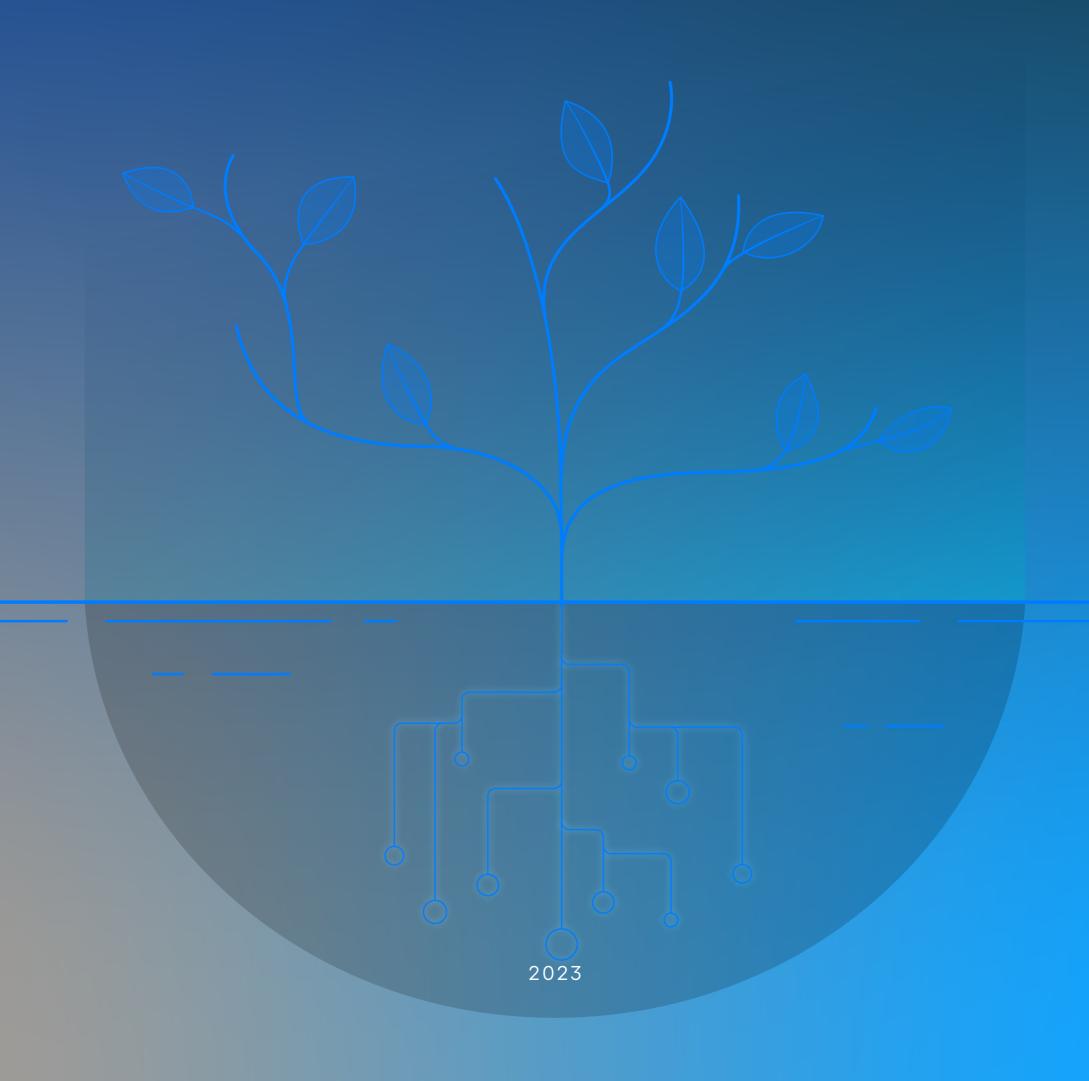


ICC BRASIL COMMISSION ON INTELLECTUAL PROPERTY
TASKFORCE ON IP & SUSTAINABILITY

IP & SUSTAINABILITY

FOSTERING GREEN INNOVATION

& ACHIEVING THE SDGS



Aknowledgments

ICC Brasil would like to acknowledge and thank all the members of the Taskforce on IP & Sustainability - an initiative of its Commission on Intellectual Property – who have contributed to this paper.

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1.Introduction

One of the topics of the international intellectual property (IP) debate over the last few years has been the interaction between IP and Sustainability. More specifically, the role played by the IP system for sustainable development, whether in relation to sustainable business practices, food security, climate change, agricultural sustainability, low-carbon economy, or clean and green-tech, as well as lifesaving medicines, among others, has been the object of public discussions and positioning that have grown in importance.

As an advocate for international business, the International Chamber of Commerce (ICC) works to identify key IP issues facing the international business community and is the business voice in debates and forums involved in IP policymaking, including the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO), among others. ICC also plays an active role in raising awareness about the crossroads between IP and other policy areas, such as sustainability, biological diversity, and climate change. This also includes helping to build an understanding within the IP community of the long-term commercial benefits of using IP as tool to achieve sustainable business practices, as well as implementing the United Nation's Sustainable Development Goals (SDGs) in national intellectual property systems.1

In this sense, IP tools that underpin the global innovation ecosystem should play a critical role in the achievement of the SDG's recognized by hundreds of representatives from 85+ countries that joined in May 29-30, 2023 an SDG conference in Lisbon co-organized by WIPO and Portugal that focused on how IP – such as patents, trademarks, industrial designs that promote innovation and socio-economic development – can serve as a powerful enabler across all SDGs.²

But what does it mean to achieve sustainable development goals by way of IP? How can IP be used as a tool for sustainable development? To answer these questions, the present paper has the purpose to introduce the main themes related to the role played by IP as a driver for sustainable economic development.



2.What is Sustainability?

As a general definition, Sustainability refers to the ability to support and maintain a process over time without compromising future generations to meet their own needs when it comes to economic, social and environmental factors. In other words, Sustainability calls for the responsible use of resources to guarantee equitable access to the next generations.

To achieve this objective, world leaders agreed in 2015 to 17 global goals, which are defined as the Sustainable Development Goals (SDGs)3 developed as part of the United Nation's 2030 Agenda for Sustainable Development to promote peace and prosperity for people and the planet. Many of these goals can only be achieved through innovation, and protecting, addressing, negotiating the resulting IP is essential to enable the scalation of the innovation and, as a consequence, to secure a sustainable impact.

¹ For more information, please visit: https://iccwbo.org/global-insights/global-trade/intellectual-property/

² For further information, please visit: https://www.wipo.int/pressroom/en/articles/²0²³/article_000⁵.html

³ For more information, please visit: https://www.globalgoals.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ¹⁴th edition of its Intellectual Property Roadmap ²0²⁰ available for download at: https://iccwbo.org/; and ICC's ²10 available for download at: https://iccwbo.org/;

3. Creativity, Innovation and Intellectual Property

While creativity is the ability to develop new ideas, innovation uses creativity to bring practical solutions to the existing problems of the society or to a better way to optimize existing processes and resources. Innovation is a key driver of economic growth and solutions to global challenges as set out in the United Nation's 2030 Agenda for Sustainable Development (Innovation is mentioned specifically in Goal 9 of the SDGs⁴). In the context of creativity and innovation, legal systems around the world were built to promote, incentivize and protect innovation by bringing together intellectual property laws to regulate the ownership, use and access to the outputs of innovation. Indeed, as mentioned in ICC's IP Roadmap 2020 (14th edition)⁵, the IP system plays a central role in supporting innovation by providing legal rights over the intangible assets that result from innovation such as brands, technology, designs and creative content. Additionally, the IP system provides the legal framework necessary to support collaboration and exchange of knowledge and information, which is essential for the development of new processes, products and services.

Nowadays, companies and businesses in general are more and more challenged to integrate innovation and Sustainability by using creativity to develop new technologies that are profitable and that enable the emergence of productive, resilient, and sustainable innovation ecosystems.

4.What is the role of IPR in Sustainability?

As a critical incentive for innovation and creativity,

which in turn are key to the achievement of the SDGs, Intellectual Property Rights (IPRs) play an important role in Sustainability. For instance, technological innovation, which has the ability to guide technical change, turning naturally unattractive technical sectors into attractive ones, can contribute to the achievement of the SDGs (e.g.: Improve agricultural productivity and food security; Increase security and access to sustainable energy sources; Improve water quality and management to preserve water supply and access to clean water and sanitation for all; Develop solutions related to climate change, biological diversity or marine conservation; Develop medical solutions for a healthier population and broader access to medical care). Breakthrough innovation requires high investment that goes beyond typical R&D spends. It also brings risks for business since innovation focus on long-term value creation. Therefore, without legal protection provided by IPRs, there would be no incentive for business leaders to commit with sustainable innovation requirements. Patent protection can offer exclusivity to inventors of new Technologies that can be applied to areas related to renewable energy, materials, agriculture, and mobility.

The branding of goods and services, underpinned by trademarks, designs and copyright has the potential to encourage social responsibility, and sustainable standards of consumption and production patterns, in other words a very useful tool for promoting the SDGs. For instance, trademarks are a mean of communication that a product or a business activity is developed to promote the better use of natural resources. In this regard, we could mention two examples of Brazilian trademarks, i.e., "I'M GREEN" to identify resins of renewable origin and "WENEW" to identify recycled resins, both licensed to customers for the use of packaging made with such resins.

Additionally, collective and certification marks show that a product complies with certain standards and requirements established and controlled by third-party certification bodies (e.g.: "MSC" label for sustainably caught seafood; "Energy Star" label for energy efficiency in electronic devices). Geographical indications are used to certify that products are protected regionally, thus reducing the transport footprint on the environment. The security provided by IPRs is one of the reasons that encourage investments in growth and innovation for sustainable solutions.

⁴ https://www.globalgoals.org/

⁵ For more information, please visit: https://iccwbo.org/news-publications/policies-reports/icc-intellectual-property-roadmap-current-emerging-issues-business-policymakers/

5.Sustainable Business Models based on IPR

As previously mentioned, sustainability goals and IP policy have become increasingly intertwined. This also applies to the development of sustainable business models based on IP rights. Companies attempt to address sustainability challenges through innovative products and services, as well as business models. In this sense, new and innovative sustainable business models can and should be used in a systematic way to assist businesses to achieve sustainable development goals. Hence, IP should be used as a strategic tool in line with business model innovation for commercial success.⁶

For the purpose of this paper, one good example to be cited would be the case of Braskem, a Brazilian company and the world's largest producer of biopolymers, who owns a Green Ethylene production technology (i.e., raw material for the production of various chemical products, including plastic resins – biopolymers) and recently started a licensing business model for this technology. It involves a partnership with another company to offer this sustainable technology to other chemical companies.⁷

6.The IP agenda for Sustainable Development

The IP agenda for Sustainable Development focuses on using IP rights to promote and incentivize innovation and the development of new Technologies that are aligned with sustainable practices. These initiatives bring light to the importance of a solid IP system to provide security to IP owners that will drive progress in our Society towards the Sustainable development. No further progress can be achieved without Sustainability and legal systems must support this agenda balancing the protection of IP rights and the need to access relevant information and technology that can drive progress

towards the achievement of sustainable development goals.

As a specialized agency of the United Nations, WIPO contributes to the SDGs by providing concrete services to enable the use of IP tools to drive innovation, competitiveness and creativity needed to achieve these goals. A good example of IP agenda focused on Sustainable Development is the WIPO GREEN initiative, an online marketplace that brings together a wide range of stakeholders in the value chain of green technology innovation and connects owners of new technologies with individuals or companies that may be looking to market, license or distribute a green technology. In this way, they help not only to accelerate innovation and the diffusion of green technologies, but also to contribute to the efforts of developing countries in the fight against climate change. The WIPO GREEN website includes a new IPO GREEN section to facilitate the sharing of best practices among IP offices in supporting the achievement of SDGs. Numbers of 2022 show more than 128,000 registered technologies, 2,500 users and 150 partners of the WIPO GREEN initiative.

Some important examples of sustainable patents are "a method of heat generation that does not directly use fossil fuels" (Great Britain patent GB 2437148B). Another relevant invention in this category is "Skyline Solar's dual trough concentrating solar photovoltaic module" (US patent US-D631004-S), that enhances carbon free technologies to produce energy, "bio-based EVA compositions and articles and methods thereof" (US patent n° US11267959B2), that covers production of EVA from bio-based feedstock that captures CO2.

In Brazil, the Patent and Trademark Office (in Portuguese, the "Instituto Nacional da Propriedade Industrial" - "INPI") has been also promoting Sustainability actions. For instance, the Green Patents fast-track program, as per INPI's Resolutions No. 175/2016 and No. 239/2019 contributes to the fight against global climate change, expediting the examination of patent applications related to environmental technologies. INPI's motivation is mainly to identify new technologies that can be quickly used by society, encouraging licensing and innovation. The program Green Patents began in April 2012 and its third phase ended in April 2016. From December 2016, INPI began to offer priority examination of applications related to green technologies, which continues to operate an important role in the promotion of green technologies in Brazil.

⁶ For more information, please visit: <a href="https://scholar.google.com.br/scholar_url?url=https://www.mdpi.com/2071_1050/12/21/8871/pdf&hl=p-t-BR&sa=X&ei=prLLZKKtMoLyyAT7u5SYAQ&scisig=AFWwaeb3i5a9xnb3M1qc-XuBps1P&oi=scholarrg

⁷ For more information, please visit: https://www.braskem.com.br/imgreen/novidades-detalhe/lummus-e-braskem-firmam-parceria-para-licenciamento-de-tecnologia-para-dois-projetos-de-eteno-verde

Some examples of green patents granted by INPI, under the fast-track program, includes: "processes for obtaining activated carbon from the hydrothermal carbonization of cigarette butts" (Brazilian patent BR 10 2019 019637 8), more specifically the activated carbon obtained from cigarette butts presents an interesting, viable, economical and environmentally efficient alternative when applied in adsorption processes, catalysis and use in agricultural technologies; "dry recovery of thin and super thin iron oxide mineral" (Brazilian patent BR 10 2012 008340 0), that can be used to the processing of ore tailings deposited in dams and tailings stored in piles. This invention solves the problem presented by wet magnetic separation and waste dewatering processes, eliminating the risks offered by the release of solid waste in containment dams; "systems for recycling contaminated plastic packaging" (Brazilian patent BR 10 2014 008094 5), which is an ecologically sustainable solution since in its obtaining process there is no consumption of water and it does not generate any type of effluent; "treatment and separation of the elements that make up biogas" (Brazilian patent BR 10 2013 010204 0), the whole process having the outstanding characteristic of simplicity combined with high efficiency, resulting in products of excellent quality, with characteristics above the limits established by regulatory bodies and maximum loss of biogas in the process of less than 5%.; and "non-expanded

elastomer composition based on ethylene-vinyl acetate copolymer, and use thereof for manufacturing footwear" (Brazilian patent BR 10 2012 025160 4), which presents advantages such as reducing energy expenditure in processing, reducing waste during the process and reusing waste in the formulation itself.

INPI has also exercised relevant participation in discussions on the importance of green technologies for the global economy, highlighting the participation in a joint project with Argentina and Chile, sponsored by WIPO, for accelerating the insertion of offers in the WIPO Green platform.

Also, the Digital ETP (in Portuguese, "Estudo Técnico Preliminar") system is the first database of preliminary technical studies of national scope. The tool was launched in 2020 and allows agencies and entities to have access to preliminary studies focused on contracts of interest and can import them to their work area as a starting point for their analysis. When describing the necessary and sufficient requirements for choosing the solution, the public manager shall include the sustainability criteria and practices, as well as the possible environmental impacts and the respective treatment measures related to the object to be contracted.

Another relevant initiative, the "National Program







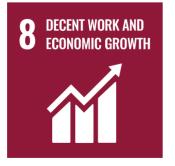
































for Green Growth" (in Portuguese, "Programa Nacional de Crescimento Verde"), launched in 2021, aims to foster economic development and the creation of long-term green jobs, which are those created from the activities developed in the green economy.

It is also worth mentioning that a detailed patent landscape study called "Mapping of technologies developed from bioinputs from the Amazon" (in Portuguese, "Mapeamento de tecnologias desenvolvidas a partir de bioinsumos da Amazônia") was initiated in the last days of 2022. The study was coordinated by members of the Intelligence Group in IP and INPI representatives. It aimed to investigate and map technologies developed by the exploitation of raw materials from the Amazon Rain Forest. The 55-page report presented relevant data over the matter, including national and international significant patent applications for different products and technologies from Amazon's biodiversity.

For instance, the largest number of patent applications with biofuels were related to Açaí (10.1%), Cupuaçu (5.6%) and Babaçu (4.9%), and the states more active in patent applications of such nature were Pará (23%), São Paulo (20%) and Amazonas (14%). Mapping, and disclosing the biodiversity potential may encourage innovative businesses and therefore social, environmental, and economic development of the entire region.

At last, on 4 March 2021, Brazil ratified the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, a multilateral agreement ancillary to the United Nation's Convention on Biological Diversity (CBD). Even though the provisions of the Protocol have not yet been implemented in the Brazilian legal system, the ratification constitutes the country's acknowledgement of the important value of biological diversity.

7. Conclusion

Achieving the Sustainable Development Goals (SDGs) requires innovative solutions to tackle well-known global challenges such as famine, climate change, inequality, pollution, among others. In that sense, Intellectual Property systems can be a driver for innovation, generating positive incentives for companies to research and develop new solutions for the good of people and planet – and Brazil shall play a fundamental role in this scenario.

About the International Chamber of Commerce Brazil (ICC Brasil):

The International Chamber of Commerce (ICC) is the institutional representative of more than 45 million companies in over 170 countries. ICC's core mission is to make business work for everyone, every day, everywhere. Through a unique mix of advocacy, solutions and standard setting, we promote international trade, responsible business conduct and a global approach to regulation, in addition to providing market-leading dispute resolution services. Our members include many of the world's leading companies, SMEs, business associations and local chambers of commerce.

In Brazil, for 8 years, ICC Brasil has the mission of representing the Brazilian business community, through the work of its nine thematic commissions, among them the Intellectual Property Commission (IP), which seeks to promote discussions, good practices and policies that improve the business environment, support the country's development and encourage global trade. ICC Brazil has always sought to mobilize the private sector for a greater international insertion of Brazil, in order to integrate it into global value chains. The IP Commission's initiatives aim to subsidize a modern IP protection system in line with international standards, creating more beneficial conditions for sustainable economic development and growth with innovation.

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IP & Sustainability

Fostering Green Innovation & Achieving the SDGs