

CHILDREN’S RIGHTS IN REGARDS TO THE LIFECYCLE OF PLASTICS AND HUMAN RIGHTS

To: **Dr. Marcos A. Orellana, Special Rapporteur on toxics and human rights**

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1. About the Alana Institute.

The **Alana Institute** is a non-profit civil society organization that seeks to safeguard the conditions necessary for the integral experience of childhood through its programs. Founded in 1994 and supported by an endowment fund since 2013, the Alana Institute’s mission is to “honor children.” Among its many programs are **Children and Consumerism**¹, and **Children and Nature**², which deal with human rights issues for children and adolescents.

¹ **Children and Consumerism**’s objective is to present ways to minimize and prevent the harm caused by marketing communications aimed at children. The program defends the end of any and all marketing communications aimed at children, in order to protect them from the abuses practiced by advertising. It acts by sending notifications to businesses and reporting abuses to the appropriate public offices. In addition, the program also participates in the drafting and execution of public and legislative policies related to publicity aimed at children. More information at: criancaeconsumo.org.br.

² **Children and Nature** program is favorable for children, especially those in urban contexts and those who are in contact with natural areas. The program works to influence and carry out intersectoral actions that result in a journey rich in nature, through studies, research and experiences that facilitate access to children, in addition to influencing the public that favor the contact of children, and the network in which it is inserted, with green areas. More information at: criancaenatureza.org.br.

These programs have a vast work aiming to promote a safe and healthy environment for the development of children. Therefore, this document intends to present the main violations, worries and recommendations found by the activities of these programs, especially in the subjects (i) climate change, (ii) plastics and (iii) air pollution, in order to contribute to the agenda of Dr. Marcos A. Orellana, Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes.

2. A brief overview of the Convention on the Rights of the Child and norms regarding childhood in Brazil.

The Convention on the Rights of the Child, incorporated in Brazil by Decree 99.710 from 1990, sets forth in Article 24.2, in dealing with the right to health, that "States Parties shall ensure the full application of this right and, in particular, adopt appropriate measures (...) in view of the dangers and risks of environmental pollution". The Convention therefore establishes the need for States to consider the dangers and risks of environmental pollution, which requires States to curb illegal air pollution³.

According to the Committee on the Rights of the Child of the United Nations, the existence of a healthy environment is a necessary condition for the full realization of the rights guaranteed by the Convention, so that pollution represents an impediment to the realization of the right to an adequate standard of living⁴.

The Convention on the Rights of the Child, in an extremely innovative text for an international treaty under public international law, foresees the horizontal effect of children's rights in relations between private actors, including companies that directly or indirectly impact children and their rights.

Specifically, private institutions are bound directly by the text of the Convention itself. Companies and corporations must primarily consider the best interests of the child in their actions and impacts, as provided in its art. 3, 1: "All actions concerning children, whether carried out by public or private welfare institutions, courts, administrative authorities or legislative bodies, must primarily consider the best interests of the child".

³ Available at: <https://www.ohchr.org/Documents/HRBodies/CRC/Discussions/2016/CIEL.pdf>. Accessed on August 20, 2018.

⁴ U.N. CRC, 34th Sess., No. 5, at paras 224-225.

Thus, it is understood that the Convention itself can be invoked to ensure that companies undertake environmental and human rights due diligence and do not contribute to abuses of children's rights. In this field, Committee's General Comment 16 is also relevant: it states that provided that the best interests of the child shall be a primary consideration for the State and it must guarantee that business activities are restricted when they pose a threat to child rights. Therefore, it is mandatory to recognize horizontal effects of children's rights under the Convention on the Rights of the Child.

In alignment with the Convention on the Rights of the Child, of which Brazil is a signatory, the Article 227 of Brazil's Federal Constitution founded the doctrine of fully protecting childhood and adolescence, and established that the rights of children and adolescents⁵ must be promoted and protected above all else, as an absolute priority, by the State, the family and society. Based on this constitutional norm, the Children and Adolescent's Statute (Federal Law n. 8.069 from 1990) recognized children and adolescents as people at a special stage of development and as rights-bearing individuals, worthy of receiving integral protection and of having their best interest guaranteed, and as such establishes that their rights must be prioritized by policies, budgeting, and public services.

These legislations as a whole must be recognized by the State, civil society and family in all activities in their exercise, such as the drafting of budget laws⁶, as well as judicial decisions, as the Brazilian Federal Supreme Court has shown on several occasions⁷⁸.

The list of rights ensured in absolute priority to children and adolescents includes, in particular: the rights to life, healthcare, nutrition and food security, and the balanced environment.

⁵ According to Brazilian legislation, a child is any person under the age of 12, and an adolescent is any person between 12 and 18 years old, as stated in the 2nd article of the Children and Adolescent's Statute.

⁶ DALLARI, Dalmo A. (2010): In: *Child and Adolescent Statute Commented*, São Paulo: Malheiros, p. 47

⁷ "There is no doubt about the legal possibility of judicial determination for the Executive Power to implement constitutionally defined public policies, as in the present case, where constitutional command demands, with absolute priority, the protection of the rights of children and adolescents, clearly defined in the Children and Adolescents Statute. This has also been decided by the Superior Court of Justice (STJ-Resp 630.765/SP, 1st Panel, Reporting Judge: Luiz Fux, DJ (Justice Official Gazzette) 12.09.2005). In the present case, it is possible to see possible insufficient protection of the rights of children and adolescents by the Country, which must be restrained, as already highlighted. The judiciary is not creating public policies, nor is it usurping the initiative of the executive power." (BRAZIL. Supreme Court of Justice. Suspension of injunction 235-0 Tocantins. Reporting Judge: Gilmar Mendes. Published in the DJ (Justice Official Gazzette) of 04.08.2008).

⁸ "It is true that the theme of the protection of children and adolescents, and specifically of adolescent offenders, is treated with special attention by the Constitution. As can be seen, both the caput of article 227, as well as its first paragraph and sections have normative commands focused on the Country, as highlighted above. In this sense, the constitutional determination of absolute priority in the realization of these normative commands stands out, due to the high significance of protection of the rights of children and adolescents. The objective dimension of the fundamental right to the protection of children and adolescents is relevant. According to this objective aspect, the Country is obliged to create the factual presuppositions necessary for the effective exercise of this right." (BRAZIL. Supreme Federal Court. Suspension of injunction 235-0 Tocantins. Reporting Judge: Gilmar Mendes. Published on the DJ (Justice Official Gazzette) of 04.08.2008).

The right to healthcare, as provided for in the Constitution and the ECA (Child and Adolescent Statute), is realized through social policies that allow the birth and healthy and harmonious development, under conditions worthy of existence. Considering their importance, these rights are considered fundamental rights and presupposed for the exercise of any other right⁹. Therefore, it is up to the Country to prevent air pollution, monitor climate changes and prevent the proliferation of diseases, by taking preventive measures to mitigate the negative impacts of climate changes on the population's health.

Food security and nutrition are also constitutionally protected and essential especially for children and adolescents, as they are necessary to enable the development of a healthy individual¹⁰. Ensuring the right to nutrition depends on regular and permanent access to enough quality food without compromising access to other essential needs. In other words, ensuring the full right to food requires ensuring food security. Climate change has a significant impact on agriculture and Brazil is expected to reduce its total cultivation area due to desertification of certain areas¹¹. Thus, impacts arising from the climate crisis may reduce the supply and variety of food in the country, causing food to become more expensive, which may impact food security, which depends on the constant supply of food in adequate quantity, quality and variety. Similarly, access to potable water, sanitation and hygiene is also compromised by climate changes and environmental disasters, undermining the development of children and adolescents. Supply crises are known to be aggravated by climate changes in the rainfall regime and poor management of the basic sanitation system¹².

Finally, the right to a balanced environment, ensured in article 225 of the Federal Constitution of Brazil, allows the interpretation that there is no quality of life without environmental quality, so that the ecologically balanced right receives protection of fundamental human right¹³. The violation of the right to a balanced environment leads to the violation of several other rights set forth herein, such as the right to food, food security, life and healthcare. In addition to such violations, the guarantee of such a right is extremely necessary, since the lack of nature in children's

⁹ AMIN, Andréa Rodrigues. In: MACIEL, Katia Regina Ferreira Lobo Andrade et al. Child and Adolescent Law Course: theoretical and practical aspects. São Paulo: Lumen Juris, 2010. p. 32

¹⁰ COUTINHO, Janine Giuberti, et al. Malnutrition and obesity in Brazil: addressing based on the single nutrition agenda. Available at: <http://www.scielo.org/pdf/csp/v24s2/18>. Access on August 22, 2018.

¹¹ Global Warming and the New Geography of Agricultural Production in Brazil, Embrapa, 2008, published by the British Embassy in Brazil.

¹² National Plan for Adaptation to Climate Changes. Available at:

http://www.mma.gov.br/images/arquivo/80182/PNA_%20Volume%202.pdf. Access on August 22, 2018.

¹³ MILARÉ, Édís; LOURES, Flavia Tavares Rocha. Environment and the Rights of the Personality. Revista de Direito Ambiental, São Paulo, v. 37, p.11-27, jan. 2015.

lives as well as the many forms of pollution, including plastic pollution, has negative impacts on child development, such as obesity, hyperactivity, depression, attention deficit, among others¹⁴.

Nationally and internationally established rights give rise to concrete obligations for countries to formulate public policies to mitigate the effects of climate changes, especially on children and adolescents. Violation of these obligations implies unconstitutionality and violation of international treaties. Therefore, it is necessary and urgent for Brazil to take the necessary measures to ensure the rights of children and adolescents in the face of plastic pollution, climate change and air pollution in order to assure the children's right to a healthy environment.

3. Climate change, plastics and its impact on children rights.

Prolonged conflicts, worsening of the climate crisis, rising levels of mental illness among young people and online misinformation are some of the most emerging global threats of concern to children, as revealed by UNICEF in an open letter¹⁵. The letter warns of emerging threats to the rights of children and describes a way to intensify efforts to address them. Specifically on climate change, as early as 2019 the letter warned that children were already facing unbridled destruction of the planet and a global climate crisis that has the potential to undermine most of the gains made in child survival and development in the past 30 years.

Rising extreme weather patterns and toxic air, prolonged droughts and flash floods are part of this crisis and disproportionately affect the poorest and most vulnerable children. The climate crisis threatens to delay the progress of children's rights, without an urgent and sufficient investment in solutions that benefit the most vulnerable children. From hurricanes to droughts, floods and forest fires and deforestation, the consequences of the climate crisis surround us, affecting children and threatening their health, education, protection and in some cases even their survival and the plastics lifecycle is part of this crisis.

The climate emergency driven by anthropic action can be aggravated with the growing production of plastics. The plastic sector is the second largest industrial source and the one that grows the most from greenhouse gases, and 99% of what makes up the product derives from fossil fuels. As a by-product of oil, coal and natural gas, plastic is a key contributor to carbon dioxide emissions, highlights a new report by the NGO Center of International Environmental Law (CIEL)¹⁶.

¹⁴ Environment and behavior. Volume 45 Issue 5, June 2013. Available at: <http://journals.sagepub.com/toc/eaba/45/5>. Accessed August 12, 2018.

¹⁵ Available at https://www.unicef.org/child-rights-convention/open-letter-to-worlds-children?utm_campaign=general&utm_source=referral&utm_medium=media. Accessed on April, 20, 2021

¹⁶ Available at: <https://www.dw.com/pt-br/como-o-plástico-acelera-o-aquecimento-global/a-48752395>. Accessed on April, 20, 2021

According to the Center for International Environmental Law report¹⁷, for the year 2019, the production and incineration of plastics will produce more than 850 metric tons of greenhouse gases, as well as plastic gases from disposal, which can reach more than 56 gigatonnes, corresponding to 10 to 13 percent of the rest of the carbon balance¹⁸. These transfers of greenhouse gases from the plastic lifecycle at these current levels accentuate the effects of climate change and threatens the global temperature capacity above 1.5° C, further strengthening the uneven picture of the effects of climate change and impacting children in particular.

In this same context, the report called Child-friendly, describes the effects of environmental damage on children's rights, as well as obligations related to the protection of children and future generations¹⁹. This document shows that air pollution, water pollution and exposure to toxic substances, together with other types of environmental damage, annually causes more than 1.5 million deaths of children under five years of age and contribute to diseases, disabilities and mortality in adulthood. In addition, it demonstrated that climate change and the loss of biodiversity threatens to cause long-term effects, which will accompany children in the future. In addition, he mentioned that children are often unable to exercise their rights, including the right to information, participation and access to remedial measures and, therefore, States need to do more to respect, protect and enable children's rights in relation to the harms to the environment.

According to UNICEF, these challenges will only be compounded by the impact of air pollution, toxic waste and groundwater pollution damaging children's health. In 2017 approximately 300 million children were living in areas with the most toxic levels of outdoor air pollution - six or more times higher than international guidelines, and it contributes to the deaths of around 600,000 children under the age of 5. Even more will suffer lasting damage to their developing brains and lungs. And, by 2040, one in four children will live in areas of extreme water stress and thousands will be made sick by polluted water. The management and protection of clean, plentiful, accessible groundwater supplies, and the management of plastic waste are very fast becoming defining child health issues for our time.

The effects caused by extreme weather events and environmental disasters are responsible for the deaths and terrible living conditions of humans in the poorest and most vulnerable areas of the planet, affecting mainly children, and they are the group that absorbs most of the deaths caused

¹⁷HAMILTON, Lisa Anne et al. Plastic & Climate: The Hidden Costs of a Plastic Planet. **Center for International Environmental Law (CIEL)**, 2019.

¹⁸PLASTIC ATLAS. Facts and figures about the world of synthetic polymers. HEINRICH BÖLL STIFTUNG. Second edition 2019

¹⁹UN ENVIRONMENT PROGRAM. Direito das crianças e meio ambiente. <https://www.unenvironment.org/pt-br/resources/other-evaluation-reportsdocuments/direito-das-criancas-e-meio-ambiente>

by these factors (80%). As a result of these situations, an estimated 175 million children are affected annually worldwide. Given the specific vulnerabilities arising from childhood and adolescence, the effects are greater because they have weaker biological systems and are more susceptible to negative environmental impacts as they are still in the early stages of development.²⁰

The effects described are aggravated in early childhood (children up to six years of age) and in pregnant women due to the fact that they are in the early stages of biological and psychological development. The main risks are poor development of the respiratory system, increased vulnerability to vector diseases, malnutrition caused by restricted access to adequate food, diarrhea and other health problems from lack of access to healthcare, sanitation services and hygiene, all caused or intensified by climate change and environmental disasters. In this regard, studies also note that among victims of climate disasters, children are two to three times more likely than adults to develop symptoms of post-traumatic stress disorder (PTSD)²¹.

Importantly, the consequences and burdens of climate change are not evenly distributed in different parts of the world. Developing countries and vulnerable groups within and outside these countries are most severely affected²². Climate change, natural disasters, droughts and floods lead to scenarios in which the poorest and most marginalized people have the least resources to survive and bypass emergencies.

Thus, considering that 17.3 million Brazilian children and adolescents live in poverty²³, it is possible to affirm a higher index of vulnerability of the population to the impacts of climate change and the plastics lifecycle, causing the violation of several rights. Within highly vulnerable groups, indigenous populations are at great risk for maintaining their livelihoods and the natural resources that depend on their survival, as they are connected to highly biodiverse ecosystems that are in serious threat of imbalance and extinction. Indigenous children suffer from inequality in various sectors, with high levels of illiteracy and lack of access to education²⁴ and health, as well as high rates of child mortality²⁵, indicating greater vulnerability of this population, especially in the context of climate change.

²⁰ Terra dos Homens. Protecting Environmental Child Rights. Available at: http://www.terredeshommes.org/wp-content/uploads/2013/01/tdh_Environmental-Child-Rights_2012-11-final.pdf. Accessed August 12, 2018.

²¹ UNICEF Office of Research (2014). 'The Challenges of Climate Change: Children on the front line', Innocenti Insight, Florence: UNICEF Office of Research.

²² DARA (2013). Climate vulnerability monitor: A guide to the cold calculus of a hot planet. Madrid: DARA. Available at: <http://daraint.org/wp-content/uploads/2012/09/CVM2ndEd-FrontMatter.pdf>. Access on August 22, 2018.

²³ According to a study based on data from the National Continuous Household Sample Survey (Pnad Contínua). FUNDAÇÃO ABRINQ Childhood and Adolescence Scenario in Brazil. 2018

²⁴ Situation of Brazilian Childhood and Adolescence 2009. The Right to Learn, Enhance progress and reduce inequalities. Available at: https://www.unicef.org/sitan/files/Brazil_SitAn_2009_The_Right_to_Learn.pdf. Access on June 3, 2018.

²⁵ Available at: https://www.unicef.org/brazil/pt/Cap_08.pdf. Access on July 30, 2018.

3.1 The claim to Children Rights Committee of the United Nations.

Fourteen children have submitted a claim to Children Rights Committee, submitted under Article 5 of the Third Optional Protocol to the United Nations Convention on the Rights of the Child. It claims that the countries Argentina, Brazil, France, Germany and Turkey are either deliberately omitting or acting contrary to what they undertook to do in the Paris Agreement. In this way, the countries would be violating provisions of the Convention on the Rights of the Child, especially the rights to life, health and culture.

The petition describes the concrete effects that climate change has on children, such as asthma due to air pollution and diseases such as dengue and Chikungunya. Regarding to Brazilian context, specifically, the petition alleges that the current government is actively dismantling environmental regulation and enforcement. It cites the drastic cuts in the budget of the Ministry of the Environment, the attempts to change the Forest Code, the changes in the Environment Council, and so on. It also says Brazil has doubled fossil fuel subsidies since 2007 and that energy investments are mostly concentrated in sources non-renewable and that the country is among the world's largest emitters of carbon, in 22nd position. The petition also highlights the increase in the burning and deforestation of the Amazon. The conclusion is that there is a responsibility of the extraterritorial Brazilian State, because the Brazil government generates negative effects on the international community as a whole.

The complaint calls on the Children Rights Committee to: (i) declare that climate change is a crisis for children's rights; (ii) declare that the five countries are responsible for the climate crisis because they ignore the scientific evidence on prevention and mitigation; (iii) declare that countries are violating the rights of the child, especially the rights to life, health, culture; (iv) advise countries to review and amend their policies and laws; (v) recommend greater international cooperation and binding measures; and (vi) recommend children must be heard.

4. Plasticized childhood.

With the presence of plastics since the beginning of life, it is observed that this material plays an important and impactful role in children's development. This is not only due to the impacts of plastics on climate change, as shown above, or the toxicity of plastics, as presented below, but also to the values attributed to plastics in children's lives. They grow around piles of plastics, from toys to domestic waste and dumps, as well as loads of advertising normalizing the consumption of plastic products with no environmental criteria. The term plasticized childhood is coined to express this set of values and impacts of plastics lifecycle in a child's development.

In regards to the health impacts, a recent study²⁶ by German Environment Ministry has found almost all children tested have traces of plastic byproducts or plasticizers in their bodies. Some of the chemicals found have been shown to harm health and development. The study tested the urine of young people, ages from 3- to 17-years-old, and residues of 11 of the 15 tested substances were detected in 97 to 100 percent of the 2,500 participants.

Moreover, the Endocrine Society also has found a linkage between plastic chemicals, such as Bisphenol A (BPA), Bisphenol S (BPS) and Bisphenol F (BPF), and child obesity. The outcomes among children and adolescents aged 6 to 19 years were that those with higher levels of BPS and BPF in their urine were more likely to have obesity compared to children with lower levels²⁷. Further research can be found in the following chapters in regards to plastic pollution in Brazil and the impacts of plastics in children's development.

4.1 Plastic pollution in Brazil

According to the recent report Plastic Atlas²⁸ "in 2018, Brazil produced about 79 million tons of waste, with plastics representing 13.5% of that volume, or 11.3 million tons. The figure makes the country the fourth largest producer of plastic waste in the world. Of the portion of plastic waste, only 145 thousand tons are recycled, or 1.28% of the total, compared to the global average of 9% and rates of 34.6% and 21.9% in the United States and China, respectively".

The increase in the volume of plastic waste is quite problematic in a country where only 1.28% of this material is recycled, according to WWF data cited by the Plastic Atlas, an unprecedented study carried out by the German non-profit organization Heinrich Böll Foundation. The German foundation also draws attention to the 70,000 to 190,000 tonnes of garbage dumped annually in the Brazilian sea by the people who live on the coast, a problem for marine fauna and flora, for the health of people, traditional communities and tourism, one of the economic activities most affected by the pandemic²⁹.

Regarding the waste management, the National Solid Waste Policy³⁰, only approved in 2010, establishes shared responsibility of waste generators: manufacturer, importer, distributor,

²⁶ Spiegel (2019). Fast alle Kinder sind mit Weichmachern belastet. Available at: <https://www.spiegel.de/gesundheit/schwangerschaft/weichmacher-und-pfoa-fast-alle-kinder-mit-gesundheitskritischen-chemikalien-belastet-a-1286708.html>

²⁷ The Endocrine Society (2019). Exposure to common chemicals in plastics linked to childhood obesity. Available at: <https://www.sciencedaily.com/releases/2019/07/190725092521.htm>

²⁸ Heinrich Böll Stiftung (2020). Atlas do Plástico. Available at: <https://br.boell.org/sites/default/files/2020-11/Atlas%20do%20Plástico%20-%20versão%20digital%20-%2030%20de%20novembro%20de%202020.pdf>. Accessed on April, 20, 2021

²⁹ BBC News (2020). Consumo de plásticos explode na pandemia e Brasil recicla menos de 2% do material. Available at: <https://www.bbc.com/portuguese/brasil-55131470>. Accessed on April, 20, 2021

³⁰ Available at: http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/112305.htm

trader, citizen and holders of urban solid waste management services. It also determines a set of goals in order to reduce the impact of solid waste in the environment. Among them, the development of municipal solid waste plans, shutting down dumps, annual declarations on the amount of waste produced by region, selective collection systems and reverse logistics policy - a practice in which the productive sectors themselves are responsible for the disposal of waste produced by their chains, including plastic packaging. Ten years later, however, the plan failed to achieve several of these goals, especially the reverse logistics system. Brazil increased the production of waste by 26%, with a recycling rate of only 3% and the dumps are still present. There are more than three thousand of these, spread across all states, which continue to contaminate the soil and water³¹.

4.2 Plastic toys and children.

As mentioned before, children are in a peculiar stage of development and must therefore have their rights guaranteed. One of the recent studies that Alana Institute undertook with the Research Group on Green Chemistry, Sustainability and Education of the Chemistry Department from the Federal University of São Carlos brings the correlation among advertising aimed at children from the toys industry, the plastic consumption and disposal and its impacts in children's lives and the environment, including toxicity.

It is important to emphasize that, although marketing to children under 12 years old is forbidden in Brazil, Alana Institute has identified many cases in which it still occurs frequently. In a recent monitoring of TV kids channel conducted by Alana Institute, children were impacted by a commercial directed to children every 9 minutes. In October of 2019, due to Brazilian Children's day, these ads increased by 331%. Among these commercials, 71% was related to the toys segment, showing the high investments by this sector to illegal child advertising and the stimuli to consumerism. Therefore, it is most important to say that advertising aimed at children has several impacts on children's health and the environment, as shown in the following section.

³¹ Poder 360 News (2020) Política Nacional de Resíduos Sólidos completa 10 anos com pouca efetividade. Available at: <https://www.poder360.com.br/brasil/politica-nacional-de-residuos-solidos-completa-10-anos-com-pouca-efetividade/> Accessed on April, 20, 2021

4.3 The correlation between advertising directed to children and the impact on their health and the environment.

Research and studies suggest that children up to 6-8 years old do not differentiate between advertising and content, nor do they have the necessary judgement to distinguish fiction from reality and, until they are 12, do not understand the persuasive nature of advertising^{32,33}, making them easily influenced by this type of commercial strategy. In the face of the digitalization of means of communication and the increased access to the internet, children's programs and commercials frequently invite their audience to visit their websites, social networks, and channels on video platforms on the internet.

Besides, to expose children to advertising content directed at them often contributes towards intensifying problems that jeopardize child development such as: precocious eroticism, behavioral disorders, family stress, violence, and alcoholism, lack of environmental sustainability as well as eating disorders, such as obesity, anorexia and bulimia.

Many studies show the correlation between advertising directed to children and the impact on their health and the environment. A report by The Economist launched in 2017 revealed that the prohibition of child advertising could save up to R\$76 billions in regards to mental and physical health of children³⁴. Complementary evidence shows that almost 85% of advertisements for children in the U.S. in 2013 promoted high-fat, high-sugar or high-sodium foods and beverages³⁵. Another unfold of the impact of children advertising on the environment is related to planned and psychological obsolescence, the mechanism of using hardware and software to make a product's life-cycle shorter, of electronic products and its increasing hazardous e-waste production³⁶.

³² Report by Professor Yves de la Taille on PL 5921/2001 develop by request of the Federal Psychology Council, 'Advertising Aimed at Children - Psychological Considerations' Available at: https://site.cfp.org.br/wp-content/uploads/2008/10/cartilha_publicidade_infantil.pdf. Access on September 22, 2019.

³³ Children and television advertising – Swedish Consumer Agency Erling Bjurström, sociologist hired by the Swedish Government in 1994-95. Available at: <http://criancaconsumo.org.br/wp-content/uploads/1994/02/Children-and-television-advertising.pdf>. Access on September 22, 2019.

³⁴ The Economist. The impacts of banning advertising directed at children in Brazil. <http://criancaconsumo.org.br/biblioteca/the-impacts-of-banning-advertising-directed-at-children-in-brazil/>

³⁵ Healthy Food America. Limits on Marketing to Kids. http://www.healthyfoodamerica.org/limits_on_marketing_to_kids. Access on September 22, 2019.

³⁶ Greenpeace. Toxic tech - the dangerous chemicals in electronic products. <https://www.greenpeace.org/archive-international/PageFiles/24478/toxic-tech-chemicals-in-elec.pdf>. Access on September 22, 2019.

4.4 The impacts of plastic toys in children

It is known that 90% of the toys in the world are made of plastics³⁷. In 2015 only, 5.2 million tons of toys were produced, being 70% of them from China³⁸. The vast majority of toys are made of Polyvinyl chloride (PVC), which has presented some level of phthalates, which in excessive exposure can cause health issues such as asthma, hormonal, development and reproductive damages³⁹. Although Brazilian standards by Inmetro has determined the limit of 0.1% of phthalates, past reports from 2008 have identified 31 toys which exceeded this level by 390 times⁴⁰.

Also present in toys in a smaller scale, the Polycarbonate (PC) is mainly produced with the chemical reaction between Bisphenol A and phosgene gas (COCl₂). The first may cause hormone problems to prostate and breast cancer, as well as association with child obesity. Moreover, urine tests collected from children from 9 to 16 years old showed that the alternatives presented to Bisphenol A, which are Bisphenol S (BPS) and Bisphenol F (BPF) present similar damages to this group⁴¹. Important to mention that Bisphenol A was banned from baby bottles, but not from toys.

Recent report and campaign launched by the European Environmental Bureau shows evidence that recycled plastic in toys are being commercialized with forbidden substances or in illegal concentrations. It also presents tests involving children from 6 to 11 years old and their mother with high levels of phthalates contamination⁴².

Therefore, response to children's right to health also involves further analysis on the toxicity and environmental impacts of plastic during this phase of life, especially in regards to the toys industry which still lacks more profound research on the quality of products, as well as its environmental impacts. As exposed, lot has been done to show some of these impacts, such as the link between exposure to chemicals in plastics and childhood obesity⁴³, the toxicity of different

³⁷ Plastics - The Mag. Christmas: plastic toys in vogue. *PlasticsleMag*, 23/11/2011.

<http://plastics-themag.com/Plastic-shakes-up-the-toy-industry>. Accessed on November 18, 2019.

³⁸ Indexbox. World - Dolls And Toys - Market Analysis, Forecast, Size, Trends and Insights.

<https://www.indexbox.io/blog/which-countries-produce-the-most-dolls-and-toys/>. Accessed in September 14, 2019.

³⁹ EHCC. Plastics and Plastic Toys. *Eco-Healthy Child Care*. 2010.

https://health.ucdavis.edu/mindinstitute/resources/resources_pdf/Plastics_and_Plastic_Toys_7_14.pdf. Accessed in November 26, 2019.

⁴⁰ IDEC. Teste com brinquedos encontra 390 vezes a quantidade de ftalatos permitida pela legislação; Idec pede recall. Instituto Brasileiro de Defesa do Consumidor. 09 de agosto de 2011.

<https://idec.org.br/em-acao/em-foco/teste-com-brinquedos-encontra-390-vezes-a-quantidade-de-ftalatos-permitida-pela-legislacao-idec-pede-recall>. Accessed in November 26, 2019.

⁴¹ JACOBSON, Melanie H.; WOODWARD, Miriam; BAO, Wei; LIU, Buyun; TRASANDE, Leonardo. Urinary Bisphenols and Obesity Prevalence Among U.S. Children and Adolescents, *Journal of the Endocrine Society*, Volume 3, Issue 9, September 2019, Pages 1715–1726, <https://doi.org/10.1210/js.2019-00201>. Accessed in November 26, 2019.

⁴² EEB (European Environmental Bureau). Flood of toxic chinese toys threatens children's health.

<https://eeb.org/flood-of-toxic-chinese-toys-threatens-childrens-health/>. Accessed in November 29, 2019.

⁴³ *Journal of the Endocrine Society*. Exposure to common chemicals in plastics linked to childhood obesity. <https://www.sciencedaily.com/releases/2019/07/190725092521.htm>. Access on September 22, 2019.

chemicals present in plastic⁴⁴ and the rapid growth of plastic's contribution to climate change⁴⁵. Therefore, it is necessary to recognize the correlation between advertising of plastic toys aimed at children and the impact on their health and the environment.

5. Children's right to connect with nature and to a healthy environment.

In regards to plastic toys, although children are overloaded with them - either at home, at school or at public playgrounds - they miss to play with what is really beneficial for them and for the environment. Many studies point that there is a significant decline in the quality and quantity of children's direct experience with the natural world. They lack the opportunity to play with natural elements and material such as seeds, water, soil and flowers. They also lack the opportunity to climb trees, explore the landscape and build a fort. Natural elements are wonderful toys. They do not pose any hazard to children's health, are free and do not contribute to the pollution and climate crisis we face. Wooden and natural resources encourage creativity and imagination in young children. Most of the time, plastic toys can only be used for their purpose which can restrict children's thinking skills. Natural items and natural playgrounds can help children to develop fine motor skills and express their thoughts and ideas as they manipulate and explore them.

In a broader sense, it is important to promote the human right to nature connection. The term got its first major boost in September 2012, when Annelies Henstra, a Dutch human rights lawyer; Cheryl Charles, cofounder of the Children & Nature Network; and others made the case at the World Conservation Congress of the International Union for Conservation of Nature. Held in Jeju, South Korea, the conference attracted over 10,000 people, representing more than 200 governments and government organizations and more than 1,000 nongovernmental organizations. Through the leadership of Henstra, Charles, and Keith Wheeler, chair of the IUCN Commission on Education and Communication, the conference passed a historic resolution declaring that children have a human right to experience a healthy natural world⁴⁶.

⁴⁴ The Guardian. Explained: the toxic threat in everyday products, from toys to plastic. <https://www.theguardian.com/us-news/2019/may/22/toxic-chemicals-everyday-items-us-pesticides-bpa>. Access on September 22, 2019.

⁴⁵ Center for International Environmental. Law, Plastic & Climate: The Hidden Costs of a Plastic Planet. <https://www.ciel.org/plasticandclimate/>. Access on September 22, 2019.

⁴⁶ IUCN. Child's right to connect with nature and to a healthy environment. Available at: <https://portals.iucn.org/docs/2012congress/motions/en/M-132-2012-EN.pdf>. Access on August 22, 2019.

The resolution called on the IUCN's membership to promote the inclusion of this right within the framework of the UN Convention on the Rights of the Child, which must be considered by the United Nations High Commissioner for Human Rights⁴⁷.

Its core states that since children are an inalienable part of nature, not only have the right to a healthy environment, but also to a connection with nature and to the gifts of nature for their physical and psychological health and ability to learn and create, and that until they have these rights they will not bear responsibility for nature and the environment.

6. Air pollution and the impacts on children's rights.

The following chapter exposes a big range of information on the linkage between air quality and children rights. Although the knowledge exposed ahead goes beyond plastic production and pollution, it is important to set the devastating scenario in which children are living regarding air quality, especially with the impacts from petrochemical industries producing plastics.

A report by WHO shows that 93% of children worldwide live in environments with air quality standards below recommended⁴⁸. Reducing air pollution is one of the most important actions to be taken by children and adolescents; after all, there is evidence of the impact on the life and health of such individuals, especially regarding respiratory, cardiological and cognitive issues, which have their reflection from intrauterine development to adulthood. Also, it is important to highlight that States and companies are responsible for children rights in this field.

The health effects associated with exposure to emissions from industrial plants have been discussed in literature and its effects can be associated with impacts on children's health and climate change. There are reports⁴⁹ that evidence the biological, psychosocial, socioeconomic and environmental factors, as well as the perceptions of communities, in regards to negative health outcomes in the vicinity of the oil industry. A report from 2006 by Fiocruz analyze the health and environmental conditions through self-rated health in adults, wheezing in children and integrated indicators of environmental health of the population living in communities located around the Petrochemical Guamaré (PPQ) and concluded that, although the concentrations of environmental pollutants to meet air quality standards set, the worst results in negative self-rated health status,

⁴⁷ LOUV, R. Outdoors for All. Sierra Magazine. May/June 2019. Available at: <https://www.sierraclub.org/sierra/2019-3-may-june/feature/outdoors-for-all-nature-is-a-human-right>. Access on August 22, 2019.

⁴⁸ World Health Organization. Air pollution and child health: prescribing clean air. <https://www.who.int/ceh/publications/air-pollution-child-health/en/>. Accessed on November 30, 2019.

⁴⁹ Moraes, Ana Claudia Lopes, in "*Condições de Saúde e Ambiente no entorno de um Pólo Petroquímico no Rio Grande do Norte: uma análise integrada*" Available at: "*Condições de Saúde e Ambiente no entorno de um Pólo ...*[https://bvssp.icict.fiocruz.br > docsonline > get](https://bvssp.icict.fiocruz.br/docsonline/get)

wheezing in children and adolescents and integrated indicators of environmental health were related to communities in the preferred direction of winds, indicating the environment and health impacts in this area. In addition, the Greenhouse Gas Emission and Removal Estimating System (SEEG)⁵⁰ from 2019 shows that emissions associated with industrial processes and waste are among the main mapped sources of greenhouse gas emissions in Brazil, despite the main one being the change in land use associated with deforestation.

6.1 The children's vulnerability to air pollution.

Air pollution is disproportionately dangerous for children and adolescents, given their special condition of being in development. Its metabolic, physiological and behavioral characteristics⁵¹, different from those observed in adults, make children and adolescents especially sensitive to changes in the environment, including air.

The first indicative of this vulnerability is related to pulmonary physiology. Children have fewer alveoli. The areas of air passage are smaller, so if inflamed, they are more easily blocked; the cellular layer of the inner part of the respiratory tract is more permeable in the case of young children⁵². The immune system of children is also developing, which makes them more susceptible to viruses and bacterial infections, increases the risks of respiratory infection and reduces the child's ability to overcome them⁵³. In addition, the infant brain is still in the making, and especially up to five years old, microparticles of pollution more easily permeate children's blood systems and negatively impact their cognitive development⁵⁴.

Added to this is the fact that children and adolescents breathe more air per unit of body mass than adults and therefore inhale proportionally more pollutants when compared to these⁵⁵. Because they are in a phase of significant growth, their metabolism is more accelerated, which consumes more energy and, therefore, they have a higher respiratory rate.

⁵⁰ The Greenhouse Gas Emission and Removal Estimating System (SEEG) is an initiative of the Climate Observatory that includes the production of annual estimates of greenhouse gas (GHG) emissions in Brazil, analytical documents on the evolution of emissions and a web portal to provide simple and clear system methods and data. Available at: http://seeg.eco.br/en?cama_set_language=en Accessed on April, 20, 2021

⁵¹ Bunyavanich, S.; Landrigan, C.P.; McMichael, A.J.; Epstein, P.R. The impact of climate change on child health. *Ambul. Pediatr.* 2003,3, 44-52.

⁵² UNICEF. Clear the Air for Children. Available at: https://www.unicef.org/publications/files/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf. Accessed on August 21, 2018.

⁵³ Idem.

⁵⁴ Ibidem.

⁵⁵ Committee on Environmental Health. Ambient air pollution: Health hazards to children. *Pediatrics.* 2004.

6.2 Impacts of air pollution on children's rights.

Worldwide, more than 169,000 deaths of children under five years old are linked to air pollution from emissions from vehicles, energy from fossil fuels and waste incineration⁵⁶. In Brazil, every 100,000 people aged up to five years old, 41.38 die from some type of pollution⁵⁷.

Furthermore, there is serious scientific evidence⁵⁸ that the exposure of pregnant women and babies to pollution exacerbates the risk of infant mortality: a percentage increase in late fetal losses is identified because of an increase in interquartile concentrations of air pollutants⁵⁹. Studies also show that chronic exposure to high levels of particulate matter is associated with higher rates of fetal loss, early birth and lower birth weight⁶⁰.

The situation may get worse. According to the Organization for Economic Co-operation and Development (OECD), the mortality of children under five years old may be 50% higher in 2050 as a result of air pollution. Another published study shows more worrying projections: the mortality from pollution can double by 2050⁶¹.

The conclusions on the impacts of pollution on cognitive development are also assertive. Exposure of pregnant women can affect white matter responsible for communication between different parts of the brain, which in the future can cause developmental delays, lower intelligence quotient and increase the signs of anxiety, depression and attention problems⁶². In addition, as blood-brain barrier in children are still developing, this tissue is less resistant and more vulnerable, so that inhaled ultrafine particulate matter can enter the bloodstream, which can cause blood-brain barrier degeneration, leading to oxidative stress, neuroinflammation and neural tissue damage, which is reflected in reduced cognitive function. The scientific literature also analyzes the connection between ambient air pollution and neurotoxicity in the brain structure, which would

⁵⁶ WHO. Inheriting a sustainable world? Atlas on children's health and the environment. 2017. Available in: apps.who.int/iris/bitstream/10665/254677/1/9789241511773-eng.pdf. Accessed on July 24, 2018.

⁵⁷ WHO. Inheriting a sustainable world? Atlas on children's health and the environment. 2017. Available at: apps.who.int/iris/bitstream/10665/254677/1/9789241511773-eng.pdf. Accessed on July 24, 2018.

⁵⁸ Institute of Environment and Sustainability, University of California. Environmental Report Card for the County of Los Angeles. 2015. Available at: <http://www.environment.ucla.edu/reportcard/article1700.html>. Accessed on July 24, 2018.

⁵⁹ PEREIRA et al. *Perdas Fetais e Poluição do Ar em São Paulo*. [Fetal Losses and Air Pollution in São Paulo. 1998.

⁶⁰ UNICEF. Clear the air for children. Available at: https://www.unicef.org/publications/files/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf. Accessed on August 20, 2018.

⁶¹ UNICEF. Clear the air for children. Available at: https://www.unicef.org/publications/files/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf. Accessed on August 20, 2018.

⁶² Idem.

contribute to neurodegenerative diseases, reduce human intelligence and lead to cognitive impairment in old age⁶³.

Studies show that air pollution is closely linked with respiratory problems such as pneumonia and bronchitis, among others, as the lung capacity of children living in polluted environments can be reduced by 20% - a consequence similar to the effect of growing up in a house as a passive smoker. Studies also show that adults who were exposed to chronic air pollution when children tend to have respiratory problems later in their lives⁶⁴. In addition, the impact of air pollution on the health of children under five years old is highlighted, since half of the world's deaths in this age group are related to acute respiratory infections that can be related to this type of pollution⁶⁵.

With reflexes especially in adult life, exposure to air pollution exacerbates cardiovascular problems such as stroke and heart failure⁶⁶.

In summary, several diseases in children and adolescents are caused by air pollution: cardiovascular diseases, such as cardiac ischemia, infarction and high blood pressure; respiratory diseases such as oxidative stress and inflammation of the respiratory tract. Coughing and wheezing, irritation of the nasal passages and throat, immune responses, acute respiratory infections (including bronchitis and pneumonia), chronic respiratory infections (including asthma), chronic obstructive pulmonary disease (which includes bronchitis and emphysema), damage to lung development, lung cancer, impairment to cognitive development, due to oxidative stress, neuroinflammation and neural tissue damage, eye irritation, low weight at birth, premature birth, among others⁶⁷.

6.3 Brazilian scenario related to air quality standards and national policy addressing childhood exposure to toxic substances

Less than 2% of municipalities are covered by air quality monitoring in Brazil. Brazilian State maintains the outdated air quality standards that are more permissive than the safety values defined by the World Health Organization (WHO). And the proposal to update the debate is

⁶³ Ibidem.

⁶⁴ UNICEF. Clear the air for children. Available at: https://www.unicef.org/publications/files/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf. Accessed on August 20, 2018.

⁶⁵ WHO. Health and the environment: addressing the health impact of air pollution. Available at http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_R8-en.pdf. Accessed on June 23, 2018

⁶⁶ UNICEF. Clear the air for children. Available at: https://www.unicef.org/publications/files/UNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf. Accessed on August 20, 2018

⁶⁷ Idem.

progressing very slowly to adapt the Brazilian standard to international standards, in order to guarantee real levels of air safety⁶⁸.

It is also important to highlight that measuring air quality in schools is fundamental to guarantee a safe and healthy environment to children and establish emergency protocols in case of high levels of air pollution. Therefore, public policies must be promoted to guarantee the best interest of children in this field.

Regarding the national policy addressing childhood exposure to toxic substances, the National Environment Council (*Conselho Nacional do Meio Ambiente*, “CONAMA”) is the federal regulatory authority responsible for regulating atmospheric emissions and determining limits on levels of exposure⁶⁹. In collaboration with industry representatives, municipal governments and civil society, CONAMA issues resolutions setting various pollution limits and general requirements for the protection of the environment. Conama Resolution n. 5/1989 establishes the National Programme of Air Quality Control (*Programa Nacional de Controle de Qualidade do Ar*) (PRONAR) as a framework regulatory regime in the field.

The goals of PRONAR are to enhance air quality, ensure compliance with the applicable environmental quality standards and preserve air quality within areas deemed not to be degraded. PRONAR is based on the following definitions:

- Maximum Emission Limits: amount of pollutants that polluting sources are permitted to emit into the atmosphere (*Res. 5 /1989*).
- Air Quality Standard: concentration level in the atmosphere of a specific pollutant, linked to a period of exposure, which guarantees the protection of the environment and human health against the risk of harm resulting from atmospheric pollution. (*Res. 491/2018*).
- Atmospheric Pollutant: any form of matter in quantity, concentration, time or with other characteristics that cause or may cause the air to become impure or harmful to human health, safety and wellbeing, to fauna and flora, to property or to ordinary community activities. (*Res. 491/2018*).

⁶⁸ VORMITTAG, Evangelina; COSTA, Renan Rodrigues da; BRAGA, Aline Atsuta; MIRANDA, Marina Jorge de; NASCIMENTO, Nicole Cristina do e SALDIVA, Paulo. *Monitoramento da Qualidade do Ar no Brasil*. [Air Quality Monitoring in Brazil.] 2014. Available at : <https://www.saudeesustentabilidade.org.br/publicacao/pesquisamonitoramento-da-qualidade-do-ar-no-brasil/> Accessed on: September 24, 2018.

⁶⁹ Available at: CONAMA resolutions

<https://antigo.mma.gov.br/cidades-sustentaveis/qualidade-do-ar/fontes-fixas.html>. Accessed on April, 20, 2021

Currently, there are no specific resolutions regarding limits on childhood exposure and air quality standards^{70[1]}, which are more permissive than the guideline values of air quality recommended by the World Health Organization in 2005.

6.4 Economic impacts of air pollution.

An OECD study shows that annual global air pollution expenditures account for about 0.3% of the global Gross Domestic Product (GDP) and this figure should increase to 1% by 2060 if there are no changes⁷¹. Yet a World Bank study carried in 2013 reveals that deaths from air pollution represent \$ 225 billion in labor losses and \$ 5 trillion in welfare losses⁷².

6.5 Air pollution, child labor and outdoor play.

In 2008, Brazil promulgated Decree 6.481 of 2008, concerning International Labor Organization (ILO) Convention 182, which became part of the Brazilian Law in 1999, including the list of worst child labor conditions prepared by the International Labor Organization.

Categories on the list include street work and other street activities such as street trading, car keeper, child office work, tour guides, transportation of people or animals, usually performed in urban contexts. The inclusion is due to the fact that these works have occupational risks exposure to solar radiation, rain and cold weather. Among the main consequences that these working conditions may cause are premature aging, skin cancer, dehydration and respiratory diseases.

Confirming this understanding, in a report published in 2018 by the World Health Organization, recent data and studies state that outdoor workers are particularly vulnerable to air pollution, with research noting the impairment of lung function in these workers⁷³.

The situation of children exposed to outdoor work is particularly serious, considering that they should not be subjected to the efforts required by the work activity and are still in the period of biological formation, making exposure to air pollution specifically harmful.

⁷⁰ Available at: CONAMA resolutions: <http://www2.mma.gov.br/port/conama/legiabre.cfm?codlegi=740>. Accessed on April, 20, 2021

⁷¹ OCDE. The Economic Consequences of Outdoor Air Pollution. 2016. <https://www.oecd.org/environment/indicators-modelling-outlooks/Policy-Highlights-Economic-consequences-of-outdoor-air-pollution-web.pdf>. Accessed on August 20, 2018

⁷² World Bank. The Cost of Air Pollution: Strengthening the economic case for action. 2016. <http://documents.worldbank.org/curated/pt/781521473177013155/The-cost-of-air-pollution-strengthening-the-economic-case-for-action>. Accessed on August 20, 2018

⁷³ Breathe clean air: everywhere, for everyone Protecting workers from air pollution outdoors and indoors, World Health Organization (Oct / 2018).

Thus, there is a double harm to children: as a result of child labor, which violates their peculiar condition of development; as well as due to the air pollution to which they are exposed, which further aggravates the situation. Therefore, the addressing and prevention of child labor, especially in outdoor contexts, it is necessary and urgent.

Also, as shown previously, research data⁷⁴ proves that the connection with nature brings many benefits for the development and health of children, among them: stimulation of all the senses; more active and exploratory learning; favoritism in the formation and maintenance of the social bonds; inspiration for moments of concentration; stimulation to physical activities; reduction of violence; integral childhood development; direct health benefits; improved healthy diet; contribution to nature conservation; stimulating conscious consumption; building a healthier society. Therefore, it is necessary to outline strategies and actions that involve families, educators and the government to materialize the possibility of childhoods abundant in nature⁷⁵.

7. Civil society mobilization.

It's also extremely notable the role of organized civil society to advocate for children's rights and a healthy environment in regards to plastic and air pollution. Around plastics, Alana Institute is a core member of the Break Free From Plastics global network, which has a notable group of organizations in Latin America. Moreover, we have supported the work of the *Aliança Resíduo Zero Brasil* (Brazil Zero Waste Alliance, in free translation), as well as the Clean Seas campaign from UNEP.

In regards to air pollution, a good example is the BreatheAir Coalition in Brazil, which consists of more than 40 organizations and has 9 collective commitments around air quality advocacy, among them: adopt and improve air quality standards; improve fuel and engine technologies in the transportation sector, as well as promote active mobility; promote accessible information on air quality; and adopt emergency protocol policies in schools. Alana Institute is also a member of the AIDA Latin American network on Climate and Air Quality litigation, as well as on the global Clean Air Fund network.

⁷⁴ Available at: <https://criancaenatureza.org.br/para-que-existimos/os-beneficios-de-brincar-ao-ar-livre/>. Accessed on August 20, 2018

⁷⁵ LOUV, R. **The Last Child in the Woods**. Workman Publishing Company. April 2016

8. Recommendations.

In the face of the scenario presented in this document, the **Alana Institute**, through its aforementioned programs, presents the following suggestions to enhance public policies in regards to a safe and healthy environment in regards to plastics lifecycle and human rights:

- Declare that climate change is a crisis for children's rights;
- Declare that children have a human right to experience a healthy natural world;
- Declare that children have the inherent right to connect with nature in a meaningful way, as a substantial part of his or her everyday life and healthy development, and to enjoy, maintain and strengthen this connection through the direct and ongoing experience of nature;
- Hear and consider the children's opinion related to climate change and their right to a healthy environment;
- Recognize the horizontal effect of Children Rights Convention and declares that companies must undertake environmental and human rights due diligence and do not contribute to the discrimination of children and to violation of other children's rights, especially in the field of climate changes and exporting of pollution, especially from plastics and air pollutants;
- Recognize the correlation between advertising directed to children and the impact on their health and the environment;
- Recommend that States take measures to prevent and mitigate climate change, adopting and enforcing ambitious targets to reduce greenhouse gas emissions from all sectors, including plastic production.
- Recommend that States take measures to prevent marine plastic pollution, stopping the production of single-use plastics and implementing effective reverse logistic systems;
- Recommend that States must establish air quality standards, aligned to WHO's recommendations, with fixed deadlines for change, appropriate critical episodes, accessible communication to the population, and control measures needed to reduce emissions in order to ensure the well-being of the population and a healthy environment;
- Recommend that States must establish emergency protocols in case of high levels of air pollution;
- Recommend that States must adopt more restrictive vehicular pollutants' emission limits, in line with the most current, clean and effective mechanism to tackle emission of pollutants by vehicles;
- Recommend that States must adopt measures in order to avoid children labor and to promote the safe outdoor play;

- Recommend that States and businesses from the plastic toys industry adopt high standards of safe substances in products, with further research on phthalates in PVC and Bisphenols in PC;
- Recommend to Children Rights Committee, in the case of children against Argentina, Brazil, France, Germany and Turkey, to issue an *interim measure* of in the face of irreparable risk to victims, request clarification, initiate investigations, and issue recommendations to the denounced States.