

PROSEGUR RESEARCH

Environmental impacts on security

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2022



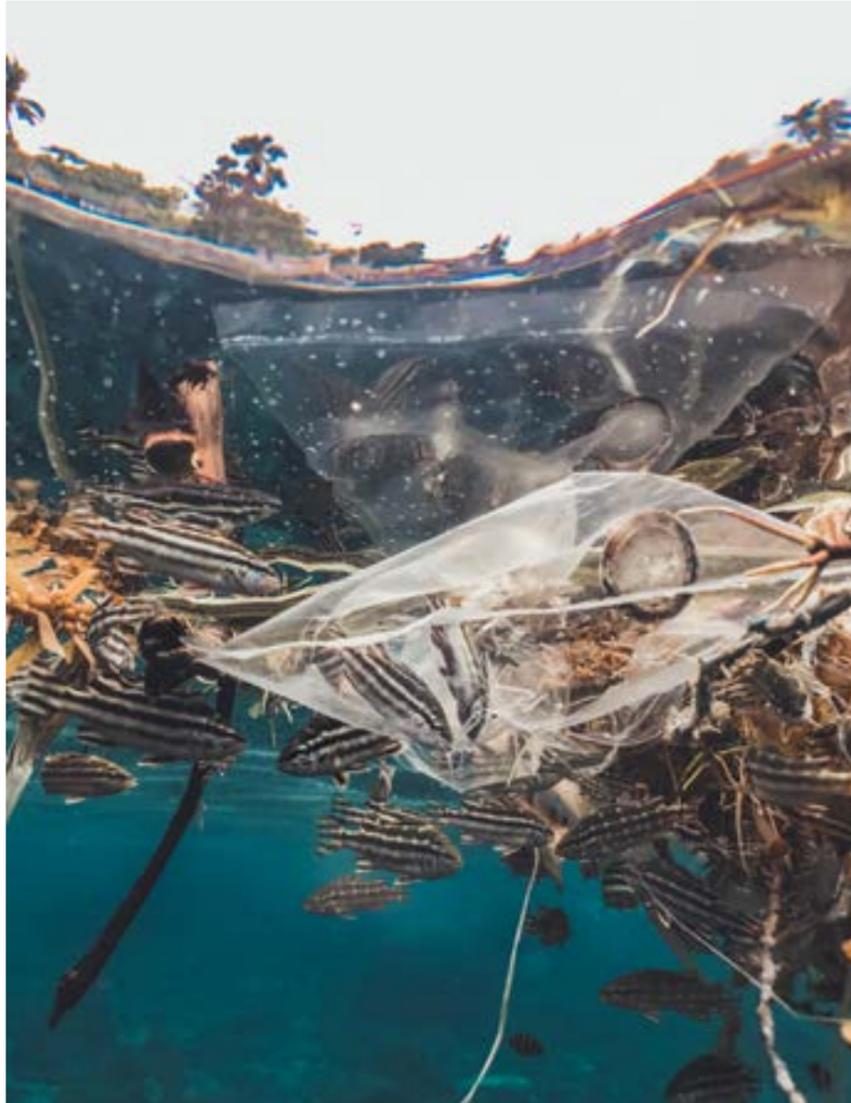
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Index



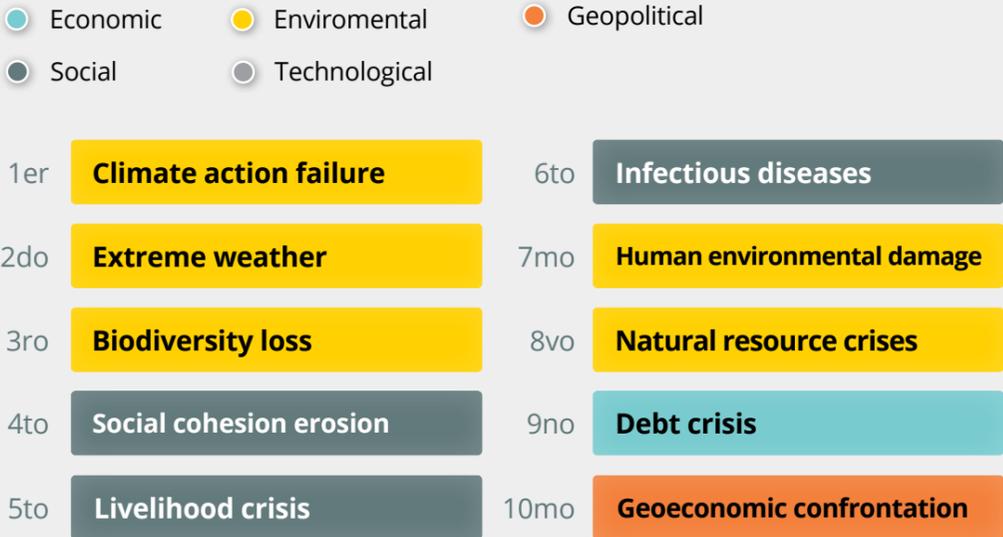
Introduction

Introduction

In its Global Risks Report 2022¹, the World Economic Forum (WEF) compiles perceptions of risks among professionals and global leaders in government, business, and society for the short, medium and long term. According to their research, the biggest concerns over the next five years are related to society and the environment. When extended to the next 10 years, the health of the planet dominates all concerns: environmental risks are perceived as the five most critical threats to the world and those with the greatest potential damage to the Earth and people in the second graph. The three most severe risks are: failure to act on climate action, extreme weather events and biodiversity loss in the first graph.

¹ World Economic Forum, January 2022, The Global Risks Report 2022, <https://www.weforum.org/reports/global-risks-report-2022>

The most serious risks on a global scale in the next 10 years



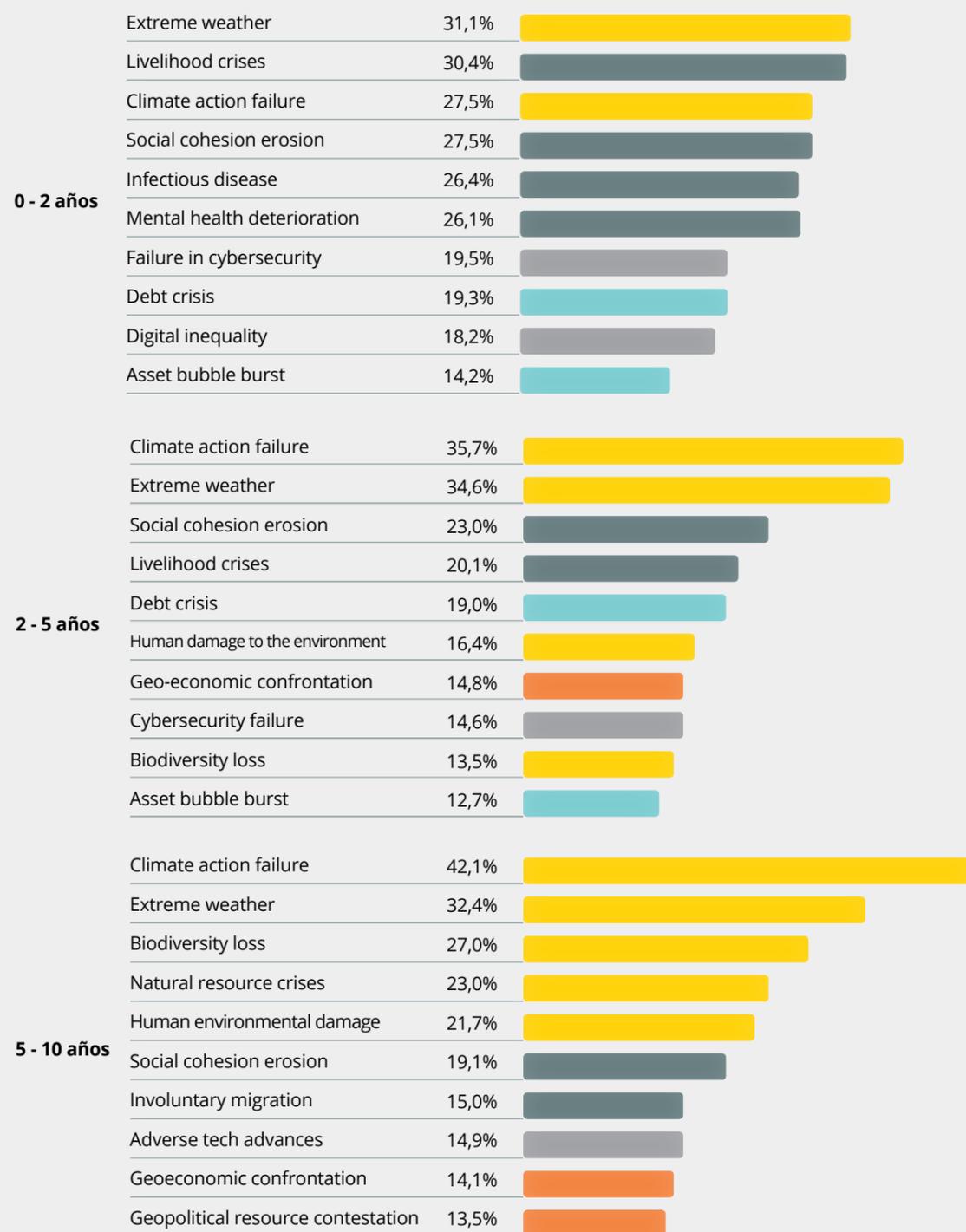
Source: Prosegur 2022, based on World Economic Forum Global Risks Perception Survey 2021-2022



Global risk horizon

When will risks become a critical threat to the world?

● Economic
 ● Environmental
 ● Geopolitical
 ● Social
 ● Technological



Source: Prosegur 2022, based on WEF

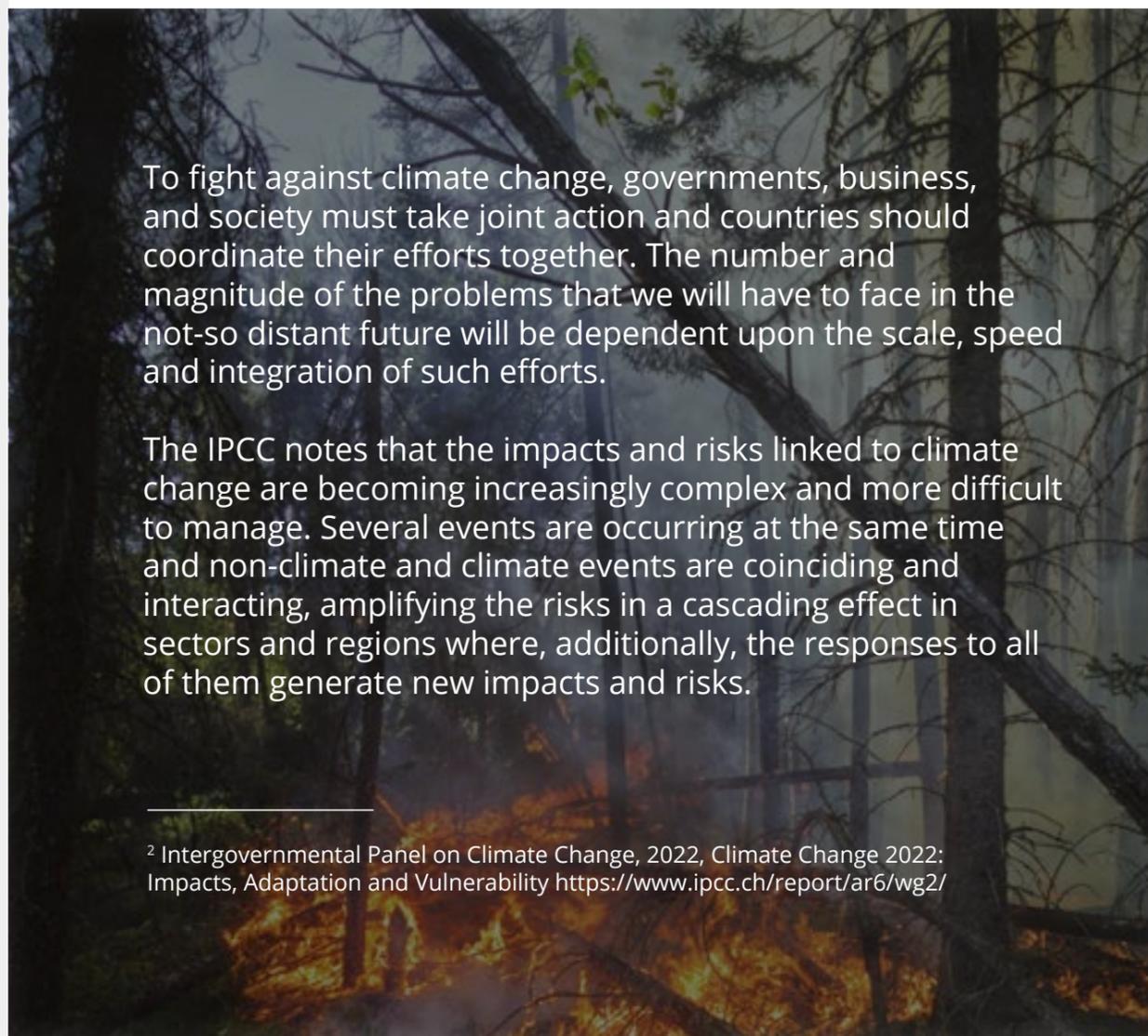
The report agrees with what the United Nations Intergovernmental Panel on Climate Change (IPCC)² in viewing the current efforts as insufficient by either being too short, local, few and unbalanced (by being more one-sided or in specific sectors). In addition, the serious problems of indebtedness, poverty or lack of governance, particularly in developing countries, slows down or even obstructs taking action on the issue.

Yet, it is precisely these regions, Central and South America, West, Central and East Africa and Southeast Asia, that are most affected by adverse effects of climate change, such as droughts, increasingly powerful and frequent cyclones, hurricanes, etc.

To fight against climate change, governments, business, and society must take joint action and countries should coordinate their efforts together. The number and magnitude of the problems that we will have to face in the not-so distant future will be dependent upon the scale, speed and integration of such efforts.

The IPCC notes that the impacts and risks linked to climate change are becoming increasingly complex and more difficult to manage. Several events are occurring at the same time and non-climate and climate events are coinciding and interacting, amplifying the risks in a cascading effect in sectors and regions where, additionally, the responses to all of them generate new impacts and risks.

² Intergovernmental Panel on Climate Change, 2022, Climate Change 2022: Impacts, Adaptation and Vulnerability <https://www.ipcc.ch/report/ar6/wg2/>



2

Conflicts

Conflicts

On September 25, 2015, the UN General Assembly approved the 2030 Agenda for Sustainable Development. This is an action plan which general objective is the pursuit of prosperity for the world's citizens as well as its balance with the planet. Moreover, among other primary objectives, are those that have to do with the intention of strengthening universal peace and access to universal justice.

These objectives configure a series of goals that, given their cross-cutting nature, have a direct impact on the world of security, in general terms, and security specifically. The inclusion of climate change plans and measures in policies, strategies and research that aim to significantly reduce all forms and causes of violence underlings; the strategic nature of such variable within national security and the relevance and challenge of its incorporation poses within states crime prevention and criminological policies.

Studies and research show that there is no duly accredited scientific evidence to link climate change and situations of violence, conflict and extremism. However, it is clear that environmental problems are risk multipliers in certain contexts of vulnerability.

The presence of adverse weather phenomena, whether in the form of prolonged droughts or floods, interacts with other structural factors from governance, social, economic, historical, criminological, etc.

It is in fragile and vulnerable environments where these structural components are stressed, indirectly causing the generation of conflict situations that lead, firstly, to community discontent and, subsequently, to the commission of criminal offenses that could lead to more complex, extremist, and sensitive situations from the security point of view. If poor or weak governmental response is added to these phenomena: institutions will not have the capacity to provide a solid alternative. Consequently, this will increase the likelihood of provoking an increase in tensions within the community and, as mentioned above, will undermine the legitimacy of the government.

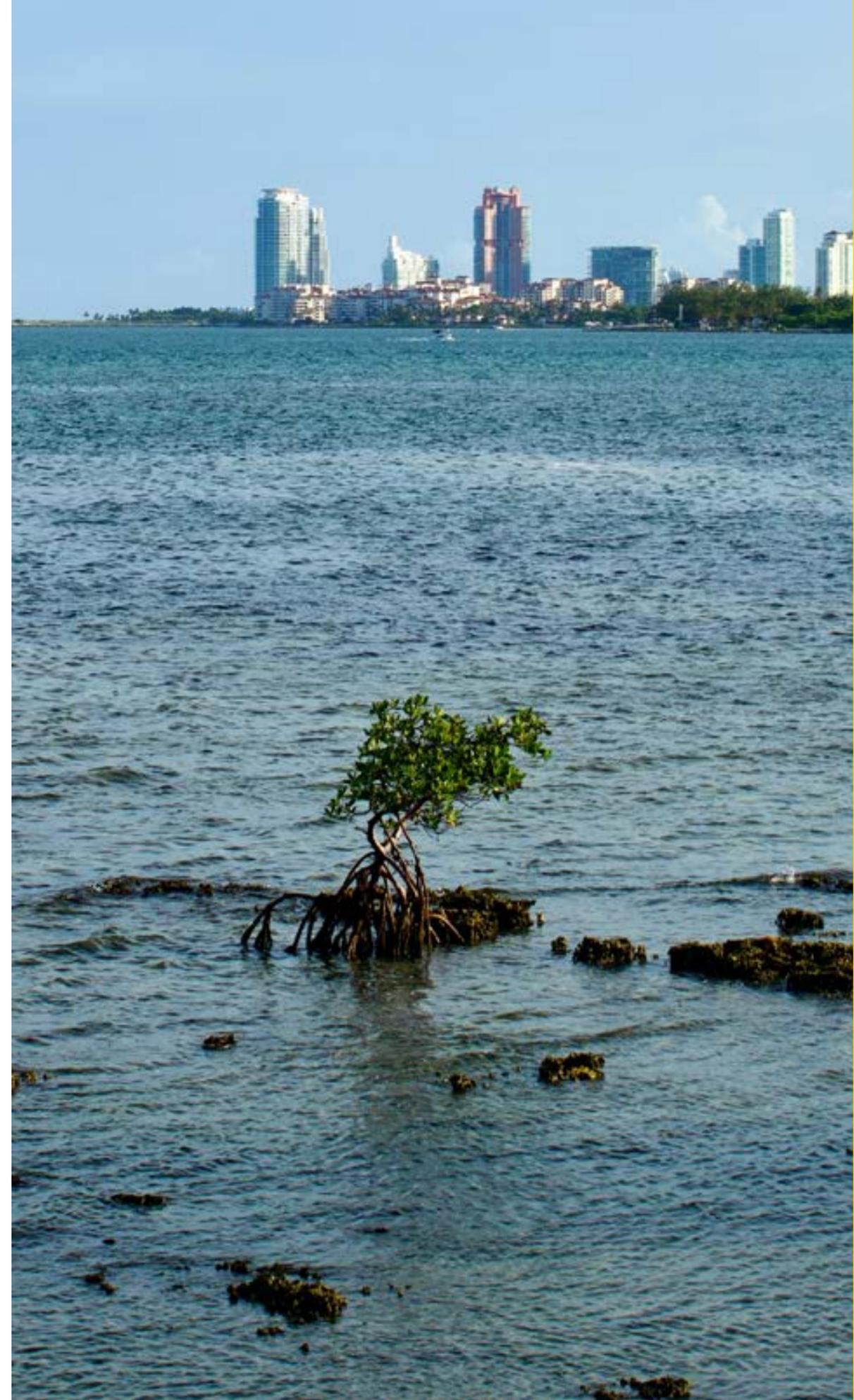
The maintenance of peace, justice, development and security are aspects that are essential and a priority, not only for any state or nation, but also for large corporations and other businesses that aim to settle in other locations to meet their own business interests.

Today, in a context of increasing water stress, there are already multiple conflicts between countries related to water, in particular transboundary waters. Representing 60% of the world's freshwater flow, 153 countries are located in at least one of the 286 transboundary river and lake basins or in one of the 592 transboundary aquifer systems. There are disputes between Sudan, Egypt and Ethiopia over the Nile; between Turkey, Syria and Iraq over the Euphrates-Tigris basin or over the flows of the Helmand and Harirud rivers between Afghanistan and Iran.

In the Sahel region, Lake Chad and the Horn of Africa "there is increasingly acute competition between pastoralists and farmers for access to water points," says Carbonier.

IPCC Working Group II stresses that climate change has harmed the physical health of people on a global scale.

Moreover, as a result of Arctic melting is the thawing of permafrost, the permanently frozen layer of soil located in places close to the North Pole, especially in Siberia, Alaska, Canada and Greenland and its disintegration caused by global warming is leading to large masses of carbon being released into the atmosphere in the form of CO₂ and methane at a speed never seen before. As a result, it is currently releasing more carbon than it absorbs and has therefore gone from being a "gutter" to a source of atmospheric pollution.





**Organized
crime**

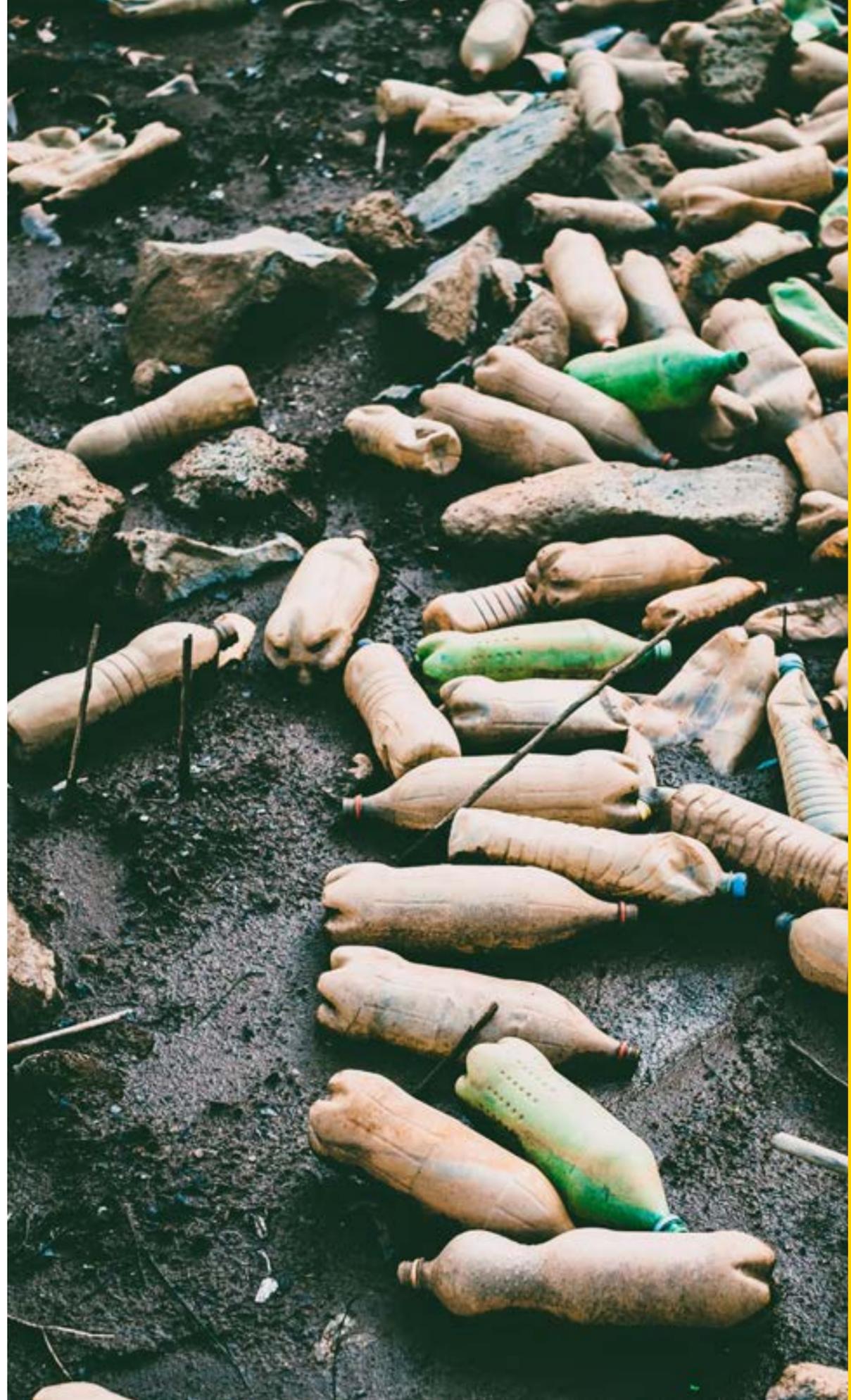
3

Organized crime

On many occasions, all the efforts made at the national level, or through international cooperation between states, as well as those made by corporations, are undermined by numerous criminal networks that carry out actions in an organized manner and with an international or transnational character.

This diversification in their operations is a growing challenge as it is allowing common interests to converge between criminal groups that have technical, economical and organizational capacity to sustain armed non-state actors and sometimes favor the creation of terrorist groups that compete to maintain and reinforce their status quo³.

³ Morán, A. et al (2018). The Intersection of Global Fragility and Climate Risks. International Crisis Group. <https://www.crisisgroup.org/global/climate-change-shapingfuture-conflict>



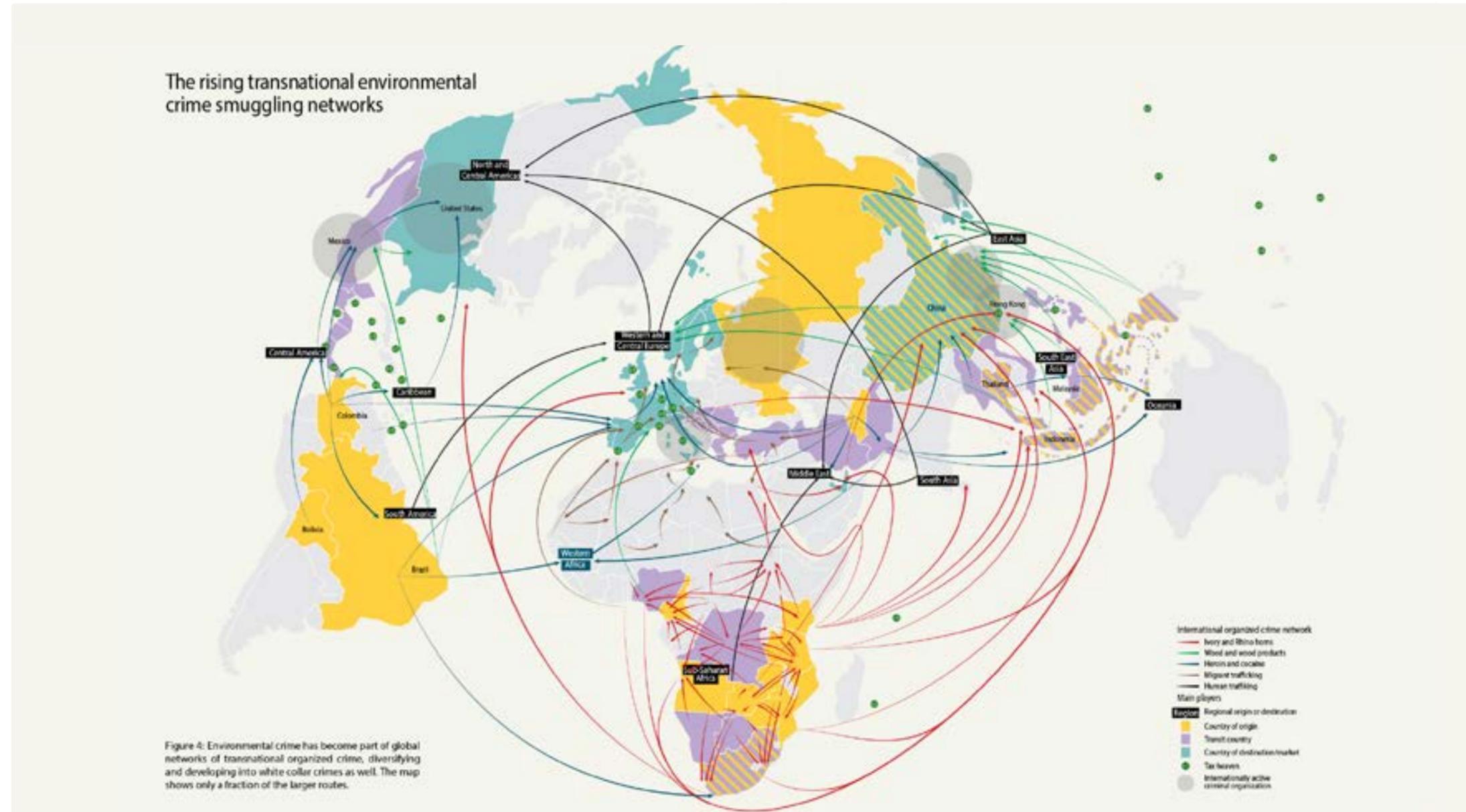
With regard to the technical capability of criminal groups, both Europol⁴, with its IOCTA strategic program, and Interpol, with its programs to combat cybercrime, agree that there is a constant evolution and increase in the activity and use of these technologies by these groups. This evolution not only derives from the use of these technologies for the purpose of marketing the proceeds of their illicit activities, but also from a technical development in the use of tools, as well as in the acquisition of defensive and offensive tools that make it possible to reach and bypass government and corporate controls.

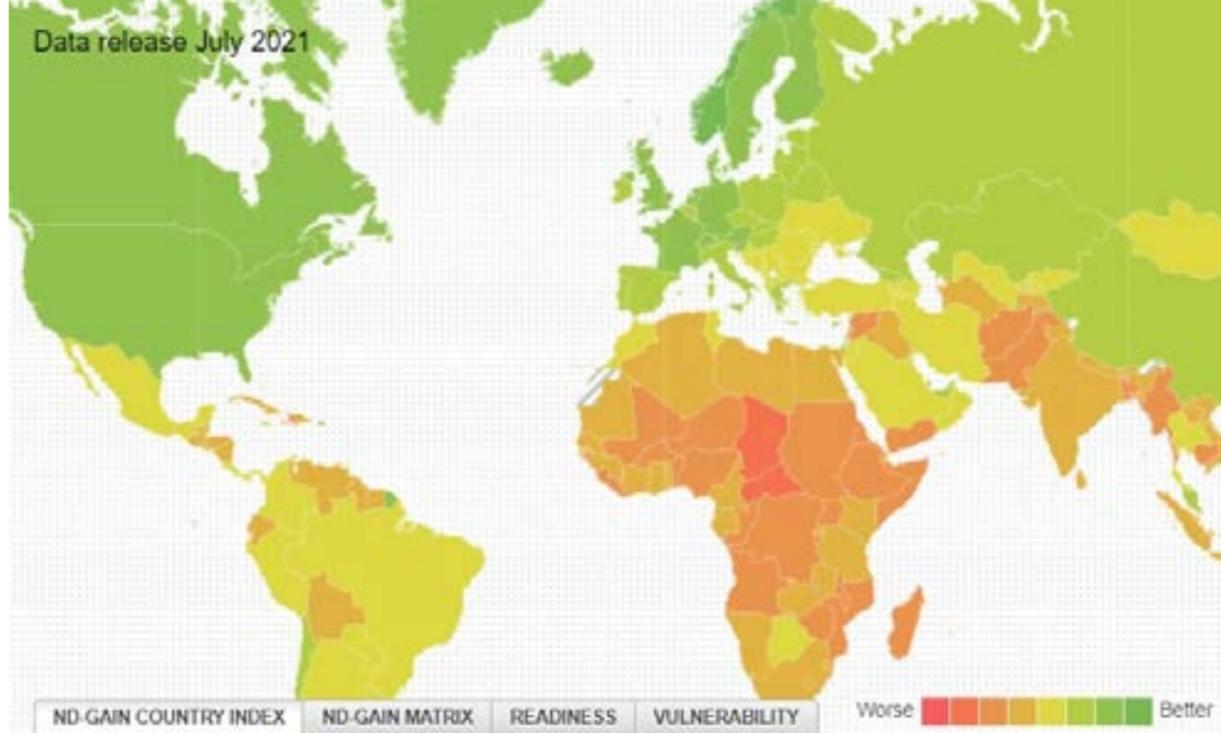
The recruitment of members with the capacity to monitor networks and markets in order to carry out certain actions indicates that greater efforts must be made to neutralize the threat posed by cybersecurity and cyberintelligence units⁵.

⁴ Europol. (07th december 2021). Internet Organised Crime Threat Assessment (IOCTA). Publications & Events. Europol. <https://www.europol.europa.eu/publications-events/mainreports/internet-organised-crime-threat-assessment-iocta-2021>

⁵ Interpol. (2022). Cybercrime. <https://www.interpol.int/es/Delitos/Ciberdelincuencia>

Source: The rising transnational environmental crime smuggling networks





It is crucial for decision-making purposes that analyses are capable of relating and correlating climate change, diversity and natural resources with the management of other illicit flows, for example, such as those related to drug routes, migratory flows, human trafficking routes at a global scale. At the end of the day, analyses should, either at the public or corporate state level, allow the development of actionable intelligence actions in places where the mentioned variables are present.

In short, it can be stated that in zones or areas where there are environmental degradation, sensitive political governance and a scarcity of natural resources, the settlement of criminal groups that will compete for control of the territory will be favored, generating security problems.

Another added problem is the complexity involved in the search for and/or creation of certain indicators that make it possible to adjust the analysis and evaluation of public policies or the creation of tools for monitoring certain environmental and security

variables and, at the same time, provide useful information for decision-making.

An example of these indicators is the ND-GAIN index offered by the University of Notre Dame⁶, which identifies the countries and areas most sensitive to climate change. The map determines⁷ the areas where territorial tensions or extreme conflict stand out. While the African continent stands out, other areas such as Latin America and the Caribbean also are highlighted and are important to analyze.

In the case of Latin America, from the Gulf of California to the Amazons, numerous organized crime groups are not only destroying the different ecosystems but are also threatening the existence of numerous ancestral communities in certain territories.

According to data provided by Interpol⁸, these criminal organizations represent a very lucrative economic business, which places them in third place in the world ranking of illicit activities, surpassed only by drug trafficking and counterfeiting. In this part of the world, the connection between drug trafficking and activities that threaten flora and fauna are very important and have major repercussions and implications at the social and governmental levels.

⁶ University of Notre Dame. (2021). ND-GAIN Notre Dame Global Adaptation Initiative. <https://gain.nd.edu/our-work/country-index/>

⁷ Santos, S. (2021). Africa, present and future. [Own graphs based on ND-GAIN data.]. <https://view.genial.ly/604f906e954ca10d9ca1ce5e>

⁸ Interpol. (2020). Interpol marks a decade of tackling serious organized environmental crime. <https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-marks-a-decade-of-tackling-serious-organized-environmental-crime>

For example, in Mexico, the Sinaloa, Jalisco and Juarez cartels, linked to drug trafficking, are currently linked to the control of the illegal timber extraction industry and aim to supply international markets with illegal timber. In order to gain access to these markets it is necessary to resort to, among others, bribes, which is why corruption rates are increasing in certain areas and could be an interesting indicator to follow or evaluate. Another representative example could be Colombia, where the extraction of minerals and metals by organized crime groups could be bringing, at a lucrative level, a greater profit than drugs for armed groups classified as terrorists (ELN or Los Urabeños).

In both cases, they also destabilize at a social level the areas where they operate by displacing communities from the lands where they have been traditionally settled, having not only socioeconomic repercussions, but also cultural and anthropological ones. These frictions translate into potential violent situations, where the murder of members of indigenous communities appears as a means of social control.

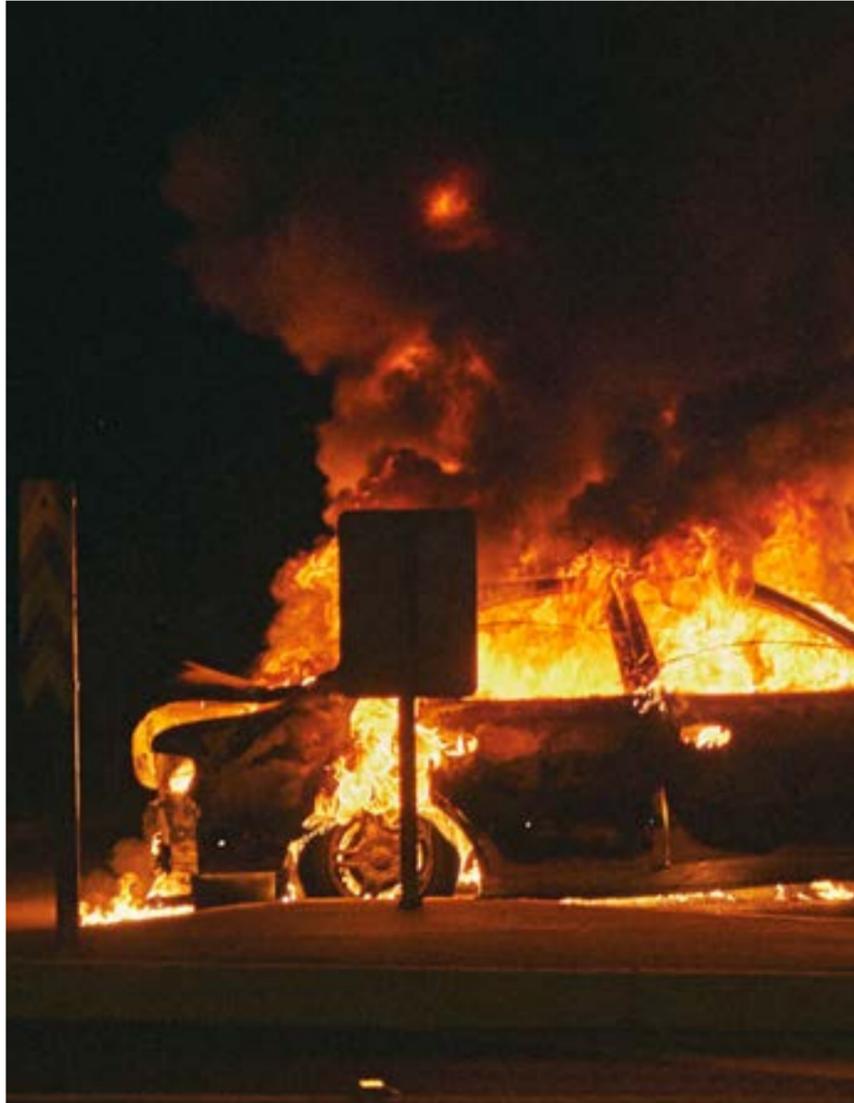
An example of such was the case of the aftermath of the 2010 hurricane in Honduras. The organized crime group linked to drug trafficking, known as the Cachiros, managed to take over the management of aid intended to combat them. In this way, they were able to launder a very large amount of money from their illicit activities.

Deforestation is a phenomenon that is also of concern to the international community and has led to a series of questions being raised and actions being considered in the hope of verifying its effectiveness and evolution. One of these is based



on the assumption that it is the State that, in some way, is a participant or accomplice due to political interests. This has led to the recent proposal for the incorporation of a new crime before the International Criminal Court (ICC), whose proposal will now be publicly discussed in order to reach a final text, which will be submitted to the signatory States of the Rome Statute⁹.

⁹ European Commission. (December 15, 2021). European Green Deal: Commission proposes to strengthen the protection of the environment through criminal law https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6744



Terrorism

4

Terrorism

There is a debate within the international intelligence community as to whether the position on climate change is personal and/or ideological in nature, and therefore applicable to the guidelines set within organizations. The fact that there is a direct attribution in a letter by the CIA located in Abbottabad (Pakistan) and sent to a third party full of references to the environment, suggests that, in his case, it was presented as an added value.

However, the rest of the terrorist organizations that have been appearing throughout the world, although initially influenced by Bin Laden's discourse, consider the deterioration of the environment based on a cost-opportunity assessment.

In a brief review of the actions in which terrorists have used the "environmental factor", we find some examples detailed below.

The Islamic State in Iraq, while taking advantage of the fragility of the territory, took control of water facilities using this environmental vector as a coercive tool.

In other areas, such as Afghanistan, there are contradictions in their narratives regarding environmental resources. On the one hand, the Taliban have benefited economically from illegal logging and used it as a tool of control. On the other hand, they requested the planting of fruit trees to adorn the land and were even in support of the Afghan government's reforestation plans.

In the African continent, and more specifically on the Lake Chad region, the presence of Boko Haram will be decisive. This is a group



on the rise, favored by a serious environmental crisis in the area, derived from a period of very strong climatic variability which has culminated in a situation of food insecurity. Combined with an increase in demographics and poor governance in their territories, this has resulted in high level of recruitment within the ranks of this terrorist group, mostly young people.

¹⁰ Landay, J. (2016). Bin Laden called for Americans to rise up over climate change. Reuters. <https://www.reuters.com/article/us-usa-binladen-climatechange/bin-laden-called-for-americans-to-rise-up-over-climate-change-idUSKCN0W35MS>

¹¹ BBC. (February 26, 2017). Taliban leader urges Afghans to plant more trees. BBC News. <https://www.bbc.com/news/world-asia-39094578>

Similar situation to those mentioned above have arose in Mali with some defining singularities. Periods of intense drought have provoked or increased historical tensions between nomadic farmers and herders, creating social confrontation between different tribes. The lack of strong governance, the weak application of local justice and the particular way of resolving conflicts have been the perfect breeding ground for the emergence of jihadist groups, which have been attracting followers to their ranks. These expect conflicts over natural resources to be resolved.

In Somalia, the jihadist group Al Shabaab has become what could be called a sort of service provider in those areas where it is established, especially in the illegal charcoal trade. This has led to further desertification of the land and increased pressure on the livelihoods of its inhabitants. It is also participating, or has been detected, in the ivory trade circuits and, as a fun fact, has banned the use of plastic bags, apparently because of their effects on livestock in the area.

Moreover, Al Qaeda in the Arabian Peninsula, following the influence of Al Qaeda in these matters, has subsequently applied the same methods in Yemeni territories to help with pipelines and water wells.

The approach and assessment of these climate-related security risks must be carried out in an integrated and cross-cutting manner, together with the management of migratory flows, forced displacements, the management of natural resources, the work and recruitment of elites: working on governance problems at source, acting on the economy and thus avoiding a reduction and instrumentalization of what climate change entails.



In the African continent we can observe another type of criminal trend with remaining similarities. It is well known, from the analysis of jihadist terrorist phenomenology, for integrating narrative of global warming into the heart of terrorist organizations as an element of action within their own policy.

This situation has favored the recruitment of assets for subsequent radicalization, which is a common element of various terrorist groups at the global level, thus creating dynamics that feedback negatively. The use of propaganda and influence on areas of special climate change related vulnerability is aimed at modifying and strengthening the strategic environments in the territories where they are based. These same terrorist groups have seen the importance of controlling the climate change narrative in the social dynamics of the areas where they operate.

The latter mentioned paradigmatic case of the leader of Al-Qaeda, Osama Bin Laden, who, on many occasions, expressed his concern for environmental conservation, has been used as a tool for controlling the narrative and for strategic positioning vis-à-vis the US. In some of the letters written by the leader of Al-Qaeda, he stated that “nature has been destroyed with (U.S.) waste and industrial gases more than any other nation in history. Despite this, it refuses to sign the Kyoto agreement so that it can secure the profits of its greedy companies and industries.” In the meantime, Bin Laden would cut off supply to facilities, polluted others that supplied water for agriculture, diverted the supply to cause flooding in military infrastructure and government facilities. Throughout this process, he offered water and electricity to communities that had settled in his domain, contributing not only to the expansion of his territory but also turning it into a source of new recruits. In addition, it sabotaged a multitude of critical facilities such as electricity and other energy facilities with the sole purpose of destabilizing the government. It is well known fact the role played by the smuggling of oil taken from the oil industries in the area for its subsequent



sale in the market and the great source of direct income and indirect benefits that this produced.

The environmental or “climate security” variable should be included in risk assessment and risk weighting analyses in environmentally vulnerable areas that are also sensitive to the action of criminal and/or terrorist organizations as a tool to help create correlations and estimates of probable scenarios. Thus, in short, the aim is to optimize the “intelligence” that will help decision-making in these areas.

¹² Hassan, K., Born, C. y Nordqvist, P. (2018). Iraq Climate-related security risk assessment. Instituto Internacional de Estudios para la Paz de Estocolmo. <https://www.eastwest.ngo/sites/default/files/iraq-climate-related-security-risk-assessment.pdf>

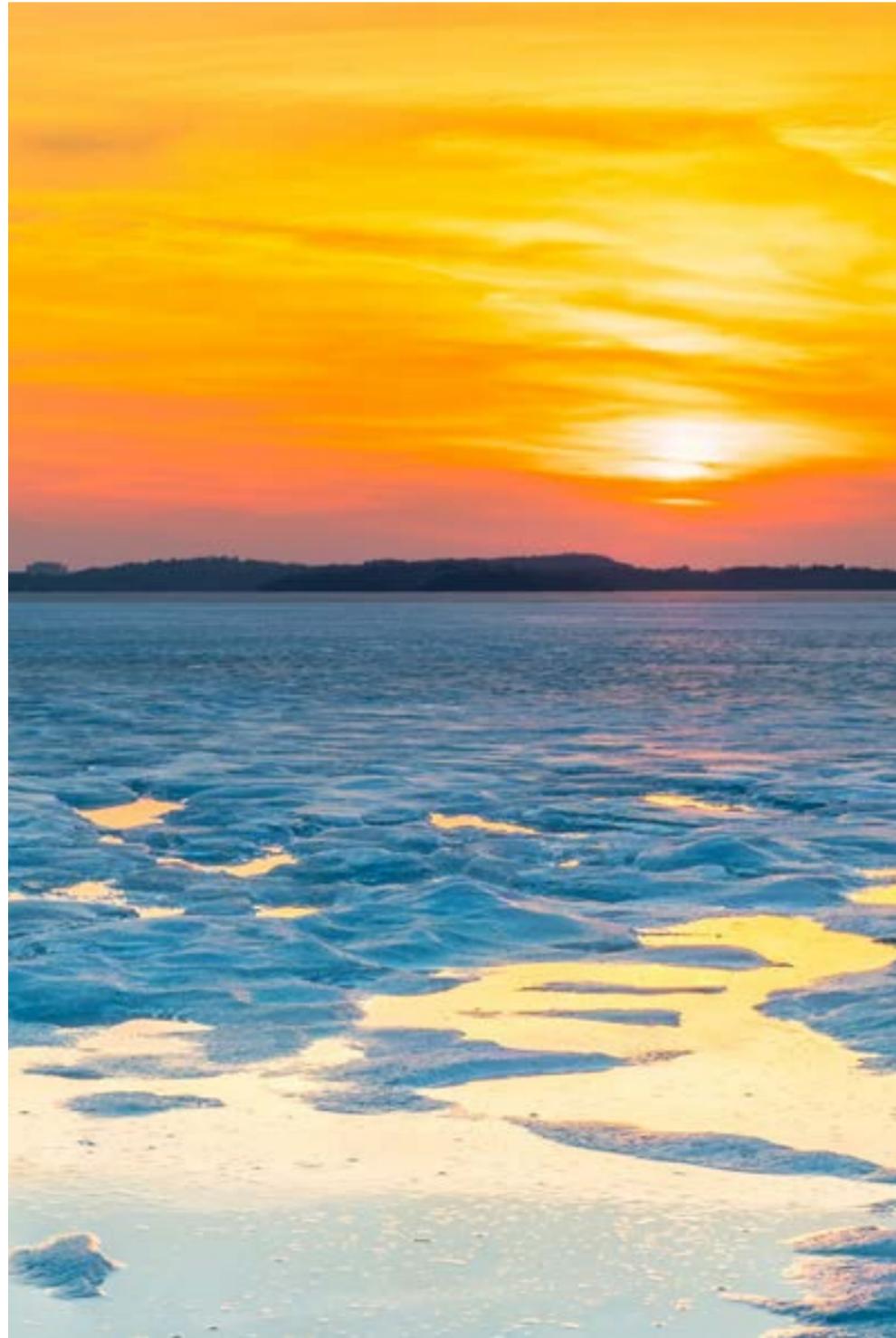
¹³ Observer Worldview. (November 24, 2002). Full text: Bin Laden `s letter to America. The Guardian. <https://www.theguardian.com/world/2002/nov/24/theobserver>

5

Conclusions



Conclusions



Climate change will be widespread and will affect both living beings and their safety. The environment and the role of society in its protection will be particularly relevant in the fight against this phenomenon, which is considered as one of the main global threats and which will be closely related to other risks: some of which are becoming noticeable, and their consequences are already palpable in some parts of the planet.

Ways of life will be affected at the social, economic and security levels. Changes and instability will give rise to new tensions that will lead to different migratory phenomena with a common link: the consequences of climate change in their places of origin.

The images of the Arctic leave no room for doubt: climate change is advancing rapidly and will not only affect the hemispheres of the planet. Its consequences are evident on a daily basis and are generating and laying the foundations for destabilization and conflict in different countries where the appropriation of the discourse against climate change by terrorist groups and the effects of this phenomenon are becoming an ideal field in which to sow instability, radicalization and violence. This is a new aspect to consider if states want to carry out a comprehensive action that involves all actors and provides effective responses to particularly latent and current risks.

We guarantee safety for people,
businesses and society as a whole.