

The logo for CEUB (Centro Universitário de Brasília) features the letters 'CEUB' in a bold, white, sans-serif font. The letter 'B' is stylized with a vertical line through its center, resembling a beta symbol.

EDUCAÇÃO SUPERIOR

ISSN 2236-1677

The cover image shows a large, white, modern building with a prominent, abstract, curved facade. In the foreground, a large, white, abstract sculpture of a seated figure is visible. The background features a tall, modern building under a blue sky with scattered clouds. The overall scene is set in a well-maintained urban environment with greenery and a paved area.

REVISTA BRASILEIRA DE POLÍTICAS PÚBLICAS  
BRAZILIAN JOURNAL OF PUBLIC POLICY

**Climate change and business development:** a critical analysis of ways to achieve sustainable development

**Mudanças climáticas e desenvolvimento empresarial:** uma abordagem para alcançar o ambiente, social e governança (ESG)

Mona Mahecha

Monika Punia

VOLUME 13 • Nº 1 • ABR • 2023

PROBLEMAS E PERSPECTIVAS DA RELAÇÃO ENTRE O DIREITO PENAL, O DIREITO PROCESSUAL PENAL E A POLÍTICA CRIMINAL

# Sumário

<b>FUNDAMENTOS DO SISTEMA JURÍDICO-PENAL.....</b>	<b>13</b>
<b>EDITORIAL .....</b>	<b>15</b>
<b>AS RELAÇÕES DE COMPLEMENTARIDADE ENTRE DIREITO PENAL, DIREITO PROCESSUAL PENAL E POLÍTICA CRIMINAL.....</b>	<b>19</b>
Felipe da Costa De-Lorenzi, Guilherme Francisco Ceolin e Bruno Tadeu Buonicore	
<b>FINALIDADES E FUNÇÕES DO PROCESSO PENAL.....</b>	<b>42</b>
Cornelius Prittwitz	
<b>O STATUS ONTOLÓGICO DOS ESTADOS MENTAIS .....</b>	<b>52</b>
Carl-Friedrich Stuckenberg	
<b>REFLEXÕES SOBRE O SISTEMA PUNITIVO BRASILEIRO: PRISÃO, DIREITO À NÃO AUTOINCRIMINAÇÃO E PRESUNÇÃO DE INOCÊNCIA.....</b>	<b>67</b>
Luís Roberto Barroso e Andre Luiz Silva Araujo	
<b>DIREITO PENAL .....</b>	<b>85</b>
<b>A TENTATIVA NA OMISSÃO IMPRÓPRIA: UM ESBOÇO SOBRE A DELIMITAÇÃO ENTRE ATOS PREPARATÓRIOS E INÍCIO DA EXECUÇÃO.....</b>	<b>87</b>
Guilherme Góes e Janice Santin	
<b>TUTELA PENAL DO CLIMA: DA IMPORTÂNCIA DA TEORIA DO BEM JURÍDICO À AUTONOMIA DO EQUILÍBRIO CLIMÁTICO DIANTE DO BEM AMBIENTAL .....</b>	<b>110</b>
Marcelo Bauer Pertille	
<b>POR UMA DETRAÇÃO COMPENSATÓRIA ENQUANTO DISPOSITIVO DE UMA POLÍTICA CRIMINAL REDUTORA DE DANOS.....</b>	<b>130</b>
Patricia Carlos Magno e Leonardo Furtado Carvalho	
<b>DIREITO PROCESSUAL .....</b>	<b>159</b>
<b>DO PROCESSO-ROCCO AO PROCESSO-RISCO: O PARADIGMA NEGOCIAL TORNANDO DÉMODÉE A CONSTITUCIONALIZAÇÃO DO PROCESSO PENAL BRASILEIRO .....</b>	<b>161</b>
Rui Carlo Dissenha e Ana Paula Kosak	
<b>UM SISTEMA DE INFORMANTES? NOTAS SOBRE O DIREITO AO CONFRONTO E O ESTÍMULO A UMA JUSTIÇA CRIMINAL UNDERGROUND .....</b>	<b>180</b>
Ruiz Ritter e Ricardo Jacobsen Gloeckner	

<b>A PRESUNÇÃO DE INOCÊNCIA E A INCONSTITUCIONALIDADE DO ARTIGO 492, I, “E”, DO CÓDIGO DE PROCESSO PENAL BRASILEIRO .....</b>	<b>213</b>
Felipe Lazzari da Silveira	
<b>A FUNÇÃO GARANTISTA PROCESSUAL DOS PRINCÍPIOS RESTAURATIVOS .....</b>	<b>231</b>
Selma Pereira de Santana e Rubens Lira Barros Pacheco	
<b>POLÍTICA CRIMINAL.....</b>	<b>270</b>
<b>POLÍTICA (PÚBLICA) CRIMINAL, CIÊNCIA DO DIREITO PENAL E CRIMINOLOGIAS: APORTES PARA UMA CONSTRUTIVA RELAÇÃO DE INTERDISCIPLINARIDADE .....</b>	<b>272</b>
Marcelo Buttelli Ramos	
<b>POLÍTICA CRIMINAL: UMA POLÍTICA PÚBLICA RELATIVA À MATÉRIA CRIMINAL.....</b>	<b>293</b>
Strauss Vidrich de Souza e Fernanda Carolina de Araujo Ifanger	
<b>MONITORAMENTO PRISIONAL NO BRASIL: EXPANSÃO INSTITUCIONAL EM TEMPOS DE AMBIGUIDADE NA POLÍTICA CRIMINAL.....</b>	<b>307</b>
Guilherme Augusto Dornelles de Souza e Lígia Mori Madeira	
<b>ABOLICIONISMO E HEGEMONIA NO CAMPO DE DISCURSIVIDADE DOS SABERES PENAIS .....</b>	<b>343</b>
Lucas Villa e Bruno Amaral Machado	
<b>OUTROS TEMAS .....</b>	<b>365</b>
<b>CLIMATE CHANGE AND BUSINESS DEVELOPMENT: A CRITICAL ANALYSIS OF WAYS TO ACHIEVE SUSTAINABLE DEVELOPMENT .....</b>	<b>367</b>
Mona Mahecha e Monika Punia	
<b>O PROGRAMA INOVAR AUTO E O ALCANCE DA IGUALDADE DE COMPETIÇÃO FRENTE ÀS CLÁUSULAS DA NAÇÃO MAIS FAVORITA E DO TRATAMENTO NACIONAL DA ORGANIZAÇÃO MUNDIAL DO COMÉRCIO.....</b>	<b>385</b>
Keite Wieira	
<b>PROTEÇÃO DE DADOS E INSTITUIÇÕES DE ENSINO: O QUE FAZER COM DADOS DE ALUNOS?.....</b>	<b>402</b>
Fabrício Vasconcelos Gomes, Marcelo Castro Cunha Filho e Victor Nóbrega Luccas	
<b>THE NON-AFFILIATES IN CHINA’S POLITICAL PARTY SYSTEM: HOW TO PLAY A ROLE? .....</b>	<b>422</b>
Di Zhou	
<b>THE CHINESE ‘SHARP EYES’ SYSTEM IN THE ERA OF HYPER SURVEILLANCE: BETWEEN STATE USE AND RISKS TO PRIVACY .....</b>	<b>440</b>
Mateus de Oliveira Fornasier e Gustavo Silveira Borges	

# Climate change and business development: a critical analysis of ways to achieve sustainable development\*

## Mudanças climáticas e desenvolvimento empresarial: uma abordagem para alcançar o ambiente, social e governança (ESG)

Mona Mahecha\*\*

Monika Punia\*\*\*

### Abstract

Climate change is one of the most significant issues of current times. The role that businesses play in the issue of climate change is extremely important. Economies that are driven by business are responsible for a considerable share of the carbon emissions that constitute a big contributor to climate change. The objective of the study is to find out the role and responsibility of businesses in climate change and to critically analyse the efforts done on national and international level to achieve sustainable development. UN Guiding Principles on Business and Human Rights 2011 imposes duty on the businesses to respect human rights. Considering this duty, businesses have duty to avoid causing environmental harm because it adversely impacts human rights. By using the doctrinal methodology through primary and secondary sources present paper first discusses environmental harms which causes climate change arising from the business activities and duty of the state to protect the human rights from climate change. Further it includes discussions about the regulations at international and national level which imposes responsibility on businesses to respect human rights and related issues. Finally, we conclude that most of the businesses are following the regulations imposed by government for the namesake only and also, they are indulged in greenwashing and still businesses accountability is not clear. Most proposed changes attempt to discuss that government should make the stakeholders aware about all the policies and make a clear distinction between environmental protective and environmentally friendly.

**Keywords:** business; human rights; climate change; UNGP; sustainability.

### Resumo

As mudanças climáticas são um dos problemas mais significativos da atualidade. As economias impulsionadas pelos negócios são responsáveis por uma parcela considerável das emissões de carbono que causam as mudanças climáticas. O objetivo deste estudo é descobrir o papel e a responsabilidade das empresas para um crescimento sustentável e examinar criticamente

\* Recebido em 23/12/2022  
Aprovado em 26/05/2023

\*\* Doctorate (PhD) of Law at Jai Narain University. Assistant Professor, School of Law, Manipal University Jaipur. Email id- mahecha.mona@gmail.com Contact no.- 9929513558.

\*\*\* PhD Candidate of Law at Manipal University Jaipur. Assistant Professor, Manipal Law School, Manipal Academy of Higher Education. Email id - monika.punia@manipal.edu Contact no.- 9415008016



os esforços feitos em nível nacional e internacional para combater as mudanças climáticas. Os Princípios Orientadores das Nações Unidas sobre Empresas e Direitos Humanos de 2011 impõem às empresas o dever de respeitar os direitos humanos e, portanto, as empresas devem evitar causar danos ao meio ambiente para cumprir seu dever. Por fim, concluímos que a maioria das empresas está seguindo as regulamentações apenas nominalmente e está envolvida em “greenwashing” e, ainda assim, a responsabilidade das empresas não está clara. A maioria das mudanças propostas tenta discutir que o governo deve conscientizar os stakeholders sobre as políticas relevantes e fazer uma clara distinção entre medidas de proteção ambiental e medidas ecologicamente corretas.

**Palavras-chave:** negócios; direitos humanos; mudanças climáticas; Princípios Orientadores das Nações Unidas; sustentabilidade.

## 1 Introduction

The existence of all species in the planet is crucially dependent upon ecological balance and climate change is the main cause for ecological imbalance. The number of “greenhouse gases” that are naturally present in the atmosphere are considered to be increasing as a result of human industrial activity. The greenhouse gases (GHG) that are released into the atmosphere due to human activity or natural sources function as a blanket to prevent the earth’s heat from escaping into space, raising the earth’s temperature and causing fluctuation in the global climate that causes Climate Change.<sup>1</sup> This Climate change directly affects the enjoyment of Human Rights. In addition, the effects of climate change tend to worsen existing inequalities and have a disproportionately negative impact on individuals, communities, and populations that are already in precarious positions, such as children, indigenous peoples, and people with disabilities. One of the major reasons of climate change is Business.<sup>2</sup>

Today’s economy is business driven economy. Business has an impact on the environment, but it also benefits from environmental products, therefore there is a direct connection between business and climate change. Some of the business activities which produce greenhouse gases are deforestation, burning of fossil fuels, use of chlorofluorocarbons in refrigeration manufacturing, landfill emissions, septic systems that enhance and target the fermentation process etc. The problem had long since become a source of great concern. This led to a variety of actions being done by various agencies and groups within society to prevent the destruction of the earth. Government officials had created a number of policies in this regard, society had raised issues by encouraging the purchase of eco-friendly products, and international organisations had been involved in developing global standards for green business operations and, as a result, promoting green business activities. However, we have struggled for long now to strike a balance between human right to development and protection of environment, both falling in the category of third generation of human rights. At national and international level various declarations, conventions, laws, regulation etc were framed for keeping a check on business activities resulting into environmental degradation.<sup>3</sup> The entire concept of sustainability was built on attaining the balance between the two major rights of development and environment protection. After missing deadlines to meet the goals and agenda set by different international conventions and protocols, we are still out there finding solutions to mitigate the problem of climate change.<sup>4</sup> Majority

<sup>1</sup> ENVIRONMENTAL AND ENERGY BUSINESS RESOURCES. Human contributions to climate change. *Environ Business*, [2015]. Available at: <https://www.environbusiness.com/cchangemain/cchuman>. Access on: 19 June 2022.

<sup>2</sup> UNITED NATIONS HUMAN RIGHTS. Human rights, climate change and business. *OHCHR*, [202-?]. Available at: <https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>. Access on: 19 June 2022.

<sup>3</sup> LI, Hongbo. The conflict and the balance between the right to development and the right to the environment. *China Human Rights*, 2017. Available at: [http://www.chinahumanrights.org/html/2017/MAGAZINES\\_0627/8447.htm](http://www.chinahumanrights.org/html/2017/MAGAZINES_0627/8447.htm). Access on: 27 July 2022.

<sup>4</sup> LEAHY, Stephen. Most countries aren’t hitting 2030 climate goals, and everyone will pay the price. *National Geographic*, 6 Nov. 2019. Available at: <https://www.nationalgeographic.com/science/article/nations-miss-paris-targets-climate-driven-weather-events->

of the countries including India have forgotten their pledge taken at Glasgow summit and are nowhere close to meeting 2030 targets of reducing carbon emissions and global temperature levels.<sup>5</sup> Still India ranks as the seventh most climate-vulnerable nation and worst in fatalities (2267) among top 10 most affected countries, according to the Global Climate Risk Index 2021.<sup>6</sup>

## 2 Corporate Social Irresponsibility

Corporate Social Irresponsibility (CSI) can be defined as “business doing wrong in relation to the environment, community, society, ethics, and business practices. CSI is when things go wrong in relation to profitability, the environment, and people (customers, suppliers, or employees)”.<sup>7</sup> Refraining from social irresponsible behaviour is one approach for businesses to reduce the danger of CSI. Yet another option is for businesses to use CSR as a way to counteract CSI.<sup>8</sup> Though coming with a counteract mechanism which in itself is not infallible to stop or reduce carbon emission cannot be considered as a solution. CSR activity by businesses could be taken as their contribution in development of a country as a stakeholder however it cannot be counted as justification of carbon emissions which big corporations are involved into doing.

Businesses are the most significant source of carbon emission. New evidence suggests that some corporate leaders have been actively trying to hide facts, weaken regulatory measures, and sway public opinion about the causes and effects of climate change. The government’s role here is to do the Environment Impact Assessment (EIA)<sup>9</sup> of any proposed factory or business setup. The regulatory bodies must not just only be relying on the documents submitted by the businesses for getting the permissions and licences but an introspection by the licensing authorities must also be done to check the adverse impacts of newly coming projects on the climate change. The process of EIA helps in predicted environmental consequences of developmental projects and to ensure that potential environmental hazards could be foreseen and could be resolved at an early stage.

The already established businesses have been given two tasks as a stakeholders to contribute in environment protection – first, to minimise greenhouse gas emissions from their own businesses and supply chains as quickly as possible and second, to support effective climate regulation.<sup>10</sup>

---

cost-billions. Access on: 27 July 2022.

<sup>5</sup> LO, Joe. Gap to 1.5C yawns, as most governments miss UN deadline to improve climate plans. *Climate Home News*, 26 Sept. 2022. Available at: <https://www.climatechangenews.com/2022/09/26/gap-to-1-5c-yawns-as-most-governments-miss-un-deadline-to-improve-climate-plans/>. Access on: 13 Oct. 2022.

<sup>6</sup> TRIVEDI Divya. India among countries worst affected by climate change: Global Climate Risk Index 2021. *The Hindu*, 25 Jan. 2021. Available at: <https://frontline.thehindu.com/dispatches/india-among-countries-worst-affected-by-climate-change-according-to-global-climate-risk-index-2021/article33659497.ece>. Access on: 13 Nov. 2022.

<sup>7</sup> JONES Brian. Corporate social irresponsibility. In: IDOWU, S. O.; CAPALDI, N.; ZU, L.; GUPTA, A. D. (ed.). *Encyclopedia of corporate social responsibility*. Berlin, Heidelberg: Springer, 2013. Available at: [https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8\\_650](https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8_650). Access on: 7 Sept. 2022.

<sup>8</sup> JONES Brian. Corporate social irresponsibility. In: IDOWU, S. O.; CAPALDI, N.; ZU, L.; GUPTA, A. D. (ed.). *Encyclopedia of corporate social responsibility*. Berlin, Heidelberg: Springer, 2013. Available at: [https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8\\_650](https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8_650). Access on: 7 Sept. 2022.

<sup>9</sup> THE RIO declaration on environment and development. Principle 17. 1992. Available at: [https://www.iau-hesd.net/sites/default/files/documents/rio\\_e.pdf](https://www.iau-hesd.net/sites/default/files/documents/rio_e.pdf). Access on: 18 Sept. 2022.

<sup>10</sup> SCHENK, Lynn; GERDEMAN, Dina. What’s the role of business in confronting climate change? *Harvard Business School*, 30 Nov. 2021. Available at: <https://hbswk.hbs.edu/item/whats-the-role-of-business-in-confronting-climate-change>. Access on: 18 Sept. 2022.

### 3 Greenwashing

“Greenwashing” is a typical marketing strategy used to make things appear more environment friendly than they are. Businesses employ “greenwashing” to attract environmentally conscious clients without changing their business operations.<sup>11</sup>

Single-use plastics are a notable example of the issue with greenwashing. According to the findings of Global Analysis of All Plastics, out of the 8.3 billion metric tonnes that have been manufactured, 6.3 billion metric tonnes have been transformed into waste plastic. Of that, only nine percent has been recycled. Seventy-nine percent of it—the significant proportion becoming waste in the environment or building up in landfills. The oceans, the last sink, receive a large portion of it. If things keep moving in the same direction as they have been, there will be 12 billion metric tonnes of plastic in landfills by the year 2050.<sup>12</sup> Claire Arkin, the Global Alliance for Incinerator Alternatives’ communications coordinator, stated in a report published by Yale Climate Connections, “Plastic pollution is not just an oceans issue. It’s a climate issue and it’s a human health issue”.<sup>13</sup>

Plastics are made from fossil fuels including coal, gas, and oil. Using fracking, it is possible to extract oil and natural gas from the earth. The process of obtaining and transporting these fossil fuels generates a significant amount of greenhouse gases. Land disturbance is another factor that adds to the emissions of greenhouse gases linked with extraction. Additionally, usage of non-reusable and non-degradable plastic is becoming a major threat to environment sustainability and increasing the pollution levels. As per the reports, plastic waste globally has doubled from the year 2000 and only a miniscule of this waste is recycled.<sup>14</sup> According to the Report of Centre of International Environmental Law, “Plastic and Climate: The hidden Cost of a Plastic Planet” published in May 2019, even the refinement process of plastic produces a lot of greenhouse gases.<sup>15</sup> During the Covid-19 outbreak as a measure of one time use and social distancing rampant plastic use happened in form PPE kit, masks, gloves, food and grocery packaging etc. However, plastic as a protector against corona soon have become a major polluter of plastic waste in landfills, oceans and is mismanaged at a huge level.<sup>16</sup>

To overcome the problem of this traditional plastics, whose production is based on petrochemicals, companies are shifting towards Bioplastics which are made from bio-based polymers. This material is considered good for environment. But the process of decomposition of bioplastics involves access to oxygen and sunlight.<sup>17</sup> There is scarcity of the oxygen on the planet, as forests have turned into residential colonies.

Many times, Companies use greenwashing technique as a market strategy. It involves –

1. emphasise the environmental characteristics of their goods while purposefully omitting bad

<sup>11</sup> NOYES, Lydia. A guide to greenwashing and how to spot it. *Ecowatch*, 26 Nov. 2022. Available at: <https://www.ecowatch.com/greenwashing-guide-2655331542.html>. Access on: 30 Nov. 2022.

<sup>12</sup> PARKER, Laura. Here’s how much plastic trash is littering the earth. *National Geographic*, 20 Dec. 2018. Available at: <https://www.nationalgeographic.com/science/article/plastic-produced-recycling-waste-ocean-trash-debris-environment>. Access on: 28 Oct. 2022.

<sup>13</sup> BAUMAN Brooke. How plastics contribute to climate change. *Yale Climate Connections*, 20 Aug. 2019. Available at: <https://yale-climateconnections.org/2019/08/how-plastics-contribute-to-climate-change/>. Access on: 28 Oct. 2022.

<sup>14</sup> BEST, Shivali. Plastic waste has more than DOUBLED globally since 2000, report warns. *Daily Mail Online*, 22 Feb. 2022. Available at: <https://www.dailymail.co.uk/sciencetech/article-10539719/Plastic-waste-DOUBLED-globally-2000-report-warns.html>. Access on: 10 Oct. 2022.

<sup>15</sup> CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW. Plastic and climate: the hidden cost of a plastic planet. *CIEL*, May 2019. Available at: <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>. Access on: 10 Oct. 2022.

<sup>16</sup> PARASHAR, Neha; HAITT, Subrata. Plastics in the time of COVID-19 pandemic: protector or polluter? *The Science of the total environment*, v. 759, 10 Mar. 2021. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7726519/>. Access on: 10 Oct. 2022.

<sup>17</sup> NOYES, Lydia. A guide to greenwashing and how to spot it. *Ecowatch*, 26 Nov. 2022. Available at: <https://www.ecowatch.com/greenwashing-guide-2655331542.html>. Access on: 30 Nov. 2022.

ones. For instance, an automaker might highlight a car's fuel economy while omitting the lithium battery's production from environmentally hazardous mining techniques.

2. A new change might be promoted by brands as being green while ignoring any negative consequences. To reduce plastic waste, Starbucks, for instance, released lids without straws, yet these new lids consumed more plastic than the old ones did.
3. Companies are focusing on advertisement tactics for the sole purpose of increasing sales without providing certifications or other supporting documentation, the corporation may assert that it is eco-friendly. (A light bulb is advertised as being energy-efficient without any proof).
4. claiming to be more ecologically friendly than other products in its category notwithstanding the possibility that the category as a whole is not.
5. utilising terms that, while technically accurate, mislead consumers about the items they are purchasing.

Marketing things in attractive packaging is often all it takes to pass off an item as green. Without specifically stating it on the packaging, a tissue firm may use green leaves to embellish its box and give the impression that the paper was harvested responsibly.

## 4 Instances of Greenwashing

**Volkswagen** - Volkswagen acknowledged to equipping cars with “defeat” devices to modify performance and cut emissions while the vehicles were being tested. The vehicles were emitting up to 40 times the permitted level of nitrogen oxide in real-world situations.<sup>18</sup>

**Apple** - It's beneficial for business that Apple eliminated the wall charger and earbuds from the new iPhone 12 boxes. Even if the decision saves the business money, some of the environmental advantages may be diminished if individuals choose to purchase earbuds and chargers individually as it could result in more packaging waste and emissions. The company claimed that eliminating the wall charger and earbuds will reduce the amount of mining, packaging, and carbon dioxide emissions produced during the production of the devices. Apple may be seeking to cut costs by supplying fewer accessories with its phones in order to prepare for the shift to 5G. Due to the complexity and higher cost of the components required to support 5G speeds, the iPhone 12 is more expensive to produce than the iPhone 11.<sup>19</sup>

**Amazon** - Amazon sets the baseline for many global green projects as one of the most powerful retailers in the world. The “Climate Pledge Arena” is the name Amazon chose for the first net-zero carbon certified arena in the world after winning the naming rights to a stadium in Seattle. The business committed to achieving net-zero carbon emissions by 2040 when it signed the Climate Pledge in 2019. But this Pledge was silent on the specific actions the business will take to achieve this vision. Over 75% of Amazon's emissions came from its supplier chain, which was also not addressed.<sup>20</sup>

**Nestle** - In a statement that was released by the company in 2018, it was mentioned that one of Nestle's “ambitions” was to have 100% of its packaging be recyclable or reused by the year 2025. Environmental groups and other critics criticised the company for failing to set precise targets, provide a timeframe for accomplishing them, or encourage customer recycling.<sup>21</sup> According to the annual study published by Break

<sup>18</sup> HOTTEN, Russell. Volkswagen: the scandal explained. *BBC News*, 10 Dec. 2015. Available at: <https://www.bbc.com/news/business-34324772>. Access on: 5 Nov. 2022.

<sup>19</sup> CALMA, Justine. Apple ditching chargers saves costs but not the planet. *The Verge*, 16 Oct. 2020. Available at: <https://www.theverge.com/2020/10/16/21519466/apple-iphone-12-chargers-airpods-greenhouse-gas-emissions-e-waste>. Access on: 5 Nov. 2022.

<sup>20</sup> NOYES, Lydia. A guide to greenwashing and how to spot it. *Ecowatch*, 26 Nov. 2022. Available at: <https://www.ecowatch.com/greenwashing-guide-2655331542.html>. Access on: 30 Nov. 2022.

<sup>21</sup> ROBINSON, Deena. 10 Companies and corporations called out for greenwashing. *Earth.org*, 17 July 2022. Available at: <https://earth.org/greenwashing-companies-corporations/>. Access on: 5 Nov. 2022.



Free from Plastic in 2021, Coca-Cola, PepsiCo, and Unilever were identified as the top three plastic polluters in the world.<sup>22</sup> In 2020 Companies among top 10 global Polluters according to the Brand Audit Report 2020 are Coca-Cola, PepsiCo, Nestlé, Unilever, Mondelez International, Mars, Inc., Procter & Gamble, Philip Morris International, Colgate-Palmolive, and Perfetti Van Melle.<sup>23</sup>

**Coca-Cola** – According to the annual report published by Break Free from Plastic, which was mentioned before, Coca-Cola has been ranked as the most significant source of plastic pollution in the world for the fourth year in a row. The company has maintained its dominant position for two consecutive years. Earth Island Institute, an environmental advocacy organisation, files a lawsuit against the company in June 2021 for falsely promoting its environmental friendliness and sustainability despite the fact that it is the primary contributor to plastic pollution around the world.<sup>24</sup>

**Fast Fashion Brands** - H&M, Zara, and Uniqlo, three popular clothing retailers, add to the enormous volumes of textile waste generated by the apparel industry. Only 20% of textiles that are thrown away are reused or recycled, according to the fashion non-profit ReMake, with the other 80% ending up in landfills or being burned. In 2019, H&M introduced their own “green” clothing collection called “Conscious”. The business states that it uses recycled polyester and “organic” cotton. However According to a report published in June 2021 by the Changing Markets Foundation, approximately 60% of the claims made by H&M to customers were “unsubstantiated or misleading”. According to the findings of the foundation’s investigation of fifty different brands, H&M was found to be the worst offender, having made 96 percent fraudulent claims. The report notes, “H&M’s Conscious Collection not only uses more synthetics than in its main collection, but also one in five items analyzed were found to be made from 100% fossil-fuel derived synthetic materials”.<sup>25</sup>

There are several other examples of greenwashing like in response to the European Union’s ban on the use of plastic cutlery, the largest supermarket chain in Spain, Mercadona, renamed the cutlery as “reusable” rather than giving customers with alternate options.<sup>26</sup> The Advertising Standards Authority (ASA) in the United Kingdom has banned one of Persil’s video ads for “greenwashing.” Unilever owns the laundry detergent brand.<sup>27</sup> Volkswagen’s admission of manipulating emissions testing by fitting various automobiles with a “defect” device is a perfect example of greenwashing.<sup>28</sup> Nearly 70 percent of all of the waste in the UK is composed of plastic, the majority of which is packaging made of plastic. Recycling only accounts for less than 10% of day-to-day plastic use, which includes plastic packaging.<sup>29</sup>

<sup>22</sup> BRAND audit report 2021: break free from plastic. *BRANDED*, v. 4, 2021. Available at: <https://www.breakfreefromplastic.org/wp-content/uploads/2021/10/BRAND-AUDIT-REPORT-2021.pdf>. Access on: 5 Nov. 2022.

<sup>23</sup> BRAND audit report 2021: break free from plastic. *BRANDED*, v. 4, 2021. Available at: <https://www.breakfreefromplastic.org/wp-content/uploads/2021/10/BRAND-AUDIT-REPORT-2021.pdf>. Access on: 5 Nov. 2022.

<sup>24</sup> ROBINSON, Deena. 10 Companies and corporations called out for greenwashing. *Earth.org*, 17 July 2022. Available at: <https://earth.org/greenwashing-companies-corporations/>. Access on: 5 Nov. 2022.

<sup>25</sup> GUPTA Alinda. Top 5 greenwashing scandals of the past decade. *Jump Start*, 30 Nov. 2021. Available at: <https://www.jumpstartmag.com/top-5-greenwashing-scandals-of-the-past-decade/>. Access on: 5 Nov. 2022.

<sup>26</sup> LAVILLE, Sandra. Coca-Cola among brands greenwashing over packaging, report says. *The Guardian*, 30 June 2022. Available at: <https://www.theguardian.com/environment/2022/jun/30/coca-cola-among-brands-greenwashing-over-packaging-report-says>. Access on: 5 Nov. 2022.

<sup>27</sup> GEORGE, Sarah. Greenwashing: Unilever laundry detergent ad campaign banned in the UK. *Edie*, 31 Aug. 2022. Available at: <https://www.edie.net/greenwashing-unilever-laundry-detergent-ad-campaign-banned-in-the-uk/>. Access on: 5 Nov. 2022.

<sup>28</sup> JOHNSON, Mariya. Companies that were caught for greenwashing. *Prakati*, 5 Aug. 2022. Available at: <https://www.prakati.in/companies-that-were-caught-for-greenwashing/>. Access on: 8 Nov. 2022.

<sup>29</sup> LAVILLE, Sandra. Coca-Cola among brands greenwashing over packaging, report says. *The Guardian*, 30 June 2022. Available at: <https://www.theguardian.com/environment/2022/jun/30/coca-cola-among-brands-greenwashing-over-packaging-report-says>. Access on: 5 Nov. 2022.

## 5 National Efforts

Since the beginning of the Industrial Revolution, greenhouse gas emissions (GHG) have increased significantly. In the Global Climate Risk Index 2021, published by environmental research tank and sustainable development activist Germanwatch, India was classified as the seventh worst-affected nation in 2019.<sup>30</sup>

At the 26th Conference of Parties (COP26), the Prime Minister of India, Narendra Modi, presented a strategy to achieve the goal that consisted of five steps and was given the name “Panchamrita”. These are-

- India will get its non-fossil energy capacity to 500 gigawatt (GW) by 2030
- India will meet 50 per cent of its energy requirements from renewable energy by 2030
- India will reduce the total projected carbon emissions by one billion tonnes from now onwards till 2030
- By 2030, India will reduce the carbon intensity of its economy by less than 45 per cent.
- So, by the year 2070, India will achieve the target of Net Zero<sup>31</sup>

Securities and Exchange Board of India stated in its circular<sup>32</sup> on May 10, 2021, that:

[...] in recent times, adapting to and mitigating climate change impact, inclusive growth and transitioning to a sustainable economy have emerged as major issues globally. There is an increased focus of investors and other stakeholders seeking businesses to be responsible and sustainable towards the environment and society. Thus, reporting of company’s performance on sustainability related factors has become as vital as reporting on financial and operational performance.

In this light SEBI introduced new reporting requirement on ESG (Environment, Social and Governance) parameters called the Business Responsibility and Sustainability Report (BRSR).<sup>33</sup> The National Guidelines on Responsible Business Conduct (NGBRCs) contain nine principles, and the BRSR requests disclosures from listed companies on how they performed in regard to those principles. Reporting under each principle is broken down into essential and leadership indicators.<sup>34</sup> Investors will benefit from these disclosures by making wiser investing choices. The BRSR will also assist businesses in interacting with their stakeholders on a deeper level by encouraging them to consider considerations other than just earnings, such as the effects on society and the environment. This aspect of the BRSR is extremely beneficial. Beginning with the fiscal year 2022-2023, the top 1000 listed firms will be required to submit BRSR reports.<sup>35</sup>

At the fourth United Nations Environment Assembly in 2019, India took the initiative to draught a resolution on the pollution caused by single-use plastics. The country was aware of the critical necessity for the rest of the world to pay immediate attention to this significant problem. India actively collaborated with all member nations during the just finished 5th session of the United Nations Environment Assembly in March 2022 to draft a resolution that would stimulate international action against plastic pollution. As a

<sup>30</sup> TRIVEDI, Divya. India among countries worst affected by climate change: Global Climate Risk Index 2021. *The Hindu*, 25 Jan. 2021. Available at: <https://frontline.thehindu.com/dispatches/india-among-countries-worst-affected-by-climate-change-according-to-global-climate-risk-index-2021/article33659497.ece>. Access on: 13 Nov. 2022.

<sup>31</sup> NARAIN, Sunita. India’s new climate targets: bold, ambitious and a challenge for the world. *Down to Earth*, 2 Nov. 2021. Available at: <https://www.downtoearth.org.in/blog/climate-change/india-s-new-climate-targets-bold-ambitious-and-a-challenge-for-the-world-80022>. Access on: 13 Nov. 2022.

<sup>32</sup> CIRCULAR No.: SEBI/HO/CFD/CMD-2/P/CIR/2021/562. *Sebi*, May 2021. Available at: [https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities\\_50096.html](https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html). Access on: 13 Nov. 2022.

<sup>33</sup> CIRCULAR No.: SEBI/HO/CFD/CMD-2/P/CIR/2021/562. *Sebi*, May 2021. Available at: [https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities\\_50096.html](https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html). Access on: 13 Nov. 2022.

<sup>34</sup> CIRCULAR No.: SEBI/HO/CFD/CMD-2/P/CIR/2021/562. *Sebi*, May 2021. Available at: [https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities\\_50096.html](https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html). Access on: 13 Nov. 2022.

<sup>35</sup> CIRCULAR No.: SEBI/HO/CFD/CMD-2/P/CIR/2021/562. *Sebi*, May 2021. Available at: [https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities\\_50096.html](https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html). Access on: 13 Nov. 2022.

result, starting on July 1, 2022, India will no longer produce, import, stock, distribute, sell, or use any single-use plastic items that have been classified as having poor utility and a high potential for littering.<sup>36</sup> Further, The Plastic Waste Management Amendment Rules, 2021 make it prohibited to produce, import, stock, distribute, sell, or use plastic carry bags having a thickness of less than 75 microns as of the September 30, 2021, and less than 120 microns as of the December 31, 2022.<sup>37</sup> Plastic Waste Management Amendment Rules, 2022 were also published on February 16, 2022 by the Ministry of Environment, Forest, and Climate Change in conjunction with the Guidelines on Extended Producers Responsibility on Plastic Packaging. Extended Producer Responsibility (EPR) is the term used to describe a “producer’s obligation to manage a product in an ecologically responsible manner all the way through to its end of life”. The Guidelines will provide a structure for optimising the recycling of plastic packaging waste, inspiring the development of innovative plastic packaging alternatives, and outlining the steps that businesses may take to adopt more environmentally friendly plastic packaging.<sup>38</sup>

## 6 International Efforts

Governments across the world have been working continuously to minimise the issue of climate change. The UN Framework Convention on Climate Change (UNFCCC) was ratified by the world’s nations in 1992 at second Earth Summit, with the objective of “stabilising atmospheric greenhouse gas concentrations at a level that would prevent further dangerous human interference with the climate system.” The Convention contains general pledges made by the Parties, but it does not establish any legally binding reduction targets. These voluntary targets failed to achieve by the governments. Considering this Berlin Mandate was adopted for calling negotiations of binding targets in 1995.<sup>39</sup> Since climate change is a global threat and all the countries have their separate role and goal to play and achieve respectively. Basel Convention, 1989 which came into force in 1992 and the aim of this convention is to “regulates the transboundary movements of hazardous wastes and other wastes and obliges its Parties to ensure that such wastes are managed and disposed of in an environmentally sound manner”.<sup>40</sup>

With the Kyoto Protocol at third United Nations Climate Change Conference of the Parties (COP3), which was the result of these discussions, developed nations were given their first set of legally binding obligations to limit down greenhouse gas emissions. The Protocol was signed in 1997 and came into force in 2005, and its second commitment term was in effect from 2012 until 2020. In accordance with the Protocol, industrialised nations are obligated to reduce their GHG emissions by an average of 5.2 percent per year from 1990 levels between 2008 and 2012.<sup>41</sup> The Kyoto Protocol does not impose on developing countries

<sup>36</sup> MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE. Ban on identified single use plastic items from 1st July 2022. *PIB Delhi*, 28 June 2022. Available at: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1837518>. Access on: 15 Nov. 2022.

<sup>37</sup> MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE. Ban on identified single use plastic items from 1st July 2022. *PIB Delhi*, 28 June 2022. Available at: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1837518>. Access on: 15 Nov. 2022.

<sup>38</sup> MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE. Ban on identified single use plastic items from 1st July 2022. *PIB Delhi*, 28 June 2022. Available at: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1837518>. Access on: 15 Nov. 2022.

<sup>39</sup> IQBAL, Badar Alam; HASSAN, Munir; RAWAT, Bhawana; ARSLAN, Shabib. Business and climate change: trends, issues and challenges. *Business Review*, v. 8, n. 2, p. 42-57, July 2013. Available at: <https://www.researchgate.net/deref/https%3A%2F%2Fdoi.org%2F10.54784%2F1990-6587.1285>. Access on: 4 Sept. 2022.

<sup>40</sup> UN ENVIRONMENT PROGRAMME. Basel Convention on the control of transboundary movements of hazardous wastes. *UN Environment Programme*, [2023]. Available at: <https://www.unep.org/resources/report/basel-convention-control-transboundary-movements-hazardous-wastes>. Access on: 4 Sept. 2022.

<sup>41</sup> EUROPEAN ENVIRONMENT AGENCY. Climate change policies. *EEA*, 23 Nov. 2020. Available at: [https://www.eea.europa.eu/themes/climate/policy-context#:~:text=Global%20policies,\(compared%20with%201990%20levels\)](https://www.eea.europa.eu/themes/climate/policy-context#:~:text=Global%20policies,(compared%20with%201990%20levels)). Access on: 4 Sept. 2022.

any legally binding GHG reduction objectives since it recognises that they have the right to expand their economy in the same manner that industrialised countries did in the past.<sup>42</sup> India, therefore, was exempted from the binding obligations of the Protocol. After first commitment period, some amendments were carried out, known as Doha amendment. The amendment includes new commitment for the parties for second commitment period, a revised list of greenhouse gases and other amendments in several article specifically referenced issues in first commitment period.<sup>43</sup> India also ratified the second commitment period of the Protocol.

Another effort to combat Climate Change was “The Copenhagen Accord” at COP15 in 2009, which confirmed the continuation of the Kyoto Protocol. It established a cap of two degrees Celsius on the rise in the average global temperature and stipulated that a review by 2015 should assess whether it will be required to restrict warming to 1.5 degrees Celsius. Developed countries committed to provide additional funds of 30 billion dollars for the developing countries for the period 2010-2012 and 100 billion dollars for other goals by 2020. It included the methods to monitor the efforts of the countries. Additionally, it called for both industrialized and developing nations to identify their own goals as well as the steps they would take to reduce global warming pollution by certain levels. The accord provided no targets for carbon emission and also it was not a legally binding pact.<sup>44</sup>

The Paris Agreement, which was finalised in 2015 at the COP21, had as its goal the reduction of global warming to 2 ° C compared with pre-industrial levels and the maintenance of global warming below 1.5 ° C. This goal has nearly unanimous support from all of the nations. In 2019, legislation was approved in France, New Zealand, and the United Kingdom that committed those countries to reaching net-zero emission levels by the year 2050. Sweden has set a goal for 2045. In 2020, Similar commitments were made by China, Japan, and South Korea.<sup>45</sup> It is very difficult to achieve the goal of net zero emissions, therefore action plans are much needed. The International Energy Agency says that “by 2030 emissions must fall by 45 per cent relative to 2010 to be on track to reach net zero”. Further it says,

Success will depend on cleaning up energy sources, reducing emissions from appliances and retrofitting buildings, as well as making gains in efficiency to enable energy demand to fall by nearly a fifth, back to the level of 2006, despite the larger global economy.

All these activities need major investments. According to the OECD, the requisite infrastructure will cost \$7 trillion per year by 2030.<sup>46</sup> The agreement highlights not just the importance of states’ roles in this change but also the roles played by cities, regions, businesses, and individuals.<sup>47</sup> It is duty of the state to encourage and promote public and private entity participation in reducing greenhouse gas emissions and increase their participation in Nationally Determined Contributions.<sup>48</sup>

In the 26th annual United Nations Climate Change Conference of the Parties (COP26) in Glasgow on 31st October to 13th November 2021 – also known as The Glasgow Climate Pact – countries again reaffirmed the Paris Agreement. More than 90 percent of the world’s GDP is covered by promises to achieve

<sup>42</sup> UNITED NATIONS CLIMATE CHANGE. What is the Kyoto protocol? *UNFCCC*, [202-]. Available at: [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol). Access on: 9 Sept. 2022.

<sup>43</sup> UNITED NATIONS CLIMATE CHANGE. What is the Kyoto protocol? *UNFCCC*, [202-]. Available at: [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol). Access on: 9 Sept. 2022.

<sup>44</sup> THE COPENHAGEN accord: lofty plans and blurred allegiances. *ODI*, [202-]. Available at: <https://odi.org/en/insights/the-copenhagen-accord-lofty-plans-and-blurred-allegiances/>. Access on: 9 Sept. 2022.

<sup>45</sup> COLBACK, Lucy. The role of business in climate change. *Financial Times Future Forum*, 18 Dec. 2020. Available at: <https://www.ft.com/content/7ab0bfb0-b37c-463d-b132-0944b6fe8e8b>. Access on: 9 Sept. 2022.

<sup>46</sup> COLBACK, Lucy. The role of business in climate change. *Financial Times Future Forum*, 18 Dec. 2020. Available at: <https://www.ft.com/content/7ab0bfb0-b37c-463d-b132-0944b6fe8e8b>. Access on: 9 Sept. 2022.

<sup>47</sup> INTERNATIONAL efforts to combat climate change. *Planete Energies*, 5 Aug. 2021. Available at: <https://www.planete-energies.com/en/medias/close/international-efforts-combat-climate-change>. Access on: 9 Sept. 2022.

<sup>48</sup> PARIS Agreement 2015: Article 6. 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf). Access on: 9 Sept. 2022.



net zero emissions. 153 countries have put forward proposals for new emission goals for the year 2030. All countries agreed to review and strengthen their present emissions objectives until 2030 in 2022.<sup>49</sup>

The first goal of COP26 was Mitigation which aimed ‘reducing emissions’. The power industry is responsible for one-quarter of worldwide greenhouse gas emissions, and coal is the single most significant contribution to human-caused climate change. In 2021, India’s total carbon dioxide emissions amounted to 2,710 million metric tons, making it the third-largest CO<sub>2</sub> emitter in the world, according to Global Carbon Atlas.<sup>50</sup> According to the data available at Global Carbon Atlas, after China, India ranks second in coal consumption and responsible for about 1802 million metric tons emissions<sup>51</sup>.

At COP26, over 65 countries have agreed to phase out coal, with over 20 new promises. Over \$20 billion in new public and philanthropic funding has been offered by international partners to protect developing countries build up sustainable energy and move away from coal. For protecting and restoring the eco system, in the Glasgow Leaders’ Declaration on Forests and Land Use, 137 countries pledged to prevent and reverse forest loss and land degradation by 2030. A quarter of the global car market has pledged to end the sale of polluting vehicles at the national level. In Europe, General Motors, Jaguar, Fiat, Volvo, Audi, Ford, and Volkswagen have all pledged to producing 100 percent zero-emission vehicles (ZEVs) by 2035. More than 110 companies have entered the EV100 pledge, promising to have completely zero-emission vehicles by 2030.<sup>52</sup>

The second goal was Adaptation which aimed ‘helping those already impacted by climate change’. To enhance climate risk readiness, 80 countries now have either Adaptation Communications or National Adaptation Plans. The Adaptation Research Alliance (ARA), the world’s first organisation of its nature, was launched at COP26. Governments, corporations, and local societies will work together to strengthen the resilience of vulnerable countries through this worldwide network of over 60 organisations in 30 countries. Indigenous knowledge and solutions will be at the heart of the ARA’s mission. Climate finance providers made promises at COP26 to expand their assistance for adaptation. According to the outcome report of COP26:

[...] over \$350 million has been committed to the UNFCCC Adaptation Fund: nearly triple the previous highest collective mobilisation. Over \$600 million was pledged to the Least Developed Countries Fund, the highest collective mobilisation the fund has seen. These record-breaking contributions are building the resilience of vulnerable communities, safeguarding livelihoods and lives.<sup>53</sup>

The next goal was Finance which aimed to mobilise finances from public sector and private sector towards the developing nations. The cost of preventing climate change will be substantially less than the cost of dealing with its consequences. As a result, the UK’s incoming Presidency prioritised the commitment of developed countries to raise \$100 billion in climate funding every year. This money should be available to those who need it, and it should help to stimulate private finance. 34 countries and 5 public finance institutions have agreed to stop providing new direct public assistance for international fossil fuel exploitation. In private sector, members of the Glasgow Financial Alliance for Net Zero (GFANZ) must agree to science-based plans based on an independent, globally recognised methodology, assess their goals every five

<sup>49</sup> UNITED NATIONS. COP26: Together for our planet. *UN*, [2023]. Available at: <https://www.un.org/en/climatechange/cop26>. Access on: 15 Sept. 2022.

<sup>50</sup> GLOBAL CARBON ATLAS. [2023]. Available at: <http://www.globalcarbonatlas.org/en/CO2-emissions>. Access on: 15 Nov. 2022.

<sup>51</sup> GLOBAL CARBON ATLAS. [2023]. Available at: <http://www.globalcarbonatlas.org/en/CO2-emissions>. Access on: 15 Nov. 2022.

<sup>52</sup> UN CLIMATE CHANGE CONFERENCE UK. COP26 The Glasgow Climate Pact. *UNCC*, 2021. Available at: <https://ukcop26.wpenginepowered.com/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>. Access on: 15 Nov. 2022.

<sup>53</sup> UN CLIMATE CHANGE CONFERENCE UK. COP26 The Glasgow Climate Pact. *UNCC*, 2021. Available at: <https://ukcop26.wpenginepowered.com/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>. Access on: 15 Nov. 2022.

years, and disclose their progress and emissions from their investments on an annual basis. Companies in 36 countries will be required to give investors with trustworthy information on climate risk to direct their investments toward greener areas.<sup>54</sup>

The last and final goal was Collaboration which aimed to ‘working together’. At the COP26 World Leaders Summit, more than 40 countries accounting for over 70% of global GDP endorsed the Breakthrough Agenda<sup>55</sup>, committing to work together to make clean and sustainable solutions the most cost-effective, easily accessible, and aesthetically pleasing option in every polluting industry by the end of this decade.<sup>56</sup>

Recently at the city of Sharm el-Sheikh in Egypt from 6<sup>th</sup>-20<sup>th</sup> November, 2022 COP-27 took place. More than 100 head of the states participated in the negotiations, talks and action plan of the UNFCCC COP-27 meeting. The focus of COP like previous COP meetings was to actively take drastic steps in reducing the carbon emissions, so that the threshold of 1.5 degree increase in global temperature in the coming decade could be reduced.

The highlight of the entire COP-27 was to “establish and operationalize a loss and damage fund”.<sup>57</sup> This concept of establishing a loss and damage fund is decades old. Alliance of Small Islands is a group of low altitude island countries pressed the need for such a fund back in 1994 when UNFCCC was established, from then onwards this point is in the agenda of various climate change conferences. The entire concept of this fund building is to provide support and reconstruction funds to under-developed countries or to middle-income countries facing the wrath of climate change in form of floods, droughts, cyclones, hurricanes etc. Government representatives of different countries have also agreed to establish an ‘transitional committee’ to monitor and operationalize the loss and damage fund as well as the other funds.<sup>58</sup> The meetings of transitional committee personnel will take place in the 1<sup>st</sup> quarter of 2023. The challenge amongst the parties at COP-27 was to meet the goal of raising funds of around 4-6 billion US dollar to switch to low-carbon emission global economy. Maximum of these contributions would be made by developed countries and they are not able to achieve their targets which is also posing a serious problem. Not just the governments but banks – public & private, international institutions and other financial investors need to come up to rescue.<sup>59</sup> The COP-27 brought together around 45,000 delegates from all round the world to discuss on many serious issues related to climate change. During a 15 days event the highlighted agenda which were discussed and put up to a solution were mainly revolving around to overcome the obstacles coming in the way of attaining targets of climate change policies and to provide resources, economy and scientific advancements to the countries to bring climate action plan in swing.<sup>60</sup>

<sup>54</sup> UN CLIMATE CHANGE CONFERENCE UK. COP26 The Glasgow Climate Pact. UNCC, 2021. Available at: <https://ukcop26.wpenpowered.com/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>. Access on: 15 Nov. 2022.

<sup>55</sup> The Breakthrough Agenda is a ground-breaking international clean technology initiative aimed at limiting global warming to 1.5°C. Through a coalition of leading public, private, and public-private worldwide efforts, it provides a guideline for countries and businesses to connect and strengthen their activities every year, in every sector, and it displays the leading global projects that will help achieve success.

<sup>56</sup> UN CLIMATE CHANGE CONFERENCE UK. COP26 The Glasgow Climate Pact. UNCC, 2021. Available at: <https://ukcop26.wpenpowered.com/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>. Access on: 15 Nov. 2022.

<sup>57</sup> SRIVASTAVA, Manas. UPSC essentials: issue at a glance — COP-27 and Its dialogue with world. *The Indian Express*, 23 Nov. 2022. Available at: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/upsc-essentials-issue-at-a-glance-cop-27-and-its-dialogue-with-world-8284608/>. Access on: 5 Dec. 2022.

<sup>58</sup> UNITED NATIONS CLIMATE CHANGE. COP27 Reaches breakthrough agreement on new “loss and damage” fund for vulnerable countries. UNFCCC, 20 Nov. 2022. Available at: <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>. Access on: 5 Dec. 2022.

<sup>59</sup> UNITED NATIONS CLIMATE CHANGE. COP27 reaches breakthrough agreement on new “loss and damage” fund for vulnerable countries. UNFCCC, 20 Nov. 2022. Available at: <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>. Access on: 5 Dec. 2022.

<sup>60</sup> UNITED NATIONS CLIMATE CHANGE. COP27 reaches breakthrough agreement on new “loss and damage” fund for vulnerable countries. UNFCCC, 20 Nov. 2022. Available at: <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on>

**Table 1** - International efforts to combat Climate Change

Year	Name of the Event	Objective	Place
1980	The World Climate Research Programme (WCRP) (established by the World Meteorological Organization (WMO) in Geneva and the International Council of Scientific Unions (ICSU) in Paris.)	Boost climate science, especially numerical simulations of atmospheric and oceanic processes.	Geneva
1988	Creation of the intergovernmental panel on climate change (IPCC)	to compile and disseminate reports that accurately depict the current level of scientific understanding on climate change.	Geneva
1992	Rio Earth Summit	to create a comprehensive plan of action for international cooperation and development strategy in the twenty-first century that addresses environmental and development challenges.	Rio de Janeiro, Brazil
1997	Kyoto Protocol	During 2008 and 2012, lower GHG emissions by 5.2% annually from 1990 levels.	Kyoto, Japan
2009	The Copenhagen Accord	To confirm the continuation of the Kyoto Protocol and keep two degrees Celsius on the rise in the average global temperature	Copenhagen
2010	Cancun Climate Change Conference	The Green Climate Fund will have \$100 billion in funds by 2020 to help developing nations combat climate change and deforestation.	Cancun, Mexico
2015	Paris Agreement	restricting the rise in global temperature to “well below” 2°C	Paris
2018-19	Three IPCC Reports	The first discusses the effects of a 1.5°C average temperature rise by 2100, the second on land, and the third on the ocean and cryosphere.	Around the world published
2021	The Glasgow Climate Pact	Proposed New emission targets for 2030	Glasgow
2022	COP 27	establish and operationalize a loss and damage fund	Sharm el-Sheikh, Egypt

Source: INTERNATIONAL efforts to combat climate change. *Planete Energies*, 5 Aug. 2021. Available at: <https://www.planete-energies.com/en/medias/close/international-efforts-combat-climate-change>. Access on: 9 Sept. 2022.

new-loss-and-damage-fund-for-vulnerable-countries. Access on: 5 Dec. 2022.

## 7 Conclusion and Suggestions

With the introduction of the United Nations Guiding Principles on Business and Human Rights a decade ago, the role of business in human rights became clearly defined, and companies began taking steps to avoid and remedy violations of human rights that resulted from their activities or interactions. Businesses are doing a lot to fight climate change, but there is still more that needs to be done. But the major concern is that most of the companies are doing this only for their profit and they are majorly indulged in green washing. From 1980 to 2022 so many efforts have been made on national and international level, still we are facing with the same problem of climate change, even worse than before.

It is necessary to think in a radical way in order to develop a regulatory system that is capable of tackling the difficulties that we are currently experiencing and to ensure that businesses are held accountable for their actions. Although it cannot be done in one day, so the systematic approach is needed to solve the issue of climate change like Companies that rely on fossil fuels have the ability to lessen the negative effects of their operations by taking measures such as doing research on alternative fuels, reaching an agreement to reduce emissions, and making use of transitional fuels like natural gas. On issues pertaining to business and human rights, and climate change, there is an urgent need for explicit and consistent national policies and legislation.

In the light of the above discussion some suggestions are as follows -

- A tier-wise capping on carbon emission by businesses should be set based on indispensability of the product.
- More awareness amongst people could be spread regarding greenwashing as it is quite unlikely for a layman to spot greenwashing happening in the products one is buying. Government regulatory bodies must have a keen check of the products floating in market on name of naturally made, herbal, ayurvedic etc. A product must not only look environment protective, but it should be environment friendly in its entire process from being produced to being its empty container being disposed-off.
- As per National Guidelines on Responsible Business Conduct (NGRBC's), it is mandatory for top 1000 listed companies to declare their Business Responsibility and Sustainability Report (BRSR). Since the aim of government here is to inform stakeholders of a company about its environment friendliness and social implications like active involvement in reducing carbon emissions and taking sustainable steps in its growth. Nevertheless, submission of BRSR shouldn't be a mandate for a handful of companies only rather all registered companies should be submitting such reports, so that a constant check could be maintained. Lastly, companies performing well in BRSR's should be given incentives and awards for performing well amidst all challenges.
- Principle 9 of the Rio Declaration is to be given more focus in relation to "demand of cooperation amongst states to achieve sustainable development by exchange of scientific and technological knowledge"<sup>61</sup> Huge reduction in emission of greenhouse gases is not possible to be done by under-developed and developing countries altogether considering growth of their GDP based on economic factors which are responsible for generation of GHGs. However, a time-limit is given to states based on their category to reduce emission of GHGs,

<sup>61</sup> Principle 9 of the Rio Declaration, 1992.



however replacement of new technologies to mitigate environment degradation is too costly from research and development perspective for many countries. Since climate change is a global issue and all countries must act together and share the technologies invented for reducing carbon emission amongst all the nations to further save the research and resources of other countries in building the same or similar advancements.

- To reduce greenhouse gas emissions by road transports, the governments can invest in building better public transport systems reducing the need of people to buy personal vehicles. Demand and supply of electronic and CNG based vehicles should be met by the government by boosting up the manufacturing of environment friendly vehicles. Bringing a change in this aspect would act as a double-edged sword against climate change, one by reducing GHGs emission and secondly by preserving oil reserves.

## References

BAUMAN Brooke. How plastics contribute to climate change. *Yale Climate Connections*, 20 Aug. 2019. Available at: <https://yaleclimateconnections.org/2019/08/how-plastics-contribute-to-climate-change/>. Access on: 28 Oct. 2022.

BEST, Shivali. Plastic waste has more than DOUBLED globally since 2000, report warns'. *Daily Mail Online*, 22 Feb. 2022. Available at: <https://www.dailymail.co.uk/sciencetech/article-10539719/Plastic-waste-DOUBLED-globally-2000-report-warns.html>. Access on: 10 Oct. 2022.

BRAND audit report 2021: break free from plastic. *BRANDED*, v. 4, 2021. Available at: <https://www.breakfreefromplastic.org/wp-content/uploads/2021/10/BRAND-AUDIT-REPORT-2021.pdf>. Access on: 5 Nov. 2022.

CALMA, Justine. Apple ditching chargers saves costs but not the planet. *The verge*, 16 Oct. 2020. Available at: <https://www.theverge.com/2020/10/16/21519466/apple-iphone-12-chargers-airpods-greenhouse-gas-emissions-e-waste>. Access on: 5 Nov. 2022.

CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW. Plastic and climate: the hidden cost of a plastic planet. *CIEL*, May 2019. Available at: <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>. Access on: 10 Oct. 2022.

CIRCULAR No.: SEBI/HO/CFD/CMD-2/P/CIR/2021/562. *Sebi*, May 2021. Available at: [https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities\\_50096.html](https://www.sebi.gov.in/legal/circulars/may-2021/business-responsibility-and-sustainability-reporting-by-listed-entities_50096.html). Access on: 13 Nov. 2022.

COLBACK, Lucy. The role of business in climate change. *Financial Times Future Forum*, 18 Dec. 2020. Available at: <https://www.ft.com/content/7ab0bfb0-b37c-463d-b132-0944b6fe8e8b>. Access on: 9 Sept. 2022.

ECKSTEIN, David; KÜNZEL, Vera; SCHÄFER, Laura. Global climate risk index 2021. *Germanwatch*, Jan. 2021. Available at: [https://germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021\\_1.pdf](https://germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_1.pdf). Access on: 13 Oct. 2022.

ENVIRONMENTAL AND ENERGY BUSINESS RESOURCES. Human contributions to climate change. *Environ Business*, [2015]. Available at: <https://www.environbusiness.com/cchangemain/cchuman>. Access on: 19 June 2022.

EUROPEAN ENVIRONMENT AGENCY. Climate change policies. *EEA*, 23 Nov. 2020. Available at: [https://www.eea.europa.eu/themes/climate/policy-context#:~:text=Global%20policies,\(compared%20with%201990%20levels\)](https://www.eea.europa.eu/themes/climate/policy-context#:~:text=Global%20policies,(compared%20with%201990%20levels)). Access on: 4 Sept. 2022.

GEORGE, Sarah. Greenwashing: Unilever laundry detergent ad campaign banned in the UK. *Edie*, 31 Aug. 2022. Available at: <https://www.edie.net/greenwashing-unilever-laundry-detergent-ad-campaign-banned-in-the-uk/>. Access on: 5 Nov. 2022.

GLOBAL CARBON ATLAS. [2023]. Available at: <http://www.globalcarbonatlas.org/en/CO2-emissions>. Access on: 15 Nov. 2022.

GUPTA, Alinda. Top 5 greenwashing scandals of the past decade. *Jump Start*, 30 Nov. 2021. Available at: <https://www.jumpstartmag.com/top-5-greenwashing-scandals-of-the-past-decade/>. Access on: 5 Nov. 2022.

HOTTEN, Russell. Volkswagen: the scandal explained. *BBC News*, 10 Dec. 2015. Available at: <https://www.bbc.com/news/business-34324772>. Access on: 5 Nov. 2022.

INTERNATIONAL efforts to combat climate change. *Planete Energies*, 5 Aug. 2021. Available at: <https://www.planete-energies.com/en/medias/close/international-efforts-combat-climate-change>. Access on: 9 Sept. 2022.

IQBAL, Badar Alam; HASSAN, Munir; RAWAT, Bhawana; ARSLAN, Shabib. Business and climate change: trends, issues and challenges. *Business Review*, v. 8, n. 2, p. 42-57, July 2013. Available at: <https://www.researchgate.net/deref/https%3A%2F%2Fdoi.org%2F10.54784%2F1990-6587.1285>. Access on: 4 Sept. 2022.

JOHNSON, Mariya. Companies that were caught for greenwashing. *Prakati*, 5 Aug. 2022. Available at: <https://www.prakati.in/companies-that-were-caught-for-greenwashing/>. Access on: 8 Nov. 2022.

JONES Brian. Corporate social irresponsibility. In: IDOWU, S. O.; CAPALDI, N.; ZU, L.; GUPTA, A. D. (ed.). *Encyclopedia of corporate social responsibility*. Berlin, Heidelberg: Springer, 2013. Available at: [https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8\\_650](https://link.springer.com/referenceworkentry/10.1007/978-3-642-28036-8_650). Access on: 7 Sept. 2022.

KOTCHEN, Matthew; MOON, Jon J. Corporate social responsibility for irresponsibility. *The B. E. Journal of Economic Analysis & Policy*, v. 12, n. 1, art. 55, 2012. DOI: 10.1515/1935-1682.3308. Available at: <https://resources.environment.yale.edu/kotchen/pubs/csrsi.pdf>. Access on: 7 Sept. 2022.

LAVILLE, Sandra. Coca-Cola among brands greenwashing over packaging, report says. *The Guardian*, 30 June 2022. Available at: <https://www.theguardian.com/environment/2022/jun/30/coca-cola-among-brands-greenwashing-over-packaging-report-says>. Access on: 5 Nov. 2022.

LEAHY, Stephen. Most countries aren't hitting 2030 climate goals, and everyone will pay the price. *National Geographic*, 6 Nov. 2019. Available at: <https://www.nationalgeographic.com/science/article/nations-miss-paris-targets-climate-driven-weather-events-cost-billions>. Access on: 27 July 2022.

LI, Hongbo. The conflict and the balance between the right to development and the right to the environment. *China Human Rights*, 2017. Available at: [http://www.chinahumanrights.org/html/2017/MAGAZINES\\_0627/8447.htm](http://www.chinahumanrights.org/html/2017/MAGAZINES_0627/8447.htm). Access on: 27 July 2022.

LO, Joe. Gap to 1.5C yawns, as most governments miss UN deadline to improve climate plans. *Climate Home News*, 26 Sept. 2022. Available at: <https://www.climatechangenews.com/2022/09/26/gap-to-1-5c-yawns-as-most-governments-miss-un-deadline-to-improve-climate-plans/>. Access on: 13 Oct. 2022.

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE. Ban on identified single use plastic items from 1st July 2022. *PIB Delhi*, 28 June 2022. Available at: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1837518>. Access on: 15 Nov. 2022.

NARAIN, Sunita. India's new climate targets: bold, ambitious and a challenge for the world. *Down to Earth*, 2 Nov. 2021. Available at: <https://www.downtoearth.org.in/blog/climate-change/india-s-new-climate-targets-bold-ambitious-and-a-challenge-for-the-world-80022>. Access on: 13 Nov. 2022.

NOYES, Lydia. A guide to greenwashing and how to spot it. *Ecomatch*, 26 Nov. 2022. Available at: <https://www.ecowatch.com/greenwashing-guide-2655331542.html>. Access on: 30 Nov. 2022.

PARASHAR, Neha; HAIT, Subrata. Plastics in the time of COVID-19 pandemic: protector or polluter? *The Science of the total environment*, v. 759, 10 Mar. 2021. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7726519/>. Access on: 10 Oct. 2022.

PARIS Agreement 2015: Article 6. 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf). Access on: 9 Sept. 2022.

PARKER, Laura. Here's How Much Plastic Trash Is Littering the Earth. *National Geographic*, 20 Dec. 2018. Available at: <https://www.nationalgeographic.com/science/article/plastic-produced-recycling-waste-ocean-trash-debris-environment>. Access on: 28 Oct. 2022.

ROBINSON, Deena. 10 Companies and corporations called out for Greenwashing. *Earth.org*, 17 July 2022. Available at: <https://earth.org/greenwashing-companies-corporations/>. Access on: 5 Nov. 2022.

SCHENK, Lynn; GERDEMAN, Dina. What's the role of business in confronting climate change? *Harvard Business School*, 30 Nov. 2021. Available at: <https://hbswk.hbs.edu/item/whats-the-role-of-business-in-confronting-climate-change>. Access on: 18 Sept. 2022.

SRIVASTAVA, Manas. UPSC essentials: issue at a glance — COP-27 and its dialogue with world. *The Indian Express*, 23 Nov. 2022. Available at: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/upsc-essentials-issue-at-a-glance-cop-27-and-its-dialogue-with-world-8284608/>. Access on: 5 Dec. 2022.

THE COPENHAGEN accord: lofty plans and blurred allegiances. *ODI*, [202-]. Available at: <https://odi.org/en/insights/the-copenhagen-accord-lofty-plans-and-blurred-allegiances/>. Access on: 9 Sept. 2022.

THE RIO declaration on environment and development. Principle 17. 1992. Available at: [https://www.iau-hesd.net/sites/default/files/documents/rio\\_e.pdf](https://www.iau-hesd.net/sites/default/files/documents/rio_e.pdf). Access on: 18 Sept. 2022.

TRIVEDI Divya. India among countries worst affected by climate change: Global Climate Risk Index 2021. *The Hindu*, 25 Jan. 2021. Available at: <https://frontline.thehindu.com/dispatches/india-among-countries-worst-affected-by-climate-change-according-to-global-climate-risk-index-2021/article33659497.ece>. Access on: 13 Nov. 2022.

UN CLIMATE CHANGE CONFERENCE UK. COP26 The Glasgow Climate Pact. *UNCC*, 2021. Available at: <https://ukcop26.wpenginpowered.com/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>. Access on: 15 Nov. 2022.

UN ENVIROMENT PROGRAMME. Basel Convention on the control of transboundary movements of hazardous wastes. *UN Environment Programme*, [2023]. Available at: <https://www.unep.org/resources/report/basel-convention-control-transboundary-movements-hazardous-wastes>. Access on: 4 Sept. 2022.

UNITED NATIONS CLIMATE CHANGE. COP27 Reaches breakthrough agreement on new “loss and damage” fund for vulnerable countries. *UNFCCC*, 20 Nov. 2022. Available at: <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>. Access on: 5 Dec. 2022.

UNITED NATIONS CLIMATE CHANGE. What is the Kyoto Protocol? *UNFCCC*, [202-]. Available at: [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol). Access on: 9 Sept. 2022.

UNITED NATIONS. COP26: Together for our planet. *UN*, [2023]. Available at: <https://www.un.org/en/climatechange/cop26>. Access on: 15 Sept. 2022.

UNITED NATIONS HUMAN RIGHTS. Human rights, climate change and business. *OHCHR*, [202-?]. Available at: <https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>. Access on: 19 June 2022.



Para publicar na revista Brasileira de Políticas Públicas, acesse o endereço eletrônico [www.rbpp.uniceub.br](http://www.rbpp.uniceub.br)  
Observe as normas de publicação, para facilitar e agilizar o trabalho de edição.