence on Temperature by G.S. Callendar dated 16 February 1938; Exhibit WW to WW-9, On the Coefficients of Absorption of Nitrogen and Oxygen in Distilled Water and Seawater, and of the Atmospheric Carbonic Acid in Seawater by Charles J.J. Fox dated 27 April 1909; Exhibit XX to XX-20, An Attempt to Frame a Working Hypothesis of the Cause of Glacial Period on an Atmospheric Basis by T.C. Chamberlin dated September-October 1899; Exhibit YY to YY-7, Radiocarbon Evidence on the Dilution of Atmospheric and Oceanic Carbon by Carbon from Fossil Fuels by H.R. Brannon, et. al., dated October 1957; Exhibit ZZ to ZZ-5, A Review of the Air Pollution Research Program of the Smoke and Fumes Committee of the American Petroleum Institute by Charles A. Jones, dated May 1958; Exhibit AAA to AAA-3, The Petroleum Industry Sponsors Air Pollution Research by Vance N. Jenkins dated February 1954.
- 443 Exhibit BBBB BBBB to BBBB BBBB-1, Early Oil Industry Knowledge of CO2 and Global Warming by Ben Franta dated 19 November 2018.

fossil fuels would cause warming of the earth's surface, melting the Antarctic ice cap, rising sea levels, warming of sea water, increased acidity of fresh water, and increasing photosynthesis. Part of its conclusion states:

Through his worldwide industrial civilization, Man is unwittingly conducting a vast geophysical experiment. Within a few generations he is burning the fossil fuels that slowly accumulated in the earth over the past 500 million years. The CO₂ produced by this combustion is being injected into the atmosphere; about half of it remains there. The estimated recoverable reserves of fossil fuels are sufficient to produce nearly a 200% increase in the carbon dioxide content of the atmosphere.

By the year 2000 the increase in atmospheric CO₂ will be close to 25%. This may be sufficient to produce measurable and perhaps marked changes in climate, and will almost certainly cause significant changes in the temperature and other properties of the stratosphere. At present it is impossible to predict these effects qualitatively, but recent advances in mathematical modelling of the atmosphere, using large computers, may allow useful predictions within the next 2 or 3 years.⁴⁴⁴

It is reasonable to charge the fossil fuel industry with actual knowledge or notice of this very important publication from the White House.

In fact, days after the presentation of the report by the United States President's Science Advisory Committee to President Johnson, and even before its publication, then President of the American Petroleum Institute (API), Frank Ikard, in a speech delivered during the 45th Annual Meeting of the API, called on its members to study the report. He said:

The fact that our industry will continue to be confronted with problems of air and water conservation for many years to come is demonstrated by the massive report of the Environmental Pollution Panel of the President's Science Advisory Committee, which was presented to President Johnson over the weekend.

This report unquestionably will fan emotions, raise fears, and bring demands for action. The substance of the report is that there is still

444

THE ENVIRONMENTAL POLLUTION PANEL PRESIDENT'S SCIENCE ADVISORY COMMITTEE, RESTORING THE QUALITY OF OUR ENVIRONMENT, 126-127 (1965) from Exhibit AAAAAAA to AAAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, available at <http://www.climatefiles.com/climate-change-evidence/presidents-report-atmospher-carbon-dioxide/> (last accessed Mar. 5, 2020).

time to save the world's peoples from the catastrophic consequences of pollution but time is running out.

One of the most important predictions of the report is that carbon dioxide is being added to the earth's atmosphere by the burning of coal, oil, and natural gas at such a rate that by the year 2000 the heat balance will be so modified as possibly to cause marked changes in climate beyond local or even national efforts. x x x

x x x

There are more than 100 recommendations in this sweeping report, and I commend it to your study. Implementation of even some of them will keep local, state, and federal legislative bodies, as well as the petroleum and other industries, at work for generations.⁴⁴⁵

The API then commissioned the Stanford Research Institute to make a comprehensive report on gaseous atmospheric pollutants. In 1968, the latter issued a final report, entitled "Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants." This final report referenced and adopted *in toto* the findings of the President's Science Advisory Committee. It concluded that the "past and present studies of CO₂ are detailed and seem to explain adequately the present state of CO₂ in the atmosphere. What is lacking, however, is an application of these atmospheric CO₂ data to air pollution technology and work toward systems in which would be brought under control."⁴⁴⁶

The API again commissioned the same institute to make a supplemental report to the earlier study. In 1969, the Stanford Research Institute released the supplement, this time omitting some of the significant findings in the 1965 report made by the President's Science Advisory Committee, including the melting of the Antarctic ice caps, rise of sea level, warming of sea water, increased acidity of fresh water, and increase in photosynthesis. It still, however, maintained that "on the basis of our present knowledge, significant temperature changes could be expected to occur by the year 2000 as a result of increased CO₂ in the atmosphere. These could bring about long term climatic changes."⁴⁴⁷

445 Frank Ikard, *Meeting the Challenges of 1966* (45 [I] American Petroleum Institute Proceedings 1965, 12, 13) (1965), available at <http://www.climatefiles.com/trade-group/american-petroleum-institute/1965-api-president-meeting-the-challenges-of-1966/> (last accessed Mar. 5, 2020); See Exhibit BBBBBBBBBB to BBBBBBBBBB-1, *Early Oil Industry Knowledge of CO₂ and Global Warming* by Ben Franta dated 19 November 2018.

446 Exhibit HHH to HHH-13, *Final Report (Sources, Abundance and Fate of Gaseous Atmospheric Pollutants)* prepared for the American Petroleum Institute (1968), at 112.

447 Exhibit III to III-40, *Supplemental Report (Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants)* prepared for the American Petroleum Institute dated June 1969, at 24.

While it downplayed some of the effects of atmospheric CO₂, it still concluded that “it is rather obvious that we are unsure as to what our long lived pollutants are doing to our environment; however, there seems to be no doubt that the potential damage to our environment could be severe.”⁴⁴⁸ From then on, as the documents submitted to the Commission show, many of the Carbon Majors’ own scientists not only affirmed the findings of the US President’s Science Advisory Committee’s report throughout the succeeding years, but the Carbon Majors themselves also began to acquire much more detailed knowledge and extent of the climate risks associated with carbon dioxide from fossil fuels, including everything that we already know today.

All these demonstrate that the Carbon Majors have known since 1965 that their products, when used as intended, result in various harms to the climate system.

C. Willful Obfuscation of Climate Science and Obstruction of Global Initiatives toward Decarbonization

The fossil fuel industry, including the Carbon Majors, engaged in measures to convince the public that the use of their products would not lead to significant harms. This was done through a combination of actions, the most notable of which are mentioned below.

Through the API, the industry perpetrated massive climate denial campaigns. In 1996, the API published a book, entitled *Reinventing Energy: Making the Right Choices*, which attempted to show that “when facts—not commonly held misconceptions—are used, there is no persuasive basis for forcing Americans to dramatically change their lifestyles to use less oil.”⁴⁴⁹ In arguing for government inaction and discouraging the further development of alternative energy sources, contrary to the findings in all the studies it commissioned over the years, it deceptively stated that:

Currently, no conclusive—or even strongly suggestive—scientific evidence exists that human activities are significantly affecting sea levels, rainfall, surface temperatures or the intensity and frequency of storms. After all, a conclusion that the global climate is changing as a result of human activity would require much more scientific

448 *Id.* at 25.

449 AMERICAN PETROLEUM INSTITUTE, *REINVENTING ENERGY: MAKING THE RIGHT CHOICES*, 2 (1965) from Exhibit AAAAAAA to AAAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, available at <http://www.climatefiles.com/trade-group/american-petroleum-institute/1996-reinventing-energy/> (last accessed Mar. 5, 2020).

knowledge about the entire earth system that exists today. Scientific inquiry has to include natural, geophysical and geochemical cycles responsible for the changing concentrations of atmospheric gases, the systems of winds, the patterns of ocean currents, and the changing weather (including rain, evaporation and clouds), as well as the role of humans and every other plant, animal and biological form of life on earth.⁴⁵⁰

In 1998, the API prepared a “Global Climate Science Communications Action Plan,”⁴⁵¹ which enumerated the strategies and tactics it will employ to undermine the Kyoto Protocol and climate science. Three (3) of its major strategies are as follows:

1. “National Media Relations Program: Develop and implement a national media relations program to inform the media about uncertainties in climate science; to generate national, regional and local media coverage on the scientific uncertainties, and thereby educate and inform the public, stimulating them to raise questions with policy makers;”⁴⁵²
2. “Global Climate Science Information Sources: Develop and implement a program to inject credible science and scientific accountability into the global climate debate, thereby raising questions about and undercutting the ‘prevailing scientific wisdom.’ The strategy will have the added benefit of providing a platform for credible, constructive criticism of the opposition’s position on the science;”⁴⁵³
3. “National Direct Outreach and Education: Develop and implement a direct outreach program to inform and educate members of Congress, state officials, industry leadership, and school teachers/students about uncertainties in climate science. This strategy will be able to raise such serious questions about the Kyoto treaty’s scientific underpinnings that American policy-makers not only will refuse to endorse it, they will seek to prevent progress toward implementation at the Buenos Aires meeting in November or through other ways. Informing teachers/students about uncertainties in climate action will

450 *Id.* at 79.

451 Global Climate Science Communications Action Plan dated 3 April 1998 from Exhibit AAAAAAA to AAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, *available at* <http://www.climatefiles.com/trade-group/american-petroleum-institute/1998-global-climate-science-communications-team-action-plan/> (last accessed Mar. 5, 2020).

452 *Id.* at 4.

453 *Id.* at 5.

begin to erect barriers against future efforts to impose Kyoto-like measures in the future.”⁴⁵⁴

Chillingly, it declared that “victory will be achieved when average citizens ‘understand’ (recognize) uncertainties in climate science; recognition of uncertainties becomes part of the ‘conventional wisdom’”⁴⁵⁵ and “those promoting the Kyoto treaty on the basis of extant science appear to be out of touch with reality.”⁴⁵⁶

From the testimonies of various resource persons and documents submitted in the course of the inquiry, the Commission is of the opinion that the strategies described in the communications action plan were actually deployed, politicians were funded, and front groups were created to oppose regulations under the guise of grassroots support. Evidence was also presented, proving the coal industry’s history of misleading the public about climate science. In 1991, for example, coal companies formed the Information Council on the Environment (ICE), which launched a national campaign to

disparage climate science and cherry-pick the data to highlight claims of cooling temperatures to confuse the public. Print and radio ads presented climate science as alarmist and out of touch with reality.⁴⁵⁷

ICE’s internal documents show that their campaigns sought to target: 1) “older, less-educated males from larger household, who are not typically active information seekers,” and 2) “younger, low-income women.”⁴⁵⁸ In the same year as it was formed, ICE’s devious aims were quickly uncovered by the press and its activities terminated.

The coal industry sent forged letters, appropriating letterheads from respected constituent groups representing minorities, seniors, and women, to members of Congress to influence the votes on the American Clean Energy and Security Act of 2009, which proposed to institute a federal carbon emissions reduction plan. A congressional investigation on the matter “revealed that the fraud was perpetrated by a lobbying firm subcontracted

454 *Id.* at 6.

455 *Id.* at 1.

456 *Id.*

457 Exhibit QQ, The Climate Deception Dossiers (Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation) by Union of Concerned Scientists, at 19.

458 ICE Benchmark Survey from Exhibit AAAAAAA to AAAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, available at <http://www.climatefiles.com/denial-groups/ice-campaign-plan/> (last accessed Mar. 5, 2020).

by a front group called the American Coalition for Clean Coal Electricity (ACCCE),⁴⁵⁹ which counts some of the Carbon Majors among its members.

These campaigns were not confined to the United States, but were also conducted at the international plane, particularly through the efforts of the Global Climate Coalition (GCC), an organization of business trade associations, such as the API, including many of the Carbon Majors. It claimed to be “the leading voice for industry on the global climate change issue, and represents its members both internationally and domestically before government agencies, Congress, the media and the general public.”⁴⁶⁰ Internally, the GCC members acknowledged that “the scientific basis for the Greenhouse Effect and the potential impact of human emissions of greenhouse gases such as CO₂ on climate is well-established and cannot be denied.”⁴⁶¹ This fact is reflected in a 1995 final draft Climate change Primer created by Lenny Bernstein of Mobil Corporation and circulated to all its members.⁴⁶² Yet, in 1996, it actively campaigned to undermine the IPCC Second Assessment Report (IPCC AR2), specifically the IPCC’s conclusion about the human contribution to global warming. The GCC wrongly accused IPCC scientists of revising the IPCC AR2 without authorization. The GCC’s strategy of attacking scientists was well documented and continued until the third IPCC assessment report.⁴⁶³

The Carbon Majors, through individual efforts, also sowed doubt and misinformation about climate change. One of the most documented efforts of obfuscation is that perpetrated by ExxonMobil. A 2017 peer-reviewed study of 187 climate change communications, including peer-reviewed and non-peer-reviewed publications, internal company documents, and paid editorial-style advertisements in *The New York Times*, produced by ExxonMobil between 1977 to 2014, concluded that ExxonMobil misled the general public. It found that 83 percent of ExxonMobil’s peer-reviewed papers and 80 percent of its internal documents acknowledged that climate change is real and human-caused. Yet, only 12 percent of its

459 Exhibit QQ, *The Climate Deception Dossiers (Internal Fossil Fuel Industry Memos Reveal Decades of Corporate Disinformation)* by Union of Concerned Scientists, at 16-17.

460 Global Climate Coalition: An Overview, at 1 from Exhibit AAAAAAA to AAAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, available at <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1996-global-climate-coalition-overview/> (last accessed Mar. 5, 2020).

461 Approval Draft, *Predicting Future Climate Change: A Primer*, at 1 from Exhibit AAAAAAA to AAAAAAA-1, Climate Files Post Index prepared by Climate Investigations Center with links to copies of the actual documents, available at <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/global-climate-coalition-draft-primer/> (last accessed on Mar. 5, 2020).

462 *Id.*

463 Exhibit K, *Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis* (Center for International Environmental Law) dated November 2017, at 16-7.

advertisements acknowledge climate change, while 80 percent of advertisements expressed doubt. As documents become more publicly accessible, ExxonMobil increasingly communicated doubt, which reflected the Scientific Certainty Argumentation Method (SCAM), a tactic for undermining public understanding of scientific knowledge.⁴⁶⁴

From the foregoing, the Commission agrees that the Carbon Majors, directly by themselves or indirectly through others, singly and/or through concerted action, engaged in willful obfuscation of climate science, which has prejudiced the right of the public to make informed decisions about their products, concealing that their products posed significant harms to the environment and the climate system. All these have served to obfuscate scientific findings and delay meaningful environmental and climate action.

An argument may be made under Philippine law that the acts of obfuscation, deception, and misinformation as described above contravene the standard of honesty and good faith expected of a person in the exercise of his rights. Articles 19 and 21 of the Civil Code of the Philippines⁴⁶⁵ provide:

ARTICLE 19. Every person must, in the exercise of his rights and in the performance of his duties, act with justice, give everyone his due, and observe honesty and good faith.

x x x

ARTICLE 21. Any person who willfully causes loss or injury to another in a manner that is contrary to morals, good customs or public policy shall compensate the latter for the damage.

Other Possible Bases of Liability

Aside from liability anchored on acts of obfuscation of climate science, fossil-based companies may also be held to account by their shareholders for continued investments on oil explorations for largely speculative purposes. Such reserves may, in the global march towards renewable energy, end up as stranded assets. Failure to comply with specific administrative or regulatory requirements, such as those in the nature of exacting transparency in business operations, may also be basis for establishing liability.

464 Exhibit J, Assessing ExxonMobil's Climate Change Communications (1977-2014) dated 23 August 2017.

465 An Act to Ordain and Institute the Civil Code of the Philippines [CIVIL CODE], Republic Act No. 386 (1949) §§ 19 & 21.

There may be more glaring bases of legal liability for fossil fuel companies. Here we cite the case of *Kiobel v. Royal Dutch Petroleum Co.*,⁴⁶⁶ where an oil company was implicated, in complicity with State agents, for extra-judicial killings and other human rights violations committed against community leader who opposed the laying of oil pipelines within their village. The case, however, was settled, also extra-judicially.

Continuing Climate Denial

The Commission sadly notes that, to this date, climate change denial and efforts to delay the global transition from fossil fuel dependence still persists. Sadder still is that these obstructionist efforts are driven, not by ignorance, but by greed. Fossil fuel enterprises continue to fund the electoral campaigns of politicians, with the intention of slowing down the global movement towards clean, renewable energy.

D. The Carbon Majors Have the Corporate Responsibility to Undertake Human Rights Due Diligence and Provide Remediation

For the Carbon Majors within Philippine jurisdiction, they may be compelled to undertake human rights due diligence and to provide remediation.

1. The UNGP-BHR may be Resorted to for Exacting Standards of Responsibility for Corporations within Philippine Jurisdiction

The non-binding nature of the UNGP-BHR under international law notwithstanding, some of the principles enunciated therein may individually be considered under Philippine domestic law as constitutive of generally accepted principles of international law. Article II, Section 2 of the Philippine Constitution states that, “The Philippines... adopts the generally accepted principles of international law as part of the law of the land and adheres to the policy of peace, equality, justice, freedom, cooperation, and amity with all nations.” Philippine jurisprudence provides for a wide latitude of what constitutes generally accepted principles of international law that are automatically

466

Kiobel v. Royal Dutch Petroleum Co., 569 U.S. 108 (2013).

incorporated into statutory law, including non-binding international instruments, such as the UDHR.

The UDHR, for example, is a resolution and not a treaty. Thus, during its adoption by the United Nations General Assembly in 1948, it was not considered as a binding instrument.⁴⁶⁷ Yet, in 1951 or merely three years after its adoption, and long before the UDHR was recognized by the international community to have achieved the status of customary international law, the Supreme Court in the landmark case of *Mejoff v. Director of Prisons*, adopted the UDHR through the incorporation clause of the 1935 Constitution, to wit:

Moreover, by its Constitution (Art. II, Sec. 3) the Philippines “adopts the generally accepted principles of international law as part of the law of Nation.” And in a resolution entitled “Universal Declaration of Human Rights” and approved by the General Assembly of the United Nations of which the Philippines is a member, at its plenary meeting on December 10, 1948, the right to life and liberty and all other fundamental rights as applied to all human beings were proclaimed. It was there resolved that “All human beings are born free and equal in degree and rights” (Art. 1); that “Everyone is entitled to all the rights and freedom set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, nationality or social origin, property, birth, or other status” (Art. 2); that “Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the Constitution or by law” (Art. 8); that “No one shall be subjected to arbitrary arrest, detention or exile” (Art. 9); etc.⁴⁶⁸

This was followed by similar pronouncements of incorporation of the UDHR as part of Philippine law in *Borovsky v. Commissioner of Immigration*,⁴⁶⁹ *Chirskoff v. Commissioner of Immigration*,⁴⁷⁰ and *Andreu v. Commissioner of Immigration*.⁴⁷¹ Admittedly, the Supreme Court, six years thereafter, recanted its adoption of the UDHR in

467 James Crawford, *BROWNIE’S PRINCIPLES OF PUBLIC INTERNATIONAL LAW* (8th ed.) (2012), at 636-7.

468 *Boriss Mejoff v. The Director of Prisons*, G.R. No. L-4254 (Sep. 26, 1951).

469 *Victor Borovsky v. The Commissioner of Immigration and The Director of Prisons*, G.R. No. L-4352 (Sep. 28, 1951).

470 *Vadim Chirskoff v. The Commissioner of Immigration and The Director of Prisons*, G.R. No. L-3803 (Oct. 26, 1951).

471 *Charles Andreu v. The Commissioner of Immigration and The Director of Prisons*, G.R. No. L-4253 (Oct. 31, 1951).

Ichong v. Hernandez.⁴⁷² But it pivoted back in *Reyes v. Bagatsing*, proudly declaring that at the time when other nations merely considered the UDHR as aspirational, the Philippines had already given it binding force in its jurisdiction, thus:

“The Philippines renounces war as an instrument of national policy, adopts the generally accepted principles of international law as part of the law of the land, and adheres to the policy of peace, equality, justice, freedom, cooperation, and amity with all nations.” The Philippines can rightfully take credit for the acceptance, as early as 1951, of the binding force of the Universal Declaration of Human Rights even if the rights and freedoms therein declared are considered by other jurisdictions as merely a statement of aspirations and not law until translated into the appropriate covenants. In the following cases decided in 1951, *Mejoff v. Director of Prisons*, 90 Phil. 70; *Borovsky v. Commissioner of Immigration*, 90 Phil. 107; *Chirskoff v. Commissioner of Immigration*, 90 Phil. 256; *Andreu v. Commissioner of Immigration*, 90 Phil. 347, the Supreme Court applied the Universal Declaration of Human Rights.⁴⁷³

2. All Entities within the Carbon Majors’ Value Chain may be Compelled to Undertake Human Rights Due Diligence and Provide Remediation

The corporate responsibility to refrain from contributing to climate change impacts that impair the full enjoyment of human rights extends not only to the whole group of companies of each Carbon Major in recognition of the enterprise theory of corporate personhood,⁴⁷⁴ but also to all business enterprises in each of the Carbon Majors’ respective value chains.⁴⁷⁵ Accordingly, the Carbon Majors and business enterprises that cause, contribute to or are linked to adverse climate-related human rights impacts, “need to know and be able to show” that they respect human rights.⁴⁷⁶ This they can do by undertaking a human rights due diligence process as set forth in Principles 16 to 21 of the UNGP-BHR.

472 Lao Ichong, in his own behalf and in behalf of other alien residents, corporations and partnerships adversely affected by Republic Act No. 1180 v. Jaime Hernandez, et. al., G.R. No. L-7995 (May 31, 1957).

473 Jose B.L. Reyes, in behalf of the Anti-Bases Coalition (ABC) v. Ramon Bagatsing, as Mayor of Manila, G.R. No. L-65366 (Nov. 9, 1983), n. 34.

474 See *Amicus Curiae* Brief of ClientEarth, *supra* note 27, at 47-49.

475 UNGP-BHR, *supra* note 313 (Principle 13).

476 *Id.* (Principle 15).

Michael Addo, a member of the United Nations Working Group on Business and Human Rights, explains that:

it is through human rights due diligence that any enterprise can understand the exact nature of the harm and its contribution to harm. In this case, its contribution to climate change, and so define exactly how each enterprise can prevent, mitigate or remedy any harms. Not knowing your role, contribution, of course, means you are unable to address the harm. Due diligence, therefore, is the key to corporate respect for human rights.⁴⁷⁷

Furthermore, if through the due diligence process or other means, it is found that a business enterprise has caused or contributed to adverse human rights impacts, it would be incumbent upon such business enterprise to provide for or cooperate in the remediation of the adverse human rights impacts as mandated by Principle 22 of the UNGP-BHR:

Remediation and remedy refer to both the processes of providing remedy for an adverse human rights impact and the substantive outcomes that can counteract, or make good, the adverse impact. These outcomes may take a range of forms, such as apologies, restitution, rehabilitation, financial or non-financial compensation, and punitive sanctions (whether criminal or administrative, such as fines), as well as the prevention of harm through, for example, injunctions or guarantees of non-repetition.⁴⁷⁸

Business enterprises, including their value chains, doing business in, or by some other reason within the jurisdiction of, the Philippines, may be compelled to undertake human rights due diligence and held accountable for failure to remediate human rights abuses arising from their business operations.

E. Global Dependence on Fossil Fuels

Latest data⁴⁷⁹ show that fossil fuels hold the largest share in the global energy mix at 83.13 percent of total. Oil, coal, and natural gas amount to 31.21 percent, 27.20 percent, and

477 T.S.N. of the Second Inquiry Hearing dated 23-24 May 2018, at 157.

478 United Nations Human Rights Office of the High Commissioner, *The Corporate Responsibility to Respect Human Rights: An Interpretative Guide*, HR/PUB/12/02 (2012) at 8.

479 Hannah Ritchie, Max Roser & Pablo Rosado, *Energy* (2020), available at

24.72 percent, respectively. There has been a decrease in the use of oil and coal by 7 percent since the Paris Agreement in 2015, and an increase in the use of natural gas by 7 percent.

On the other hand, renewable energy (hydro, wind, solar, geothermal, biomass, waste to energy) amounted to 12.55 percent of the energy mix. This represents an increase of 28 percent since 2015. Nuclear power supplied 4.31 percent of the mix.

The share of renewables in the energy mix in the US amounts to only 9.93 percent, with most of the energy sourced from oil (37.06 percent), natural gas (34.12 percent), and coal (10.38 percent).

China sources a massive 56.56 percent of its primary energy from coal, with 19.59 percent from oil, 13.43 percent from renewables, and 8.18 percent from natural gas. Europe is the leader in renewables, with 19.13 percent of their energy mix coming from green sources, with 33.8 percent from oil, 25.25 percent from gas, and 12.18 percent from coal. The Asia Pacific region sources its primary energy mostly from coal at 47.77 percent of the energy mix, with 26.33 percent from oil, 12.25 percent from gas, and only 11.36 percent from renewables. Africa is highly dependent on fossil fuels, sourcing 38.67 percent from oil, 29.63 percent from natural gas, 22.11 percent from coal, and only 8.85 percent from renewables. The Philippines is also highly dependent on fossil fuels, sourcing 41.01 percent from oil, 39.88 percent from coal, 7.58 percent from natural gas, and only 10.52 percent from renewables.

Globally, renewables represent only 12.55 percent of the total energy mix, which is a 28 percent increase from 2015 to 2020.

While science is clear on the adverse effects of fossil fuels, the present global energy mix shows that our supply of clean, renewable energy is not yet of sufficient scale to effectively replace carbon-based fuel.

The challenge that confronts us, therefore, is to hasten the transition of the global economy towards clean energy. And all acts to obfuscate climate science and delay, derail, or obstruct this transition may be bases for liability. At the very least, they are immoral. States may, as part of their duty to human rights, enact and/or enforce laws to overcome these kinds of undertakings and hold parties accountable for them.

The inflection point has already been reached in favor of renewable energy. Globally, although renewables represent only 12.55 percent of the total energy mix, it reflected a significant increase of 28 percent from 2015 to 2020. Soon, renewable energy would be a sufficient alternative to fossil fuel for powering the global economy. The use of fossil fuel which is harmful to the climate and environment and a threat to life and other human rights will then be proscribed, from whence its extraction, processing, and marketing shall be deemed as a human rights abuse and an illegal act as well.

IX. Recommendations

A. General

Despite science telling us that even an increase in global temperature of 1.5°C above pre-industrial level will significantly harm natural and human systems, we are far from “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.”⁴⁸⁰ While more and more States have strengthened their commitments and increased their ambitions in addressing climate change, this is still not enough to avert catastrophic climate change in time. The latest IPCC report on Nationally Determined Contributions (NDCs) shows that, even if all current NDCs are implemented, the world will still face a 2.7°C increase in temperature by the end of the century. There is an urgent need for a significant increase in the level of ambition of NDCs between now and 2030, a significant over-achievement of the latest NDCs, or a combination of both.⁴⁸¹ There is a “need [for] maximum ambition from all countries on all fronts.”⁴⁸²

There is a vital need for a 45 percent reduction in GHG emissions from 2010 levels by 2030 and to reach net zero emissions by 2050.⁴⁸³ Political will complemented by urgent action is necessary to meet these targets, and everyone, from governments to businesses and

480 Glasgow Climate Pact, para. 20 (The full text of the Glasgow Climate Pact is available at <https://www.msn.com/en-us/news/world/the-full-text-of-the-glasgow-climate-pact/ar-AAQFBS4>) (last accessed on Apr. 25, 2022).

481 United Nations Framework Convention on Climate Change, *Nationally Determined Contributions Under the Paris Agreement: Revised Synthesis Report by the Secretariat*, FCCC/PA/CMA/2021/8/Rev.1 (2021), available at https://unfccc.int/sites/default/files/resource/cma2021_08r01_E.pdf (last accessed Apr. 25, 2022), paras. 15, 29, & 150.

482 Mr. António Guterres, Secretary-General, United Nations, Speech at the COP26.

483 *Id.* at 4.

individual citizens, must engage in securing a sustainable future. “[P]olitical commitment and follow-through, institutional frameworks, policies and instruments with clear goals and priorities, enhanced knowledge on impacts and solutions, mobilization of and access to adequate financial resources, monitoring and evaluation, and inclusive governance processes”⁴⁸⁴ are all necessary to sustain climate adaptation, mitigation, and resilience actions.

The Commission agrees that, if the international community persists in its “business-as-usual” paradigm despite climate change, the diminution of fundamental rights will become the norm in many nations, or even worse. Cooperation among all duty-bearers and rights-holders is of primal importance, if we are to truly reverse the dangerous path we are on.

In the spirit of cooperation, the Commission endorses the following recommendations:

1. To Governments

The very nature of climate change and its worldwide impacts require States to commit to global collective action. The UNFCCC recognizes that effective climate action requires “the broadest possible cooperation by all countries, as well as their involvement in an efficient and acceptable international response in accordance with their shared yet distinct responsibilities.”⁴⁸⁵

Ecosystems and people have substantially different vulnerabilities among and within regions due to various “patterns of intersecting socioeconomic development, unsustainable ocean and land use, inequity, marginalization, historical and ongoing patterns of inequity such as colonialism, and governance.”⁴⁸⁶ In addition, “[a]cross sectors and regions[,] the most vulnerable people and systems are observed to be disproportionately affected.”⁴⁸⁷ As climate change’s consequences and risks are much more severe in low-income countries, developed countries have a special obligation and interest to aid poorer developing countries.⁴⁸⁸

484 IPCC, AR6, WGII, SPM, *supra* note 281 (Statement C.5).

485 United Nations General Assembly, *United Nations Framework Convention on Climate Change*, A/RES/48/189 (Jan. 20, 1994) (Article 2, paragraph 2 of the Paris Agreement also explicitly states that “the Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances”).

486 IPCC, AR6, WGII, SPM, *supra* note 281 (B.2, at 13).

487 IPCC, AR6, WGII, SPM, *supra* note 281 (Statement b.1, at 11).

488 *Laudato Si*, *supra* note 304, no. 170.

Countries that have reaped the benefits of high industrialization without regard for massive GHG emissions and their effects on the environment, bear a larger share in providing solutions to the problems they have created. This is climate justice.

In order to usher in the much-needed global green industrial revolution, those in the developed world must recognize their special responsibility to help everybody else.⁴⁸⁹ At the same time, “emerging economies, too, must go the extra mile, as their contribution is essential for the effective reduction of emissions.”⁴⁹⁰ Hence, to truly affect climate justice, global action must involve the “pooling of resources and a sharing of skills across the world.”⁴⁹¹

In accordance with the obligation of States to respect human rights, the Commission endorses the call to States to undertake the following:

i. Discourage Dependence on Fossil Fuels

Apart from not promoting fossil fuels, States should also discourage dependence on them. Steps must be made for the eventual phase-out of all subsidies for coal-fired power plants, not merely “inefficient” subsidies, as suggested in the Glasgow Climate Pact. Additionally, more than just phasing-down, efforts must be made for the complete phase-out of coal power. Previously-granted tax breaks and subsidies in developed countries must immediately be terminated; for developing countries, concrete plans must be made for their eventual termination. As a general rule, no future tax incentives should be granted to carbon-intensive industries or corporations. States must divest from, refrain from investing in, and deny subsidies or incentives to fossil fuel-related projects or activities, as well as cease from issuing new permits therefor.

On the other hand, tax credits and other incentives for investments must be granted to renewable or clean energy technologies, such as solar, wind,

489 Mr. Boris Johnson, Prime Minister, United Kingdom, Speech at the COP 26.

490 Mr. António Guterres, *supra* note 482.

491 Mary Robinson Foundation Climate Justice, Principles of Climate Justice (2015), at 6, available at <https://www.mrfcj.org/wp-content/uploads/2015/09/Principles-of-Climate-Justice.pdf>.

hydro, geothermal, and hydrogen energy. These must be complemented with aggressive carbon-capture measures. In addition, “[i]nnovative approaches and instruments for mobilizing finance for mitigation and adaptation from private sources”⁴⁹² must be explored.

States must require that private actors and businesses receiving grants, funding, loans, or financial assurances have decarbonization and net-zero plans, and other measures to meet the Paris Agreement’s objectives and that such plans or actions are fulfilled or are on track to be met.⁴⁹³

ii. Collaborate on Innovative Climate Action and Guarantee that the Benefits of Science and Technology are Enjoyed by All

As provided in the Glasgow Climate Pact, “the development, deployment and dissemination of technologies and the adoption of policies to transition towards low-emission energy systems”⁴⁹⁴ must be accelerated, including the rapid scaling-up of “the deployment of clean power generation and energy efficiency measures.”⁴⁹⁵ Towards this end, the Commission endorses the Global Coal to Clean Power Transition Statement, including the need for the rapid scaling-up of the deployment of clean power generation, and technologies and policies “to achieve a transition away from unabated coal power generation in the 2030s (or as soon as possible thereafter) for major economies and in the 2040s (or as soon as possible thereafter) globally.”⁴⁹⁶

The Commission echoes the recommendation of the OHCHR, to wit:

All States should actively support the development and dissemination of new climate mitigation and adaptation technologies, including technologies for sustainable production and consumption. Environmentally clean and sound technologies should be accessibly priced, the cost of their development should be equitably shared, and their benefits should be fairly distributed between and within

492 Glasgow Climate Pact, *supra* note 480, para. 19.

493 *Id.*

494 *Id.* para. 36.

495 *Id.*

496 Global Coal to Clean Power Transition Statement (2021).

countries. Technology transfers between States should take place as needed and appropriate to ensure a just, comprehensive and effective international response to climate change. States should also take steps to ensure that global intellectual property regimes do not obstruct the dissemination of mitigation and adaptation technologies while at the same time ensuring that these regimes create appropriate incentives to help meet sustainable development objectives. The right of indigenous peoples to participate in decision making related to and benefit[ing] from the use of their knowledge, innovations and practices should be protected.⁴⁹⁷

iii. Cooperate towards the Creation of a Legally Binding Instrument to Strengthen the Implementation of the UNGP-BHR, and Provide Redress Mechanisms for Victims of Human Rights Harms Caused by Businesses

States “must take adequate measures to protect all persons from human rights harms caused by businesses,”⁴⁹⁸—including those arising from the impacts of climate change. Further international legislation that will close global governance gaps and make businesses “accountable for their climate impacts and participate responsibly in climate change mitigation and adaptation efforts with full respect for human rights”⁴⁹⁹ is needed. This regulation must necessarily include State “activities conducted in partnership with the private sector” or “[w]here States incorporate private financing or market-based approaches to climate change within the international climate change framework.”⁵⁰⁰

For the proposed treaty to be fully meaningful, the Commission further endorses the recommendation to include redress mechanisms and effective remedies for victims of human rights violations committed by enterprises pursuant to or in the conduct of business activities.

497 OHCHR, CoP 21 Submission, *supra* note 349, at 4, para. 7.

498 *Id.* at 4, para. 8 (Emphasis supplied).

499 *Id.* (Emphasis supplied).

500 *Id.* (Emphasis supplied).

iv. Concretize the Responsibility of Businesses in the Context of Climate Change

According to the United Nations Office of the High Commissioner for Human Rights, “States should be accountable to rights-holders for their contributions to climate change including for failure to adequately regulate the emissions of businesses under their jurisdiction regardless of where such emissions or their harms actually occur.”⁵⁰¹ National and subnational governments that have authority to regulate the exploration, growth, and operation of natural resources or industrial enterprises, as well as State agencies that have authority to regulate environmental or human rights protection within their jurisdiction, must require companies to prepare decarbonizing analysis, planning and commitments, including corporate actions to carry out said plans and the legal duty of directors and officer relating to such.⁵⁰²

To help fulfill their duty to protect human rights, States should “encourage, and where appropriate require, business enterprises to communicate how they address their human rights impacts,”⁵⁰³ especially when their business operations impact human rights. While corporations are already mandated to submit financial reports to government regulators, States should further require the submission of non-financial reports relating to environmental and climate change impact assessments, disclosure of human rights due diligence and consideration of human rights risks, consistent with the Guiding Principles. Necessarily, States should strictly monitor such submissions and impose appropriate penalties for non-compliance. Importantly, these reports should be accessible to investors and the general public.

501 *Id.* at 3, para. 3.

502 David Estrin & Cynthia A. Williams, Unique Legal Obligations of Officers and Directors of Carbon Major Enterprises and their Investors to Reduce Enterprise Carbon Emissions and Avoid Climate Change Related Human Rights Impacts to Vulnerable Communities, and Measures these Enterprises and their Directors should Implement to Act on/Comply with these Obligations: Summary of Recommended Measures to Reduce and Potentially Avoid Human Rights Impacts in the Planning, Financing and Approval of New or Expanded Carbon Plans and Projects (2018), available at <https://ccli.ouce.ox.ac.uk/wp-content/uploads/2018/10/Recommendations-for-the-Philippines-CHR.pdf>.

503 UNGP-BHR, *supra* note 313 (Principle 3 d).

v. Discourage Anthropogenic Contributions to Climate Change and Compensate Victims

All countries must put a price on pollution.⁵⁰⁴ States must provide penalties for emissions. Monetary penalties may then be earmarked for climate change-related mitigation and adaptation activities.

States should also establish legal frameworks to compensate victims of climate change impacts, through courts or quasi-judicial bodies, with revenues derived directly from polluters. This framework should allow for compensation to be fair, meaningful, and accessible. Polluters may be found to have solidary liability for penalties assessed in favor of a claimant.⁵⁰⁵

vi. Ensure that All persons have the Necessary Capacity to Adapt to Climate Change and Guarantee Equality and Non-discrimination in Climate Adaptation and Mitigation Measures

Sustainable adaptation and mitigation measures must be based on equity and justice and must consider specific inequalities which stem from gender, ethnicity, disability, age, location, and income. Inclusive governance involving “multi-stakeholder co-learning platforms, transboundary collaborations, community-based adaptation and participatory scenario planning, focus on capacity-building, and meaningful participation of the most vulnerable and marginalized groups, and their access to key resources to adapt” is necessary for developing more effective and sustainable adaptation and mitigation laws, policies, processes, and interventions that address context specific inequities.⁵⁰⁶

States must thus implement adaptation and mitigation measures that protect and fulfill the rights of all persons, particularly those most vulnerable and most marginalized, and build climate resilience in communities through recognizing that factors such as “discrimination, and disparities in education

504 Mr. Justin Trudeau, Prime Minister, Canada, Speech at the COP 26.

505 Findings and Recommendations, no. 162.

506 IPCC, AR6, WGII, SPM, *supra* note 281 (C.5.6).

and health affect climate vulnerability,”⁵⁰⁷ thus the need to devote “adequate resources to the realization of the economic, social and cultural rights of all persons, particularly those facing the greatest risks.”⁵⁰⁸

States must guarantee equity in climate action and give further protection to those who have contributed least to GHG emissions including developing countries, indigenous peoples, people in vulnerable situations, and future generations. Toward this end, States must guarantee that climate actions do not “exacerbate inequalities within or between States. For example, indigenous peoples’ rights should be fully reflected in line with the United Nations Declaration on the Rights of Indigenous Peoples and actions likely to impact their rights should not be taken without their free, prior and informed consent. Care should also be taken to ensure that a gender perspective, including efforts to ensure gender equality, is included in all planning for climate change mitigation and adaptation. The rights of children, older persons, minorities, migrants and others in vulnerable situations must be effectively protected.”⁵⁰⁹ Thus, States must “ensure meaningful youth participation and representation in multilateral, national and local decision-making processes ... actively involve indigenous peoples and local communities in designing and implementing climate action... [and] increase the full, meaningful and equal participation of women in climate action and to ensure gender-responsive implementation and means of implementation.”⁵¹⁰

vii. Ensure a Just Transition Towards an Environmentally Sustainable Economy

Global cooperation is necessary for working towards a just and equitable outcome. The collective knowledge of the global community must complement the local and regional experience and realities, including an understanding of differences in goals, values, risks, barriers, and opportunities, in the

507 MOHAMED BEHNASSI, HIMANGANA GUPTA, & OLAF POLLMANN, HUMAN AND ENVIRONMENTAL SECURITY IN THE ERA OF GLOBAL RISKS PERSPECTIVES FROM AFRICA, ASIA AND THE PACIFIC ISLANDS: PERSPECTIVES FROM AFRICA, ASIA AND THE PACIFIC ISLANDS, 10.1007/978-3-319-92828-9 (2019) [hereinafter BEHNASSI, ET AL., 2019] (Emphasis supplied).

508 *Id.* (Emphasis supplied.)

509 OHCHR, CoP 21 Submission, *supra* note 349, at 4, para 9.

510 Glasgow Climate Pact, *supra* note 480, para 95.

development of just and equitable laws, policies, and process interventions that eliminate entrenched vulnerabilities to climate change.

Thus, States must recognize and address the existing inequalities and varying challenges in the transition to a net-zero carbon economy. Climate neutrality cannot take place at the expense of people.⁵¹¹ Green policy must put the citizen's well-being at the heart of change because "if domestic and global policies are to achieve common goals, they must create not only a resilient economy but also a resilient society that leaves no one behind."⁵¹²

States must ensure a just transition towards an environmentally-sustainable economy that will guarantee "decent work for all, social inclusion and the eradication of poverty."⁵¹³ This is particularly true for oil-based economies and those with workforces relying on carbon-intensive industries and their supply chains. The Commission endorses the recommendation that States, in the transition to net-zero, engage with stakeholders in developing economic strategies that are fair, inclusive, and sustainable; and provide support to workers through the creation of local, inclusive and decent jobs.⁵¹⁴

viii. Fulfill Climate Finance Commitments and Device New Mechanisms For Loss and Damage from Climate Change-Related Events

Climate-resilient development "is enabled by increased international cooperation including mobilizing and enhancing access to finance, particularly for vulnerable regions, sectors and groups."⁵¹⁵ Accelerated financial support for developing countries, including "increased levels of public finance and publicly mobilized private finance flows from developed to developing countries in the context of the USD100 billion-a-year goal; increas[ing] the use of public guarantees to reduce risks and leverage private flows at

511 Mr. Mateusz Morawiecki, Prime Minister, Poland, Speech at the COP 26.

512 *Id.*

513 International Labour Organization, *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies For All* (2015), paras. 4 & 15 (a).

514 The 2021 Declaration on Supporting the Conditions for a Just Transition Internationally for COP 26, available at <https://ukcop26.org/supporting-the-conditions-for-a-just-transition-internationally>. [hereinafter 2021 Declaration on Just Transition].

515 IPCC, AR6, WGII, SPM, *supra* note 281 (D.5.2).

lower cost; local capital markets development; and building greater trust in international cooperation processes” are critical to enhancing adaptation and mitigation actions.⁵¹⁶ The scaling-up of climate financing must be supported by clear policy choices and signals from governments and the international community.⁵¹⁷

The Commission echoes the call for developed and emerging economies to fulfill their \$100 billion annual climate finance commitments. Wealthy nations must take the lead in mobilizing climate finance through various channels, prioritizing country-driven strategies based on data and science. Current climate finance commitments must be balanced between adaptation and mitigation based on the needs and priorities of developing countries. The Commission further endorses the recommendation that developed nations support developing countries and emerging economies through knowledge and technology-transfer, capacity-building, and finance,⁵¹⁸ pursuant to

... relevant human rights principles, climate assistance should be adequate, effective and transparent, it should be administered through participatory, accountable and non-discriminatory processes, and it should be targeted toward persons, groups, and peoples most in need. States should engage in cooperative efforts to respond to climate-related displacement and migration and to address climate-related conflicts and security risks.⁵¹⁹

The Commission endorses the recommendation that, apart from climate financing for mitigation and adaptation, a separate finance mechanism for *loss and damage* must be implemented to assist developing countries.

The Commission acknowledges that United Nations agencies, international development organizations, and NGOs have already developed a variety of multilateral and regionally-targeted funding mechanisms for mitigation and

516 IPCC, *AR6, WGIII*, *supra* note 389 (E.5.3).

517 *Id.* (E.5).

518 2021 Declaration on Just Transition, *supra* note 512.

519 United Nations Office of the High Commissioner for Human Rights, OHCHR’s Key Messages on Human Rights, Climate Change and Migration, *available at* <https://www.unhcr.org/events/conferences/5a1812a87/ohchrs-key-messages-human-rights-climate-change-migration.html>.

adaptation. National, regional, and multilateral policies have also been implemented and proposed. Their influence, however, may be improved.⁵²⁰

Coordination across governance scales, including international cooperation, can be improved in achieving mitigation and adaptation goals.⁵²¹ It will be more economical and effective if climate actions are embodied in internationally-binding instruments, including trade agreements or regional arrangements, for the joint construction of infrastructure that facilitates the reduction of carbon emissions.⁵²²

ix. Support and Provide Adequate Legal Protection to Environmental Defenders and Climate Activists

States must support and provide adequate legal protection to climate activists and environmental groups in recognition of their role in promoting and advancing climate justice. In particular, States are encouraged to:

1. Expand the civic space that enables various climate and environmental organizations to build and exchange good practices and call attention to gaps in the security of human rights and environmental defenders;
2. Remove administrative and operational barriers to the formation and accreditation of legitimate environmental groups and NGOs;
3. Avoid interfering with climate activists' and environmental groups' efforts to create networks, including their involvement in public relations, especially at international climate conferences and negotiations, and their access to foreign and domestic funding;

520 Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. (Geneva: IPCC, 2014) [hereinafter IPCC, *SYR*, 2014] at 102-6.

521 *Id.* at 102.

522 *Id.* at 106.

4. Stop labeling climate advocates, environmental groups and defenders as enemies of the State based merely on their advocacy for climate action;
5. Prohibit vilification, surveillance, red-tagging, threats of retaliation, and other activities that limit the freedom of climate activists and environmental groups;
6. Effectively guarantee and preserve climate activists' and environmental organizations' and defenders' freedoms of speech, association, and peaceful assembly, without fear of criminalization;
7. Protect citizens' right to information by allowing environmental groups and defenders, journalists and climate advocates to freely report on environmental activities and give journalists and members of the press full access to information on the promotion of human rights and activities of climate activists and environmental groups;
8. Conduct efficient, timely, comprehensive, and impartial investigations into human rights violations against environmental groups and defenders. Where applicable, take action against those natural or legal persons found liable, in compliance with domestic and international law.

x. Promote Climate Change Awareness and Education

States must take a more proactive approach to promoting climate change awareness and instilling a deep understanding of human rights and climate justice. Formal and non-formal education must raise understanding of these issues by generating new insights not only on a scientific level, but also on a sociological and political level.⁵²³

In this regard, the Commission endorses the adoption of the Glasgow Action for Empowerment,⁵²⁴ to wit:

523 Mary Robinson Foundation Climate Justice, *supra* note 489, at 3.

524 Conference of Parties 26 (2021) Decision-/CP.26 Glasgow work programme on Action for Climate

1. Integrate climate change learning into the curricula of schools and other institutions that provide formal education, and support non-formal and informal education on climate change, including respect for and inclusion of indigenous and traditional knowledge;
2. Strengthen education, training and skills development in national institutions to deliver action on climate change learning;
3. Train government officials from different ministries and departments, including those working in local government, on how climate change relates to their respective areas of work to strengthen institutional and technical capacity;
4. Inform the public on the causes of climate change and sources of greenhouse gas emissions, as well as on actions that can be taken at all levels to address climate change and vulnerabilities, including through social media, electronic communication, festivals and cultural events, or by partnering with urban and rural local communities;
5. Improve public access to information on climate change at the national and local level using a range of methods and tools, taking into account the different ways particular communities, groups and individuals, including women and children and youth, may be impacted by climate change;
 - a. To include accurate information on climate change science and mitigation on national and subnational government websites;
 - b. To make scientific information on climate change mitigation and adaptation freely available and accessible to the general public; and
 - c. To make national climate reports available in local languages for vulnerable communities, including people with special needs;
6. Seek public participation and input, including from youth, women, civil society organizations and other groups, in

formulating and implementing efforts to address climate change and in relation to preparing national communications, and encourage the involvement and participation of representatives of all stakeholders and major groups in the climate change negotiation process; and

7. Promote and facilitate the exchange of information and materials and the sharing of experience and good practices

Importantly, States should invest in training and developing the current student generation in skills and talents which will aid in the transition to a green economy.

xi. Include the Military in Carbon Accounting

Each State must also consider all fuel consumption and carbon emissions resulting from their military operations and supply chains when developing their NDC. For example, a recent study showed that the US military consumes more liquid fuels and emits more CO₂e (carbon-dioxide equivalent) than most countries, largely due to its global logistical supply chains.⁵²⁵ It is likely that other military establishments worldwide also consume and emit similar levels in their operations and supply chains. Because of the size, scale, and spread of global military operations, their impact on climate change must also be considered and included in carbon accounting.

xii. Strengthen Shared Efforts to Conserve and Accelerate the Restoration of Forests and Other Terrestrial Ecosystems

Recognizing the role of forests and other terrestrial ecosystems as carbon sinks, the Commission endorses the recommendation that States urgently commence or continue the transition to sustainable land-use, including “halting and reversing forest loss and land degradation by 2030.”⁵²⁶

525 Oliver Belcher, Patrick Bigger, Ben Neimark, & Cara Kennelly, *Hidden Carbon Costs of the ‘Everywhere War’: Logistics, Geopolitical Ecology and the Carbon Boot-print of the US military*, 45 TRANS. INST. BR. GEOGR. 65, doi:10.1111/tran.12319 (2020).

526 Conference of Parties 26, Glasgow Leaders Declaration on Forests and Land Use (2021), *available*

The Commission encourages conservation, protection and restoration measures including sustainable forest management, diversifying and adjusting tree species compositions to build resilience, and managing increased risks from pests, diseases, and wildfires.⁵²⁷

The Commission endorses the position that programs to arrest forest degradation and accelerate reforestation must be supported by sustainable international and domestic trade and development policies. States must also “reduce vulnerability and empower local communities and indigenous peoples; redesign agricultural policies to promote sustainable agriculture and food security; and facilitate the alignment of financial flows with international goals to reverse loss and degradation, while ensuring policies are in place in the accelerated transition to a greener economy.”⁵²⁸ “Cooperation, and inclusive decision making, with local communities and Indigenous Peoples, as well as recognition of inherent rights of Indigenous Peoples,” must be made an integral part of such action plans.”⁵²⁹

2. To the Carbon Majors (and Other Carbon-Intensive Industries)

The Commission echoes the recommendations listed below not only for the Carbon Majors named in the *Petition*, but also for all carbon-intensive corporations and industries, whether private or State-owned.

i. Publicly Disclose Due Diligence and Climate and Human Rights Impact Assessment Results, and the Corresponding Measures taken in Relation thereto

The Carbon Majors must be transparent in their operations, not only to their shareholders and government regulators but also to the general public.

at <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/> [hereinafter Glasgow Leaders Declaration on Forests and Land Use].

527 IPCC, *AR6, WGII, SPM*, *supra* note 281 (c.2.3).

528 Glasgow Leaders Declaration on Forests and Land Use, *supra* note 524.

529 IPCC, *AR6, WGII, SPM*, *supra* note 281 (c.2.3).

The public has the right to know the specific climate risks that each carbon major contributes to or may be involved in through the continued production, sales and use of their products. They must disclose the carbon emissions resulting from the totality of their operations, including those of their subsidiaries across multiple jurisdictions. The Carbon Majors must conduct climate change and human rights impact assessments as part of their due diligence in accordance with the UNGP-BHR in all stages of their operations and across all their value chains, even if not required by government regulations in the jurisdictions they operate in.

The Carbon Majors must make public pronouncements on their commitments to combat climate change. Particularly, they should inform the public how they plan to support the Paris Agreement targets by developing and publishing specific business plans about intended emissions reduction, decarbonization and transition to a low-carbon economy, among others. These plans must contain key performance indicators, which may be reviewed and evaluated to determine whether published goals and plans are achieved over a specific period.

ii. Desist from Undermining Climate Science

The Commission urges the Carbon Majors to desist from all activities that undermine climate science. They should acknowledge, in no uncertain terms, the reality of climate change; that it is primarily anthropogenic in nature; and that their products have widely contributed thereto. They should denounce all forms of climate denial propaganda and cease funding lobbies, politicians, pseudo-scientists, trade associations and other organizations that disseminate false information about climate change and climate science. They should harken to the voice of climate science to hasten the global transition towards clean and renewable energy.

iii. Cease Exploration for New Oil Fields and Help in the Global Transition Towards Clean Energy

Explorations for new sources of fossil fuel must stop. There is already a glut in fossil fuel reserves and new discoveries will only end up as stranded assets in the future.⁵³⁰ Continued, costly, and speculative explorations for new fossil reserves shall subject the officers behind them to suits by their shareholders and investors after these fields end-up as stranded assets. Instead, corporate resources should be applied to research and development of alternative, renewable energy systems and carbon sequestration.

iv. Contribute to a Green Climate Fund for the Implementation of Mitigation and Adaptation Measures

The Carbon Majors must contribute to a Green Climate Fund or other similar funds not only in the jurisdictions they operate in, but also in geographical areas that bear the brunt of the impacts of climate change. They can also choose to finance mitigation and adaptation measures and projects to alleviate the plight of those impacted by climate change-related harms.

v. Engage with Experts, CSOs and other Stakeholders for the Assessment and Improvement of Corporate Climate Response

Carbon Majors must now seriously consider engaging with climate scientists, policymakers, NGOs, affected communities and other stakeholders in climate action towards the development of alternative energy.

3. To Financial Institutions and Investors

Financial institutions⁵³¹ are progressively taking part in various climate initiatives and publicizing their commitments toward climate action. The financial sector is regarded as “the vital link in enabling the kind of system-wide change”⁵³² in achieving a net-zero carbon economy. The sector can steer companies and industries towards a sustainable path by aligning lending and investment portfolios with targets set by science. Although their direct emissions are negligible, their role as financiers of the sectors and projects that generate GHG emissions, including and most significantly, the fossil fuel industry, make them similarly accountable for global warming and climate change. To meet the targets of the Paris Agreement, the global carbon budget demands the cessation of new fossil fuel extraction, and the creation of more infrastructure in support of renewable energy. This would be possible if financiers break away from lending and investing in carbon-related industries.

i. Financial Institutions Must Refrain from Financing Fossil Fuel-Related Projects and Instead Direct Capital Towards ‘Green’ Projects

The Commission fully supports the latest version of the Equator Principles (EP4),⁵³³ and recommends its adoption by all financial institutions. The Equator Principles serve as a framework for financial institutions to identify, assess and manage environmental and social risks when financing projects. Those who subscribe to them, called the Equator Principles Financial Institutions (EPFIs), commit not to provide Project Finance, Project-Related Corporate Loans to Projects or Project-Related Refinance and Project-Related Acquisition Finance to projects that are not compliant with Equator Principles requirements. Principle 2 of the EP4 requires clients to conduct an environmental and social assessment of their proposed projects. Such assessment specifically includes

531 “The core participants in the finance sector include banks, insurance companies, pension funds, fund managers, mutual funds, sovereign wealth funds, charities and endowment funds.” See United Nations Environment Programme Finance Initiative, *Financial Institutions Taking Action on Climate Change* (2014).

532 Science Based Targets, Financial Institutions, available at <https://sciencebasedtargets.org/sectors/financial-institutions>.

533 The Equator Principles, *supra* note 419.

human rights risks and impacts based on the UNGP-BHR, as well as climate change risk assessments aligned with the Climate Physical Risk and the Climate Transition Risk categories of the Task Force on Climate-related Disclosures. The assessment documentation also requires measures to minimize, mitigate, compensate, and remedy risks and impacts on affected communities and the environment. EPFIs are also encouraged to use the EP4 framework for financial products outside of the scope of the EP4. Praiseworthy in the EP4 is the EPFIs' solid and unequivocal commitment to support the objectives of the Paris Agreement and fulfill the responsibility to respect human rights in line with the UNGP-BHR.

However, as the window to take decisive climate action becomes smaller, the Commission joins in encouraging financial institutions to take bolder actions to fully realize and embrace their unique position to influence and direct the actions and policies of companies and industries to transition to a low-carbon economy. They must refrain from injecting capital into activities related to fossil fuel extraction and conventional fossil fuel-based power generation. Instead, they should redirect capital to activities that promote GHG emissions reduction and build infrastructure necessary to address and respond to the physical impacts of climate change.

Further, financial institutions must endeavor to “enhance finance mobilization in order to deliver the scale of resources needed to achieve climate plans, particularly for adaptation;”⁵³⁴ scale-up investments in climate action⁵³⁵ taking into account the vulnerabilities of specific sectors, regions, and countries; simplify and enhance access to finance;⁵³⁶ and “provide enhanced and additional support for activities addressing loss and damage associated with the adverse effects of climate change.”⁵³⁷

534 Glasgow Climate Pact, *supra* note 480, para. 19.

535 See Glasgow Climate Pact, para. 47.

536 See Glasgow Climate Pact, para. 53.

537 Glasgow Climate Pact, *supra* note 480, para. 64.

ii. Investors Must Exert Social, Political, and Economic Pressure on the Fossil Fuel Industry to Transition to Clean Energy by Divesting Therefrom

The Commission calls on investors to invest in protecting the climate for present and future generations. Conventional investing, where profit is the sole driving force, should no longer be the norm. The imperatives of sustainability and protection of the environment and the climate system for present and future generations must now also be investment considerations. As owners of capital, investors have the power to influence and direct company policies and actions. Thus, investors should be more circumspect in their investments and mindful of their obligation under the UNGP-BHR to respect human rights. They must ensure that the companies they invest in do not tolerate, propagate or contribute to human rights abuses in all phases of their operations, including within their value chains.

The consistent use of environmental, social and governance (ESG) criteria in investment decisions is likewise encouraged. ESG criteria are standards used by socially-responsible investors in screening potential investments. Human rights impacts are necessarily included therein. The Commission joins in encouraging networks such as the Investor Alliance for Human Rights, whose members integrate ESG considerations in investment decision-making processes, in using their leverage as investors to influence responsible business conduct. The Commission also notes the work of the Transition Pathways Initiative (TPI) in creating tools and generating resources for investors to assess companies' preparedness to transition to a low-carbon economy. By integrating TPI's data in ESG assessments, investors can better understand how their holdings fare with the pathways set by the Paris Agreement and, consequently, make better and more informed socially responsible investment decisions.

The Commission fully supports the Fossil Fuel Divestment Movement in its action to mitigate climate change. This movement calls on individual and institutional investors to divest from financial instruments connected with the fossil fuel industry to exert social, political and economic pressure upon fossil fuel companies to transition to clean energy. The movement puts to public discourse the ethics and morality of knowingly profiting from activities that

cause significant harm to the climate, in general, and to the victims of climate change impacts, in particular, who are unjustly bearing the brunt of the harm even though they have least benefited from or contributed to it. The Commission hopes that this movement will gain maximum global traction and inspire more investors to use their economic power to support climate action.

4. To the United Nations

The United Nations offers a special platform for bringing together world leaders and uniting governments. The Commission recognizes the unique position of the United Nations for shepherding global resources towards the full implementation of the Paris Agreement.

The Commission is encouraged by the United Nations dynamism in promoting a safe climate and healthy ecology, with special reference to human rights. Climate change must be integrated, indeed, in the monitoring of the full implementation of “existing recommendations of the treaty bodies, the Universal Periodic Review, the special procedures mandate holders and the Office of the United Nations High Commissioner for Human Rights.”⁵³⁸

As countries put forward their NDCs with more ambitious targets, it would be judicious for the United Nations to also report on State compliance with human rights obligations relating to climate change.

The Commission also lauds the addition of “another focal point on climate change and human rights to the UNFCCC to ensure a rights-based approach to negotiating, implementing and monitoring actions pursuant to the Paris Agreement.”⁵³⁹

The Paris Agreement emphasizes global inclusivity and the need to provide financial, technical, and climate-related capacity-building support to developing countries. The United Nations can act as a catalyst in encouraging developed States to lend technical assistance and financial resources to countries most in need of climate mitigation and adaptation. This includes compensation for loss and damage arising from the impacts of climate change.

538 *Safe Climate Report, supra note 327, at 24.*

539 *Id.*

The United Nations has the unique ability to forge agreements and implement normative frameworks. It is also in a strong position to promote guiding principles into becoming international treaties or domestic laws. It can catalyze the development of mechanisms and processes for hearing human rights cases, especially those involving transboundary harm, universal liability, cross-jurisdictional enforcement, compensation, and proportional liability.

The Commission also recognizes the central role of the United Nations in engaging the business community to deliver climate goals. Developing binding instruments that promote responsible business standards, including compelling the business sector to fulfill their human rights responsibilities for a more inclusive and transformative climate action.

5. To National Human Rights Institutions

The climate crisis calls not just for an evaluation of State obligations on human rights, but of the human rights responsibilities of businesses, as well.

NHRIs “play a crucial role in promoting and monitoring the effective implementation of international human rights standards at the national level”⁵⁴⁰ and bridging stakeholders to “promote transparent, participatory and inclusive national processes of implementation and monitoring.”⁵⁴¹ In the face of one of the greatest human rights challenges of our time, the Commission notes that NHRIs around the world are rising to the challenge and have increased engagements aimed at protecting climate-affected rights.⁵⁴²

In October 2015, the Global Alliance of National Human Rights Institutions (GANHRI) adopted the Mérida Declaration, encouraging all NHRIs to “influence the national process of implementation and accountability to ensure human rights are

540 United Nations Human Rights Office of the High Commissioner, *UN Human Rights and NHRIs*, available at <https://www.ohchr.org/EN/Countries/NHRI/Pages/NHRIMain.aspx>.

541 The Mérida Declaration, *The Role of National Human Rights Institutions in Implementing the 2030 Agenda for Sustainable Development*, para. 15 [hereinafter as Mérida Declaration].

542 NATHANIEL ELSÉN & NINA ESCHKE, *CLIMATE CHANGE AND HUMAN RIGHTS, THE CONTRIBUTIONS OF NATIONAL HUMAN RIGHTS INSTITUTIONS: A HANDBOOK* (2020 ed.).

integrated in the process of tailoring and tracking goals, targets and indicators”⁵⁴³ of the 2030 Agenda for Sustainable Development. It highlighted the role of NHRIs to “promote remedies for all human rights violations and ... use their protection powers to address serious human rights concern linked to the implementation”⁵⁴⁴ of development goals, including the realization of Sustainable Development Goal (SDG) No. 13 on climate action. The declaration also encouraged cooperation between NHRIs and private actors, reaffirming the role businesses can play in fulfilling the SDGs, and highlighting the need to align implementation with the UNGP-BHR and other international human rights standards.⁵⁴⁵

A month later, in November 2015, the Commonwealth Forum of National Human Rights Institutions adopted the St. Julian’s Declaration on Climate Justice,⁵⁴⁶ the first collaborative declaration of commitments signed by NHRIs, acknowledging and affirming their role in climate action.

More recently, during its Annual Meeting in December 2020, GANHRI adopted an outcome statement on the role of NHRIs in combating the climate crisis.⁵⁴⁷ Recognizing that a human rights-based approach leads to more sustainable and effective climate action and policies, it called on all States to ratify and implement international and regional human rights instruments. Likewise, it called for the implementation of the provisions of the Paris Agreement, to promote human-rights based and people-centered climate action.⁵⁴⁸ Also noteworthy in the statement is the recognition of the need for climate justice, which it defined “as addressing the climate crisis with a human rights-based approach whilst also making progress towards a just transition to a zero-carbon economy.”⁵⁴⁹

543 Mérida Declaration, *supra* note 541.

544 *Id.*

545 *Id.* para. 11.

546 Commonwealth Forum of National Human Rights Institutions, St. Julian’s Declaration on Climate Justice (2015), at 5.

547 Global Alliance of National Human Rights Institutions, GANHRI Statement Adopted at the GANHRI Annual Conference on Climate Change: The Role of National Human Rights Institutions (adopted on Dec. 4, 2020), available at https://ganhri.org/wp-content/uploads/2020/12/EN_Climate-change-and-NHRIs.pdf [hereinafter GANHRI Statement].

548 *Id.* para. 2.

549 *Id.* para. 3.

Guided by these declarations and lessons learned from its climate *Inquiry*, the Commission encourages its fellow NHRIs to:

1. Continuously engage with climate scientists and other experts in the field to keep abreast of the best available science on climate change, event attribution, as well as technological developments related thereto;
2. Collaborate with other NHRIs and engage in regional and international mechanisms to monitor government and business compliance with their duties and responsibilities when dealing with climate-related transboundary harms and cross-border human rights violations;
3. Ensure that climate change actions, including monitoring, investigations, decisions and legislation are participatory, transparent and accountable;
4. Contribute to the development of laws and legal frameworks on the intersection of human rights, climate change and business enterprises through monitoring, research, case studies, investigation, decision on cases and other activities within their mandates;
5. Pursue meaningful collaboration with government actors and encourage them to understand and integrate human rights obligations in national climate action policies by advising them on human rights-based approaches to climate mitigation and adaptation, through the integration of the different international climate agreements, the Sustainable Development Goals, and the adherence to the Geneva Pledge to promote and respect human rights in climate action;
6. Actively dialogue with the business sector and work for the development of normative frameworks that will embed the respect for human rights in the obligations of businesses—such as the conduct of environmental and human rights impact assessments and due diligence across all phases of their operations, as well as providing remedies in case of violations;
7. Increase monitoring and reporting on government's compliance with business, human rights and climate change obligations and

- commitments, through international human rights mechanisms like the Universal Periodic Review and other treaty bodies;
8. Strengthen engagements with civil society, particularly in educating communities about the causes and impacts of climate change and how it relates to the realization of human rights in order to mainstream climate awareness in the public consciousness and drive responses ranging from individual changes of lifestyles to concerted climate actions;
 9. Recognize that some climate actions are inevitable to negatively impact human rights; that the transition to a carbon-less economy would necessarily put some sectors at risk of losing their livelihoods or that evacuating those living in danger zones would necessarily lose their homes; the challenge is to find a balance towards the most just, humane and equitable climate solution; and finally
 10. Commit to achieving climate justice, particularly for those acutely impacted but have least contributed to the climate crises.

6. To Courts

Many individuals and organizations have now resorted to initiating actions before State-based judicial mechanisms to compel climate actions⁵⁵⁰ and influence the development of laws and policies in both the domestic and international spheres. Litigation has been used to compel governments to provide more ambitious emissions targets,⁵⁵¹ establish the right to a healthful ecology for future generations,⁵⁵² or delineate the role of States with regard to transboundary environmental harms.⁵⁵³

Similarly, the progressive interpretation of laws by courts enhances regulation and addresses gaps in law where legislation may be vague or when current legislation

550 Michal Nachmany, Sam Fankhauser, Joana Setzer & Alina Averchenkova, *Global Trends in Climate Change Legislation and Litigation* (2017) [hereinafter *Global Trends 2017*].

551 Netherlands Hague District Court [2015] HAZA C/09/00456689. Affirmed by Hague Court of Appeals and Supreme Court of the Netherlands in 2018 and 2020, respectively [hereinafter *Urgenda v. Netherlands*].

552 Philippine Supreme Court [1993] G.R. No. 101083 and *Juliana v. United States*, 217 F. Supp.3d 1224 (D. Or. 2016) (U.S.).

553 Inter-American Court of Human Rights [2017] OC-23/17.

is not up to date with developments in science.⁵⁵⁴ In the case of *Massachusetts v. EPA*⁵⁵⁵ for instance, the court held that the US Environmental Protection Agency under their statute had the power to regulate GHGs, even though the statute did not specifically contemplate emissions regulation.

Courts must also interpret the law in conformity with international obligations and act as enforcement tools of States' international obligations—including those relating to climate change.⁵⁵⁶ The coupling of international obligations with domestic regulation is not new. The courts in *Urgenda v. Netherlands* and *Leghari v. Pakistan* established their States' commitments under international conventions as part of their domestic obligations to their citizens. In *Pro Public v. Godavari Marble Industries Pvt. Ltd.*,⁵⁵⁷ the court established that mining in a protected area is inconsistent with the principles found in international environmental protection and the Nepal Constitution.

The judiciary may also grant remedies not expressly provided by laws. The “*imprimatur* of the courts confers considerable legitimacy on the operation of the administrative state[;] [...] courts have considerable latitude to develop law on their own.”⁵⁵⁸ A review of government acts has been accepted by courts to compel public agencies and offices to act and revise policies.⁵⁵⁹ Civic organizations and individuals have used the threat of judicial review to compel governments into climate action.⁵⁶⁰

Judiciaries worldwide have also provided remedies that protect the environment and the people affected by environmental degradation. Examples of these are the

554 Joana Setzer & Mook Bangalore, *Regulating Climate Change in the Courts*, in TRENDS IN CLIMATE CHANGE LEGISLATION (Alina Averchenkova, et al. eds., 2017).

555 United States Supreme Court [2007] 549 U.S. 497 (2007).

556 Esmeralda Colombo, *Enforcing International Climate Change Law in Domestic Courts: A New Trend of Cases for Boosting Principle 10 of the Rio Declaration?* 35 UCLA JOURNAL OF ENVIRONMENTAL LAW AND POLICY 98 (2017).

557 Supreme Court of Nepal [2015] 068–WO–0082.

558 David Markell & J.B. Ruhl, *An Empirical Assessment of Climate Change in The Courts: A New Jurisprudence or Business As Usual?* 64 FLA. L. REV. 15, 20 (2012) [hereinafter referred to as Markell & Ruhl 2012].

559 *Urgenda v. Netherlands*; John Hermse, *Dutch Government Plans CO2 Emissions Levy for Industrial Firms*, BLOOMBERG BUSINESSWEEK, JUN. 28, 2019 (last accessed Jan. 6, 2021); Reuters, *Dutch to Close Amsterdam Coal-fired Power Plant Four Years Early – RTL*, REUTERS, MAR. 7, 2019 (last accessed Jan. 6, 2021).

560 Alina Averchenkova, Sam Fankhauser, & Jared J. Finnegan, *The Impact of Strategic Climate Legislation: Evidence from Expert Interviews on the UK Climate Change Act*, 21 CLIM. POLICY 251 (2020).

*Tutela*⁵⁶¹ writs, found in Latin American countries and the *Writ of Kalikasan*⁵⁶² in the Philippines. These special writs have been consistently used by their respective courts to protect the environment.⁵⁶³ Regional courts have also promoted remedies by issuing Advisory Opinions to help clarify the duties and rights relative to the environment and transboundary harm.⁵⁶⁴

In the climate change context, “courts have moved beyond their primary function of resolving disputes between private individuals and are now being used by public interest litigants as vehicles for achieving social change.”⁵⁶⁵ The Commission encourages all courts to embrace their power to influence and inspire government action. However, caution must be exercised to avoid “overly aggressive judicial review [that] has the potential to engender administrative ossification—agency paralysis—among other phenomena.”⁵⁶⁶ Thus, without favoring any particular party or going beyond their authority, courts should strive to inform, determine, explain and uphold, through their decisions, the rights and obligations of parties concerning particular climate laws, policies and issues. In dismissing claims, courts should clarify the factual and legal bases that were found wanting or insufficient to provide guidance not only to the parties but also to future actions. It should be emphasized that even when courts do not rule in favor of the claimants, they still contribute to meaningful climate response through their elucidation of the law and the rights and obligations of the parties. Judicial contribution to the development of the law and jurisprudence on various climate issues is indispensable to the success of the global climate action.

In the determination of claims and liabilities, courts may take judicial notice of the findings of NHRIs or other similar bodies.

561 1991 COLOM. CONST. (Revised 2015).

562 RULES OF PROCEDURE FOR ENVIRONMENTAL CASES.

563 Corte Constitucional de Colombia [2016] T-622 of 2016; Supreme Court of the Philippines [2019] *Abogado et. al v. Department of Environment and Natural Resources*.

564 Inter-American Court of Human Rights [2017] Advisory Opinion Concerning the Interpretation of Article 1(1), 4(1) and 5(1) of the American Convention on Human Rights.

565 Brian J. Preston, *Characteristics of Successful Environmental Courts and Tribunals*, 26 J. ENVIRON. LAW 365, 387-8 (2014).

566 Markell & Ruhl 2012, *supra* note 558 (citing Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 DUKE L. J. 1385, 1386-87 (1992); Mark Seidenfeld, *Why Agencies Act: A Reassessment of the Ossification Critique of Judicial Review*, 70 OHIO ST. L. J. 251, 254 (2009); & Jason Webb Yackee & Susan Webb Yackee, *Testing the Ossification Thesis: An Empirical Examination of Federal Regulatory Volume and Speed, 1950–1990*, 80 GEO. WASH. L. REV. 1414, 1414 (2012)).

7. To NGOs, CSOs, and the Legal Profession

i. NGOs and CSOs

No less than the Human Rights Council has emphasized that “civil society actors have an important and legitimate role in promoting corporate social responsibility, and in preventing, mitigating and seeking remedy for the adverse human rights impacts of transnational corporations and other business enterprises.”⁵⁶⁷ With the growing power of multinational companies and the shrinking influence of governments, NGOs and CSOs have become the third force alongside the public and private sectors in promoting and ensuring human rights with respect to companies.⁵⁶⁸

The Commission recommends that NGOs and CSOs continuously engage in strategic litigation to strengthen business and human rights norms, change public policy, increase government ambition, and create binding precedents catalyzing the movement towards zero-carbon energy.

ii. Legal Profession

Justice Brian Preston⁵⁶⁹ explains the role that lawyers play in supporting climate action:

Recognizing that addressing climate change depends on responses on a small scale, and that any legal action which involves climate change issues will impact on climate change policy, gives rise to a responsibility on lawyers to be aware of climate change issues in daily legal practice. It calls for a climate conscious approach rather than a climate blind approach. A climate blind approach is where the outcome of the legal problem or dispute will have some impact on climate change issues, but legal advice is given or the dispute is litigated or resolved without any attention to climate change issues. A climate conscious approach requires an active awareness of the reality of climate change and how it interacts

567 United Nations Human Rights Council, *Elaboration of an International Legally Binding Instrument on Transnational Corporations and Other Business Enterprises with Respect to Human Rights*, U.N. Doc. No. A/HRC/RES/26/9 (July 14, 2014), available at <https://undocs.org/A/HRC/RES/26/9>.

568 Chris Jochnick and Louis Bickford, *The Role of Civil Society in Business and Human Rights*, in *BUSINESS AND HUMAN RIGHTS FROM PRINCIPLES TO PRACTICE* 258 (Dorothee Baumann-Pauly & Justine Nolan eds., 2016).

569 Chief Judge of the Land and Environment Court of New South Wales.

with daily legal problems. A climate conscious approach demands, first, actively identifying the intersections between the issues of the legal problem or dispute and climate change issues and, secondly, giving advice and litigating or resolving the legal problem or dispute in ways that meaningfully address the climate change issues.⁵⁷⁰

The Commission shares Preston’s view and that of the International Bar Association (IBA) that the global response to climate change entails, if not inevitably requires, a host of legal proceedings if any success is to be gained. Lawyers around the world will be called upon to represent the conflicting rights and interests of States, corporations, communities and individuals impacted by the climate crisis. Thus, “the legal profession must be prepared to play a leading role in maintaining and strengthening the rule of law and supporting responsible, enlightened governance in an era marked by a climate crisis.”⁵⁷¹

In whatever side or capacity lawyers may find themselves in these proceedings, the Commission appeals to them to work towards the development of laws and legal systems that will justly protect and uphold the common interest of humankind. To this end, the Commission calls on lawyers to generously lend their expertise towards improving or creating a legal framework for climate accountability in their localities, which may inform and ultimately become one of the bases for the development of a global legal framework for addressing the challenges posed by climate change.

8. To the Global Citizenry

As Consumers

The Commission calls on all citizens of the world, as stewards of nature, to do their just share in caring for our common home. Much has been said about the legal and moral obligation of governments and private enterprises, including carbon-intensive

570 Brian J. Preston, Implementing a Climate Conscious Approach in Daily Legal Practice (Dec. 4, 2015), at 2.

571 International Bar Association, Climate Crisis Statement (May 5, 2020), available at <https://www.ibanet.org/Article/NewDetail.aspx?ArticleUid=cac6e15d-ec80-4669-9025-2773e9019519>.

industries. Yet, as individual consumers, each one of us must also take responsibility for the role of our consumption habits in climate-related human rights impacts.

Indeed, “an important contributor to global emissions is over-consumption.”⁵⁷² Consequently, a just transition toward a carbonless economy cannot be achieved through mere technological innovations and global changes in national policies, but also necessarily includes reduction in demand by altering consumer habits and mindsets. Thus, the Commission invites self-reflection to examine whether our behavior contributes to excessive and irresponsible consumerism, and recommends that we consciously take steps to reduce our carbon footprint and make positive choices to adopt a climate-friendly lifestyle consistent with global efforts for climate change mitigation and adaptation.

As Shareholders and Investors

The Commission encourages global citizens to be informed shareholders and investors. Knowledge of production chains, corporate values, and business practices and the individual investment choices made based on this information will ultimately shape and fuel the global response to climate change. Support must be given to clean and green products and business enterprises instead of those that seek to profit at the cost of the destruction of our common home.

As Electorate

Pope Francis in his encyclical letter, *Laudato Si'*, reminds us that we need “leadership capable of striking out new paths and meeting the needs of the present with concern for all and without prejudice towards coming generations.”⁵⁷³ Thus, the Commission calls on all global citizens to elect responsible leaders. Individual efforts will be for naught if those in power or those who make and influence policies are blind to the plight of the planet. Everyone must exercise their right to vote in favor of those who will champion the fundamental human right of present and future generations to live with dignity in a home safe from the grave and fatal impacts of climate change.

572 Expert Group on Climate Obligations of Enterprises, *Principles on Climate Obligations of Enterprises* (2018), at 30.

573 *Laudato Si'*, *supra* note 304, para. 53.

B. Additional / Particular Recommendations to the Philippine Government

The General Climate Policy in the Philippines

At the core of Philippine environmental policy is the 1987 Constitution which establishes Filipinos' right "to a balanced and healthful ecology in accord with the rhythm and harmony of nature."⁵⁷⁴

In 1991, the Inter-Agency Committee on Climate change⁵⁷⁵ was created in preparation for the first Conference of Parties. Soon after, the Philippines signed and adopted the UNFCCC and the Kyoto Protocol. In 1999, Congress passed the Clean Air Act⁵⁷⁶ outlining the country's response to industrial emissions and air pollution, and mandating the incorporation of environmental protection in development plans.

The next decade saw the strengthening of the Philippines' climate response through the enactment of the Climate change Act of 2009⁵⁷⁷—a law that mainstreamed climate change in government policy formulation, established the framework strategy and program on climate change, and created the Climate Change Commission (CCC).

It also mandated the creation of two policy documents that would guide the country's integrated action on climate change—the National Framework Strategy on Climate change 2010-2022 (NFSCC) and the National Climate change Action Plan 2011-2028 (NCCAP).

The NFSCC envisioned "a climate risk-resilient Philippines with healthy, safe, prosperous and self-reliant communities, and thriving and productive ecosystems."⁵⁷⁸ Its goal was "to build the adaptive capacity and increase the resilience of natural ecosystems to climate change, and optimize mitigation opportunities towards sustainable development."⁵⁷⁹

574 PHIL. CONST. art. II, § 16.

575 Office of the President, Creation of an Inter-Agency Committee on Climate Change, Administrative Order No. 220, s. 1991 (May 18, 1991).

576 An Act Providing for a Comprehensive Air Pollution Control Policy and for Other Purposes [Clean Air Act of 1999], Republic Act No. 8749 (1999).

577 An Act Mainstreaming Climate Change Into Government Policy Formulations, Establishing the Framework Strategy and Program on Climate Change, Creating for this Purpose the Climate Change Commission, and for Other Purposes [Climate Change Act of 2009], Republic Act No. 9729 (2009).

578 National Framework Strategy on Climate Change 2010-2022 [hereinafter NFSCC] (Guiding Principles 2.1).

579 *Id.* at (Guiding Principles 2.2.).

Formulated within the context of the Philippines’ sustainable development goals, it considered governance and institutional factors that may limit the country’s capacity to respond to climate change.⁵⁸⁰ It identified climate change impacts and vulnerabilities and set key result areas to be pursued in climate-sensitive sectors through adaptation and mitigation strategies. The NFSCC mitigation pillar relies on “pursuing cost-effective measures to reduce GHG emissions, including increased energy efficiency and conservation, development and increased utilization of appropriate low carbon and renewable energy technologies, and reducing emissions from deforestation and degradation.”⁵⁸¹ However, mitigation is treated as a function of adaptation⁵⁸² and more emphasis is given on adaptation due to the “country’s geophysical and socio-economic characteristics,” and the “risks associated with current climate variability and extremes.”⁵⁸³

A year after the NFSCC was signed, its framework and guiding principles were translated into the NCCAP. The NCCAP outlined the country’s strategic direction for adaptation and mitigation from 2011 to 2028. It laid down the government’s short-, medium- and long-term plans and expected outputs in the seven thematic areas of food security, water security, ecological and environmental stability, human security, climate smart industries and services, sustainable energy, and knowledge and capacity development.⁵⁸⁴ Six of the seven NCCAP priority areas are focused on adaptation. The NCCAP also highlighted the convergence between adaptation and disaster risk reduction and management.

In 2010, the Disaster Risk Reduction and Management Act⁵⁸⁵ was passed. The law provides for an “approach that is holistic, comprehensive, integrated, and proactive in lessening the socioeconomic and environmental impacts of disasters including climate change, and promote the involvement and participation of all sectors and all stakeholders concerned, at all levels, especially the local community.”⁵⁸⁶ Notable in the law is the mainstreaming of

580 *Id.* at 17 (Philippine Climate Change Framework).

581 *Id.* at 20 (The Mitigation Pillar, para. 2).

582 *Id.* at 17 (Philippine Climate Change Framework).

583 *Id.* at 27 (The Adaptation Pillar, para. 1).

584 Republic of the Philippines Intended Nationally Determined Contribution Communicated to the UNFCCC on October 2015, at 3, available at <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf>.

585 An Act Strengthening the Philippine Disaster Risk Reduction and Management System, Providing For the National Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan, Appropriating Funds Therefor and for Other Purposes [Philippine Disaster Risk Reduction and Management Act of 2010], Republic Act No. 10121 (2010).

586 *Id.* § 2 (d).

disaster risk reduction in several sectors including land-use planning, budget, infrastructure, education, health, environment, and housing; and the creation of disaster risk reduction offices in every province, city, and municipality.

In 2012, the People's Survival Fund was established to finance the adaptation programs and projects based on the NFSCC and the NCCAP. It has an annual allocation of at least one billion Pesos, which may be augmented by donations, endowments, grants and contributions.⁵⁸⁷ However, to date, only six (6) approved climate change projects utilizing the said fund have been approved. These are: 1) Disaster Risk Reduction & Management Response as Coping Mechanism to Resiliency in Lanuza, Surigao del Sur; 2) Siargao Climate Field School for Farmers and Fisherfolk in the Municipality of Del Carmen, Siargao Islands, Surigao del Norte; 3) Building Resilience through Community-based Ecological Farming in San Francisco, Camotes Island, Cebu; 4) Promoting Resiliency and Climate-Informed Gerona in Gerona, Tarlac; 5) Saub Watershed Ecosystem Rehabilitation and Flood Risk Reduction for Increased Resilience to Climate change and Natural Hazards in Sarangani; and 6) Establishment and Sustainable Management of River Ecosystem in Kitcharao, Agusan del Norte.⁵⁸⁸

Several sectoral laws and policies, including the National Environmentally Sustainable Transport Strategy for the Philippines (2011), the Energy Efficiency Roadmap 2014-2030 (2013), Institutionalizing the Philippine Greenhouse Gas Inventory Management and Registry System (2014), the Philippine Green Building Code (2015), the Philippine Masterplan for Climate Resilient Forestry Development (2016), the Philippine Energy Plan 2016-2030 (2016) and the Philippine Green Jobs Act (2016) were then instituted. These were in addition to sectoral legislation already in place to regulate the utilization of resources, such as the National Integrated Protected Areas System Act of 1992, the Ecological Solid Waste Management Act of 2000, the Electric Power Industry Reform Act of 2001, the Philippine Clean Water Act of 2004, the Biofuels Act of 2006, the Oil Compensation Act of 2007 and the Renewable Energy Act of 2008, among others.

During the last quarter of 2020, after Super Typhoon Vamco (local: Ulysses) battered the Philippines and caused massive floods and deaths, the House of Representatives

587 An Act Establishing the People's Survival Fund to Provide Long-Term Finance Streams to Enable the Government to Effectively Address the Problem of Climate Change, Republic Act No. 10174, § 13.

588 Climate Change Commission, Approved Projects, available at <https://climate.gov.ph/our-programs/climate-finance/peoples-survival-fund>.

passed House Resolutions No. 1377 and 535, seeking to declare a climate emergency and enjoining a “whole-of-government, whole-of-society, and whole-of-nation policy response to anticipate, halt, reduce, reverse, address, and adapt to its impacts, consequences, and causes.”⁵⁸⁹ Although non-binding, the resolution expressed the general sentiment of local representatives—or half of the bicameral Congress. A similar bill⁵⁹⁰ is pending before the Senate. Several local government units have also declared climate emergencies in their localities.

In 2015, the Philippines communicated its intended Nationally Determined Contribution (INDC) to the UNFCCC, pledging “GHG (CO₂e) emissions reduction of about 70% by 2030, relative to its BAU scenario of 2000-2030.”⁵⁹¹ This was anchored on reducing carbon emissions by the energy, transport, waste, forestry, and industry sectors. However, “the mitigation contribution is conditioned on the extent of financial resources, including technology development and transfer, and capacity building, that will be made available to the Philippines.”⁵⁹² In 2017, the Philippines submitted its Instrument of Accession to the Paris Agreement, with an express provision that the country’s first NDC will be submitted before 2020. However, it was only on 15 April 2021, that the said NDC was communicated to the UNFCCC.

Through its NDC submission in 2021, the Philippines projected a

... GHG emissions reduction and avoidance of 75%, of which 2.71% is unconditional and 72.29% is conditional, representing the country’s ambition for GHG mitigation for the period 2020 to 2030 for the sectors of agriculture, wastes, industry, transport, and energy. This commitment is referenced against a projected business-as-usual cumulative economy-wide emission of 3,340.3 MtCO₂e 12 for the same period.⁵⁹³

589 A Resolution Declaring a Disaster and Climate Emergency, H. Res. No. 535, 18th Cong., 1st Reg. Sess. (2019).

590 An Act Declaring Climate Change Emergency and Enhancing Resiliency and Adaptability to The Effects of Climate Change, S.B. No. 1964, 18th Cong., 2d Reg. Sess. (2020).

591 *Id.*

592 *Id.*

593 United Nations Framework Convention on Climate Change, NDC Registry (Republic of the Philippines Nationally Determined Contribution Communicated to the UNFCCC on 15 April 2021), available at <https://unfccc.int/sites/default/files/NDC/2022-06/Philippines%20-%20NDC.pdf> [hereinafter Philippine NDCs].

It was also stated that “[t]he implementation of the mitigation commitments shall be undertaken through bilateral, regional and multilateral cooperation,” and “market and non-market mechanisms under Article 6 of the Paris Agreement.”⁵⁹⁴

The NDC is anchored on enhanced access to climate finance, technology transfer and development, and capacity building.

Noticeably, the NDC mitigation commitment is 5 percent higher than that indicated in the INDC. The NDC likewise promotes education, public awareness, and meaningful inclusive collaboration with vulnerable sectors, and “upholds the importance of ensuring ecosystems integrity and promoting the country’s obligations on human rights and the rights of indigenous peoples.”⁵⁹⁵

The Judiciary also plays and continues to play a significant role in environmental protection. In the oft-cited case of *Oposa v. Factoran*,⁵⁹⁶ the Supreme Court recognized the right of current and future generations to a balanced and healthful ecology. The Court, in *MMDA v. Concerned Residents of Manila* mandated the clean-up of *Manila Bay through a Writ of Continuing Mandamus*⁵⁹⁷—an order not usually used in environmental cases.

In 2009, the Supreme Court issued the Rules of Procedure for Environmental Cases,⁵⁹⁸ which introduced the *Writ of Kalikasan*, a special civil action

on behalf of persons whose constitutional right to a balanced and healthful ecology is violated, or threatened with violation, by an unlawful act or omission of a public official or employee, or private individual or entity, involving environmental damage of such magnitude as to prejudice the life, health or property of inhabitants in two or more cities or provinces.⁵⁹⁹

This procedural remedy allows for a “citizen suit,”⁶⁰⁰ and permits any Filipino citizen—representing “minors and generations yet unborn”—to file an action

594 *Id.*

595 *Id.*

596 *Oposa v. Factoran, Jr.*, G.R. No. 101083, 224 SCRA 792 (1993).

597 *Metropolitan Manila Development Authority v. Concerned Residents of Manila Bay*, G.R. Nos. 171947-48, 574 SCRA 661 (Dec. 18, 2008).

598 RULES OF PROCEDURE FOR ENVIRONMENTAL CASES, A.M. No. 09-6-8-SC (Apr. 29, 2010).

599 *Id.* (Rule 7).

600 *Id.* (Part II, Civil Procedure, Rule 2, Section 5. Citizen suit. — Any Filipino citizen in representation of

for violations of environmental laws. The Court, in *Metropolitan v. Concerned Residents of Manila Bay* affirmed that the need to give animals (in this case resident marine mammals of the Tañon Strait) “legal standing has been eliminated by our Rules [for Environmental Cases], which allow any Filipino citizen, as a steward of nature, to bring a suit to enforce our environmental laws.”⁶⁰¹

The Rules of Procedure for Environmental Cases further provide that when there is a lack of full scientific certainty in establishing a causal link between human activity and environmental effect, the court shall apply the *precautionary principle* in resolving the case before it and the constitutional right of the people to a balanced and healthful ecology shall be given the benefit of the doubt.⁶⁰² Section 2 of said rules provide for the standards to be used by courts in applying the precautionary principle to environmental cases, *viz.*:

SEC. 2. *Standards for application.*—In applying the precautionary principle, the following factors, among others, may be considered: (1) threats to human life or health; (2) inequity to present or future generations; or (3) prejudice to the environment without legal consideration of the environmental rights of those affected.

In *Osmeña v. Garganera*,⁶⁰³ the Supreme Court declared that while it has “jurisdiction and power to decide cases, [it] is not precluded from utilizing the findings and recommendations of the administrative agency on questions that demand the exercise of sound administrative discretion requiring the special knowledge, experience, and services of the administrative tribunal to determine technical and intricate matters of fact.”⁶⁰⁴ The court emphasized that the *Writ of Kalikasan* was designed to give stronger protection for environmental rights; provide speedy and effective resolution to cases involving violations of the right to a healthful and balanced ecology that transcends political and territorial boundaries; and to address the potentially exponential nature of large-scale ecological threats.⁶⁰⁵

others, including minors or generations yet unborn, may file an action to enforce rights or obligations under environmental laws. Upon the filing of a citizen suit, the court shall issue an order which shall contain a brief description of the cause of action and the reliefs prayed for, requiring all interested parties to manifest their interest to intervene in the case within fifteen (15) days from notice thereof. The plaintiff may publish the order once in a newspaper of a general circulation in the Philippines or furnish all affected barangays copies of said order.)

601 Resident Marine Mammals v. Reyes, G.R. No. 180771 (2015).

602 RULES OF PROCEDURE FOR ENVIRONMENTAL CASES (Section 1, Rule 20, Evidence, Part V).

603 *Osmeña v. Garganera*, G. R. No. 231164 (Mar. 20, 2018) [hereinafter *Osmeña v. Garganera*].

604 *Osmeña v. Garganera*, citing *West Tower Condominium Corporation v. First Philippine Industrial Corporation*, 760 Phil. 304, 339 (2015).

605 See *Segovia, et al., v. The Climate Change Commission*, G.R. No. 211010 (Mar. 7, 2017), citing *Osmeña v. Garganera*.

However, to date, there are no Philippine laws, policies, or jurisprudence on the intersectionality between business and Human rights, on the one hand, and climate change, on the other.

The Philippines has a wide-ranging set of laws, policies, and institutions seeking to address the impacts of climate change. Both national laws and sectoral policies integrate climate mitigation and adaptation plans into their development plans. In fact, Margareta Wahlström, special Disaster Risk Reduction representative of the United Nations Secretary General, in a press conference said the country has “an excellent legal framework for disaster risk reduction and an excellent framework for climate adaptation.”⁶⁰⁶

Despite this, GHG emissions continue to rise, and thousands of Filipinos continue to perish, become sick, or suffer the loss of heritage and properties. The problem is found in the weak enforcement of laws. Even with lofty international pledges on emission cuts and dedicated climate legislation, implementation depends on the political will of the ruling administration—leaving much to the caprice of politicians.

The Philippine government exhibits mediocre actions to meet the Paris Agreement climate commitments. Actions from the Executive are inconsistent with Legislative resolutions—with moves to reopen closed mines,⁶⁰⁷ continuous coal-based electricity generation, coal expansion,⁶⁰⁸ and public declarations by the President suggesting that international climate conferences are useless.⁶⁰⁹

The Commission thus recommends the following to the Philippine government:

606 Michael Lim Ubac, *UN lauds Philippines' Climate Change Laws 'World's Best'*, PHILIPPINE DAILY INQUIRER, May 4, 2012, available at <https://globalnation.inquirer.net/35695/un-lauds-philippines%E2%80%99-climate-change-laws-%E2%80%98world%E2%80%99s-best%E2%80%99>.

607 Department of Environment and Natural Resources, *In the News: Strategic Communication and Initiatives Service (2020)*, available at https://www.denr.gov.ph/images/Online_News_Monitoring/DENR_Online_News_Monitoring_07_27_2020.pdf.

608 Department of Energy, *Coal Overview*, available at <https://www.doe.gov.ph/coal-overview>.

609 Pia Ranada, *Duterte Slams Climate Change Conferences for Accomplishing 'Nothing'*, RAPPLER, May 31, 2019, available at <https://www.rappler.com/nation/duterte-slams-climate-change-conferences-accomplishing-nothing>.

1. Recommendations Particular to the Executive Department

a. Commit to the Implementation of the UNGP-BHR and Formulate a National Action Plan on Business and Human Rights

The government should make a clear commitment to the UNGP-BHR and bring to life its three pillars: the State duty to protect human rights; the corporate responsibility to respect human rights; and access to remedies for human rights abuses. In line with this, the government should provide a clear policy on business and human rights, codify the expected conduct of businesses, promote an understanding of how bringing human rights to the forefront of business practices stimulates success, and design remediation measures for victims of corporate human rights abuses.

The Commission recommends the adoption of a National Action Plan on Business and Human Rights (NAP) to support the implementation of the UNGP-BHR, and ensure that business enterprises, in the conduct of their activities, do not infringe on the fundamental freedoms of individuals and communities.

The NAP must: 1) summarize and review all government initiatives in relation to business and human rights; 2) ensure policy coherence by identifying gaps and including new measures in furtherance of the implementation of the UNGP-BHR; 3) provide information on how private actors might violate human rights, including directives on due diligence processes and prevention actions; 4) require accountability for human rights abuses by corporations and private business enterprises; 5) stipulate victim-centric legal and non-legal mechanisms for redress of business-related human rights violations; and 6) contain monitoring provisions to guarantee continuous compliance by business enterprises.

The Commission also recommends forming an interdepartmental and multi-stakeholder working group to design the initial NAP and thereafter conduct regular reviews and follow-ups.

b. Declare a Climate and Environmental Alert

The government must recognize the need for urgent measures to address the impacts of climate change. There must be an acknowledgement that anthropogenic climate change, if left unmitigated, can and will lead to global extinction; that existing measures to combat its consequences must be improved; and that long-term measures for adaptation, mitigation, and resiliency must be translated to concrete actions.

The declaration must specify in no uncertain terms the need to address climate action as a national priority and require the (a) mainstreaming of climate science and climate response into national and local policies and legislation; (b) alignment of sectoral development priorities and socioeconomic development plans with climate targets; (c) mobilization and proper allocation of international and domestic financial resources; (d) involvement of the private sector in climate actions; and (e) the immediate and just transition to a low-carbon economy.

c. Revisit the NDC

The NDC mentions GHG mitigation targets for the agriculture, wastes, industry, transport, and energy sectors but fails to mention the forestry sector—seemingly disregarding the importance of forest covers as effective carbon sinks, and the contribution of deforestation and change in land cover to the net release of CO₂ and rise in global temperatures.⁶¹⁰ The Commission recommends the revision of the NDC to include the forestry sector in GHG mitigation—not just adaptation targets.

The Commission also recommends including sectoral baseline data to serve as a basis for the evaluation of the effectiveness of climate policies and projects for each sector.

610 IPCC, 2019: *Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.

Further, the Commission recommends the inclusion of concrete methodologies and investment plans to ensure implementation across all sectors, enhance access to climate finance, and to get policy support from other States.

Last, and perhaps most important, is the need to increase the 2.71 percent unconditional targets. The government must avoid reliance on external support offered by undetermined cooperation agreements as these are often dependent on the will of higher-income states. The Commission recommends that the Climate Change Commission revisit the targets set in the NDC to genuinely achieve the goals set in the Paris Agreement.

d. Implement Coal Moratoriums and Spearhead Transition to Renewable Energy and Cleaner Energy Sources

In October 2020, the Department of Energy declared a moratorium on endorsements of greenfield coal power plants and emphasized the need to transition to a more flexible power supply mix that allows “the entry of new, cleaner, and indigenous technological innovations.”⁶¹¹ However, the coal moratorium does not cover projects previously approved by the Department, nor does the most recent draft Philippine Energy Plan (PEP) reflect this moratorium.

The Commission therefore recommends the formulation of a coal-exit policy to spur the transition of the country to cleaner energy sources.

Measures to create an electricity market favoring renewable energy must urgently be established. This can include: (a) tax breaks for ‘green’ investments and jobs; (b) actualization of the National Renewable Energy Program which provides the blueprint towards a triple renewable energy capacity by 2030; and (c) crafting of renewable market rules mandating renewable auctions for a more competitive electricity market. Policy measures, including subsidies for wind, solar, hydropower, and other renewable energy sources, must be

611 Press Release by Alfonso G. Cusi, Secretary, Department of Energy, *DOE Sec. Cusi Declares Moratorium on Endorsements for Greenfield Coal Power Plants* (Oct. 27, 2020), available at <https://www.doe.gov.ph/press-releases/doe-sec-cusi-declares-moratorium-endorsements-greenfield-coal-power-plants>.

designed, together with measures to improve energy efficiency standards and regulations.

e. Transition to Low-Carbon Transportation Systems

The Commission recommends adopting the Asian Development Bank (ADB) - Sustainable Transport Initiative “Avoid-Shift-Improve” approach to reduce GHG emissions from the transport sector.⁶¹² This includes policies that will discourage unnecessary travel, create more energy efficient routes, modernize railways and the public transport system, and improve vehicle energy efficiency through better inspection and enforcement.

The Commission also recommends enacting laws establishing a policy and regulatory framework for electric vehicles (EV), including infrastructure development and fiscal and non-fiscal incentives for EV manufacturers and users. This must be accompanied by the phase-out of internal combustion engines (ICE) within a reasonable time, taking into consideration the human rights of workers that may be affected by the transition.

f. Implement ‘Reducing Emissions from Deforestation and Forest Degradation Plus’ (REDD+) Measures

The UNFCCC, understanding the critical role of forests in carbon sequestration and climate change mitigation, initiated the REDD+ framework to promote the role of conservation, sustainable forest management, and forest carbon stock enhancement. Likewise, the Philippines has a National REDD+ Strategy in place. However, as with many countries, its implementation is hampered by weak governance, lack of financial and technical support, and conflicting interests with local government development plans.

The Commission recommends the strict implementation of the Philippine National REDD+ Strategy, at both the national and local levels. Local sources

612 Asian Development Bank, Addressing Climate Change in Transport, available at <https://www.adb.org/new/sectors/transport/issues#climate-change>.

must supplement funding from external sources to ensure the continuity of projects. Further, it is necessary to create and strengthen mandatory reforestation programs. A logging ban in all-natural forests must also be imposed and strictly implemented. Lastly, land-use planning and management must be made more climate and human rights-sensitive.

g. Implement Data Building and Reporting Mechanisms

The Commission recommends the passage of a framework policy mandating sharing, reporting, and verification of climate data—bringing together the country’s robust network of scientists, meteorologists, and researchers both in the government and private sector. A central database that will facilitate analysis, sharing, verification, and communication among the various stakeholders and duty-bearers will lead to effective adaptation and mitigation strategies including infrastructure development, coastal planning, climate risk reduction, and forest management. Reviews and evaluation of effectivity of climate actions must also be quantified by proper data.

2. Recommendations Particular to the Legislative Department

a. Enact Laws Imposing Legal Liabilities for Corporate or Business-related Human Rights Abuses

The Commission recommends enacting laws that mandate business compliance with the UNGP-BHR and other human rights treaties and instruments. Domestic laws must clearly set out jurisdiction over cases involving human rights abuses committed by non-state actors, provide sanctions for such abuses, and provide legally demandable reparations to the victims. This must necessarily include redress for transboundary harms felt by victims domiciled in the Philippines, regardless of juridical personality or local presence of erring corporation.

b. Amend Climate Change Act, Disaster Risk Reduction and Management Act, and Other Related Regulations to Create a Singular Climate Code

In order for the Government to have a unified, holistic, and complete approach to tackling climate change, the Commission recommends that the Philippine Climate Change Act, the Disaster Risk Reduction and Management Act, and all other related regulations be merged into one complete instrument with the following additions:

1. A legally binding GHG emissions reduction target with reference to the NDCs;
2. A five-year carbon budget or statutory cap on GHG emissions to meet reductions target;
3. Incentive mechanisms to achieve reductions target including tax breaks and subsidies for transitioning to a zero-carbon economy;
4. Fossil fuel exploration and coal plant moratorium;
5. Carbon footprint due diligence and reporting requirements for all public and private enterprises;
6. Annual government review of emission reductions and energy supply decarbonization commitment compliance;
7. Strengthening of disaster risk and climate change mitigation efforts (as opposed to the current emphasis on post-disaster relief and short-term preparedness);
8. Provisions on post-disaster support for economic recovery;
9. Redress mechanisms for victims of climate impacts including compensation for all forms of harm including human rights harm;
10. Mandate corporate contribution to a climate fund which shall be apportioned equally to mitigation, adaptation, post-disaster recovery, and victim compensation;
11. Provide a percentage tax on carbon fuel profits after company taxes to fund climate education;
12. Penal provision for non-compliance with any provisions of the Code.

3. Recommendations Particular to the Judiciary

a. Design and Implement Rules of Evidence for Attributing Climate Change Impacts and Assessing Damages

There is a distinction between the science of event attribution and the establishment of legal causation. Event attribution is not a direct reconstruction of how each carbon contribution of an individual caused damage through climate change. Instead, it seeks to establish: (a) whether the likelihood or strength of a natural event has changed in the observational record, and (b) whether this change is consistent with the anthropogenic influence as found in one or more climate models.

Assessment of the “Fraction of Attributable Risk”⁶¹³ is often misunderstood and misapplied in the context of legal causation where a clear unbroken chain of events leading up to the injury or damage is necessary to establish liability.

In many jurisdictions, courts evaluate evidence linking actors to climate-related losses using the stringent standards of legal causation. This disregards the work of climate and attribution science, and causes more climate injustice.

The Commission therefore recommends that the judiciary take notice of developments in the science of attribution when considering legal causality in assessing climate change impacts and damages.

b. Take Judicial Notice of the Anthropogenic Nature of Climate Change

The scientific community has long reached a consensus that climate change is induced by human activity. In the Sixth Assessment Report (AR6), the IPCC stated that it is unequivocal that the climate change currently being experienced is anthropogenic in origin. As discussed in earlier chapters, it has been concluded that human activities have caused significant changes in the key global climate change indicators. In light of this uncontroverted evidence, courts should take judicial notice that climate change is unequivocally anthropogenic, as supported by incontrovertible data.

613

Kevin E. Trenberth, John T. Fasullo, & Theodore G. Shepherd, *Attribution of Climate Extreme Events*, 5 NAT. CLIM. CHANG. 725 (2015), available at <https://doi.org/10.1038/nclimate2657>.



REPUBLIC OF THE PHILIPPINES
COMMISSION ON HUMAN RIGHTS

RESOLUTION
CHR (V) No. POL2022-017

The Commission **RESOLVES** to **ADOPT** the attached National Inquiry on Climate Change Report, submitted by Commissioner Roberto Eugenio T. Cadiz.

SO RESOLVED.

Done this 4th day of May 2022 in Quezon City, Philippines.

LEAH C. TANODRA-ARMAMENTO
Chairperson


KAREN S. GOMEZ-DUMIT
Commissioner


GWENDOLYN LL. PIMENTEL-GANA
Commissioner


ROBERTO EUGENIO T. CADIZ
Commissioner

ATTESTED BY:


MARIA ASUNCION I. MARIANO-MARAVILLA
Commission Secretary

CHR: Dignity of all

Commonwealth Avenue, U.P. Complex, Diliman 1101 Quezon City Philippines
Tel. Nos. (02) 294 8704 (02) 925 3886



Naglilingkod
maging sino
ka man

Contact us:

SAAC Bldg., Commonwealth Ave.,
UP Complex, Diliman Quezon City

Public Assistance and Complaints Desk
(0936) 068 0982 (TM) | (0920) 506 1194 (Smart)
(02) 8294-8704

www.chr.gov.ph

     [chrgovph](#)

2022 | COVER DESIGN BY

STRATCOMM
D I V I S I O N