

WAITRO



WORLD
ASSOCIATION OF
INDUSTRIAL &
TECHNOLOGICAL
RESEARCH
ORGANIZATIONS

STRATEGIC PLAN 2030

Work Program 2021-2022



SUSTAINABLE INNOVATION &
INNOVATIVE SUSTAINABILITY

"The dynamic challenges facing our people and our planet demand dynamic responses. Matching the experience and drive of WAITRO's diverse members is central to our mission. We understand the urgent need to draw on our collective, creative and adaptive talents to build a better long-term future and to ensure greater short-term resilience. Our network must engage in an ebb and flow of ideas and collaborative interaction so that local challenges are recognised and understood in regional and global contexts. We each share an equal stake in the future of our world, and we must work together to innovate for positive change."

Her Royal Highness Princess Sumaya bint El Hassan of Jordan
 WAITRO President

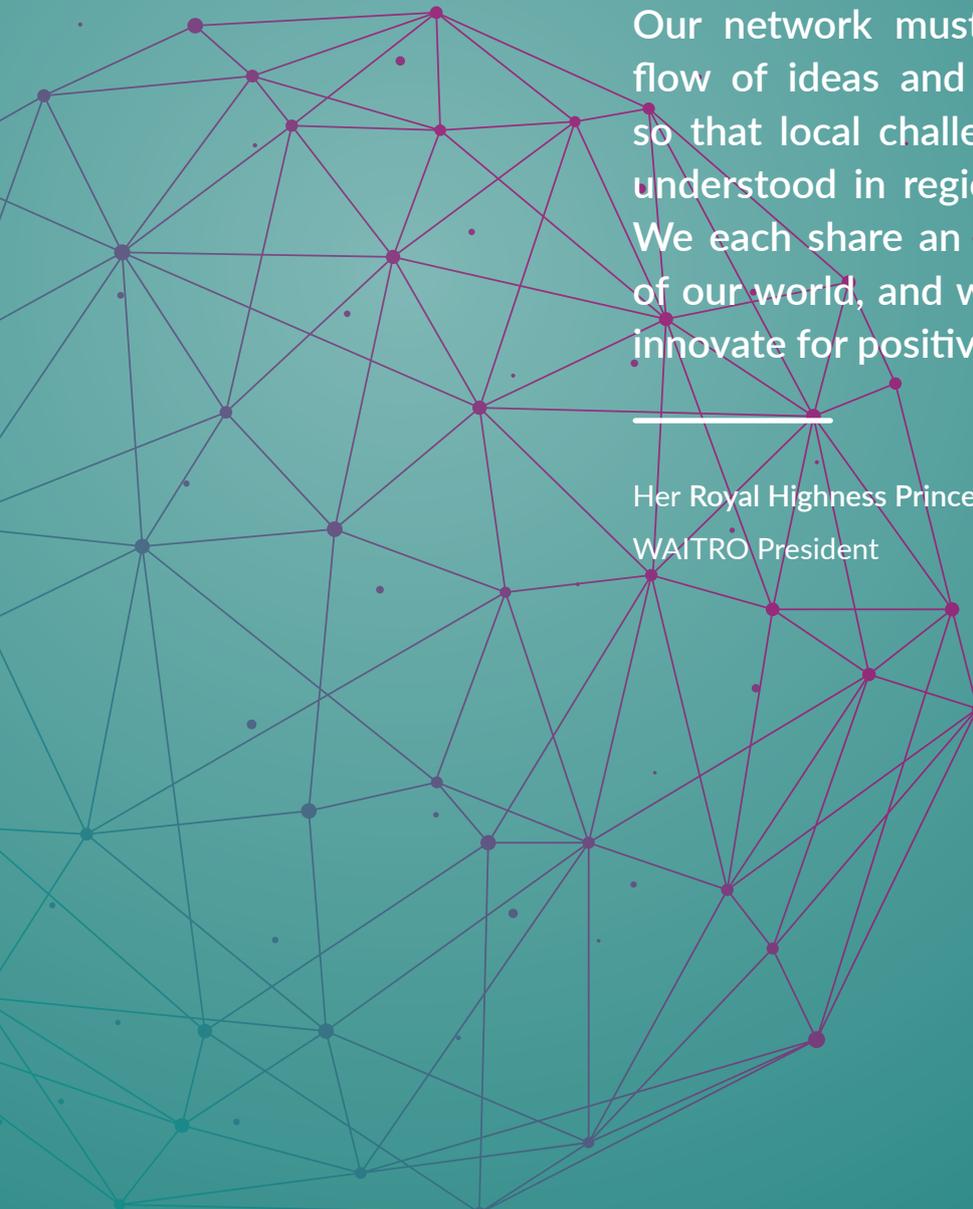


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EXECUTIVE SUMMARY

The current WAITRO Secretariat, split between Fraunhofer-Gesellschaft and the Jiangsu Industrial Technology Research Institute, launched in January 2019 based on a strategic plan and work program developed in late 2018. After sixteen years of administration and development from SIRIM-Berhad in Malaysia, the new Secretariat represented a significant new direction and necessitated a steep learning curve for all concerned. Inevitably, some plans worked out while others did not. After two years of lessons learned from managing the Association, organizing events, and helping members create partnerships and strategies (and one year into an almost total global travel shutdown), the Secretariat and Executive Board of WAITRO present a revised strategic plan and work program for 2021-22.

Throughout the year 2020, the strategic plan to manage WAITRO until the next Secretariat begins in 2023 was steadily revised. Drafts of the plan were presented by the Secretariat to the Executive Board at the 85th Executive Board Meeting, and to the entire membership at the 25th General Assembly, held online on October 30th. Input from both meetings have been incorporated into this document. The goal was to develop a vision for WAITRO in the year 2030 in the context of a changing world and WAITRO's need to evolve in it, and a work plan for 2021-22 that will start to build towards that vision. This document, therefore, both sets a course for the Association and justifies why such a course is necessary.

The mission statement of WAITRO has been refocused, although its intent remains unchanged:

To foster innovation on a global scale and drive sustainable development by empowering member organizations and facilitating collaboration across borders and boundaries.



To accomplish this mission, the 25th General Assembly adopted the proposal from the Board and the Secretariat to focus on the following Goals:

Strategic Goal 1

BECOME AN ASSOCIATION WITH A DIVERSE, GLOBALLY REPRESENTED AND ENGAGED MEMBERSHIP

Objectives

- 1.1 Increase the number of full member organizations, and increase the engagement of individuals at those organizations.
- 1.2 Increase the number of associate members participating from all regions.
- 1.3 Improve WAITRO's transparency and accountability.

Strategic Goal 2

BECOME A COLLABORATIVE INNOVATION HUB FOR SUSTAINABLE DEVELOPMENT

Objectives

- 2.1 Facilitate the participation of member organizations in publicly-funded collaborations.
- 2.2 Facilitate collaboration and technology transfer between (full) member organizations and the private sector (incl. associate members).
- 2.3 Foster collaborations to support the development and deployment of innovative technologies with impact on sustainable development.

Strategic Goal 3

BECOME A PROVIDER OF CAPACITY DEVELOPMENT AND ACCREDITATION

Objectives

- 3.1 Improve operational practices and business performance of WAITRO members and enhance scientific research and technological capacities of individuals.
- 3.2 Strengthen and validate the capabilities of member organizations and establish "WAITRO Certified" as a brand of value.
- 3.3 Augment international experience of researchers and staff of member organizations.

Strategic Goal 4

BECOME AN ADVOCATE AND INFLUENCER OF SUSTAINABLE INNOVATION

Objectives

- 4.1 Become a respected global advocate for the impact of science, technology and innovation on sustainable development.
- 4.2 Position WAITRO to be an influential organization in the global policy and strategy market.
- 4.3 Position WAITRO as a consultant at the intersection of science, technology, and innovation and sustainable development.

1. INTRODUCTION AND CONTEXT

The World Association of Industrial and Technological Research Organizations (WAITRO) reached its 50th anniversary in 2020 with a successful online celebration and General Assembly. The achievements of WAITRO in benchmarking (best practices), partnering to enable collaboration, and building capacity amongst its members have been recognized and celebrated. Much has changed, however, since WAITRO was created by UNIDO in 1970. Some modifications and new approaches to its strategy are therefore required to put the Association on a path to success for the next fifty years. In this plan, we outline the vision of the Executive Board and Secretariat for what WAITRO can become over the next decade, and detail goals and objectives for the next two years of WAITRO's development.

The revised mission statement of WAITRO is "To foster innovation on a global scale and drive sustainable development by empowering member organizations and facilitating collaboration". WAITRO believes that technological innovation is at the heart of sustainable development and that meeting the United Nations' Sustainable Development Goals (SDGs) requires collaboration to harness and maximize the potential of science, technology and innovation (STI). The mission and vision statements are described in detail in Section 4.

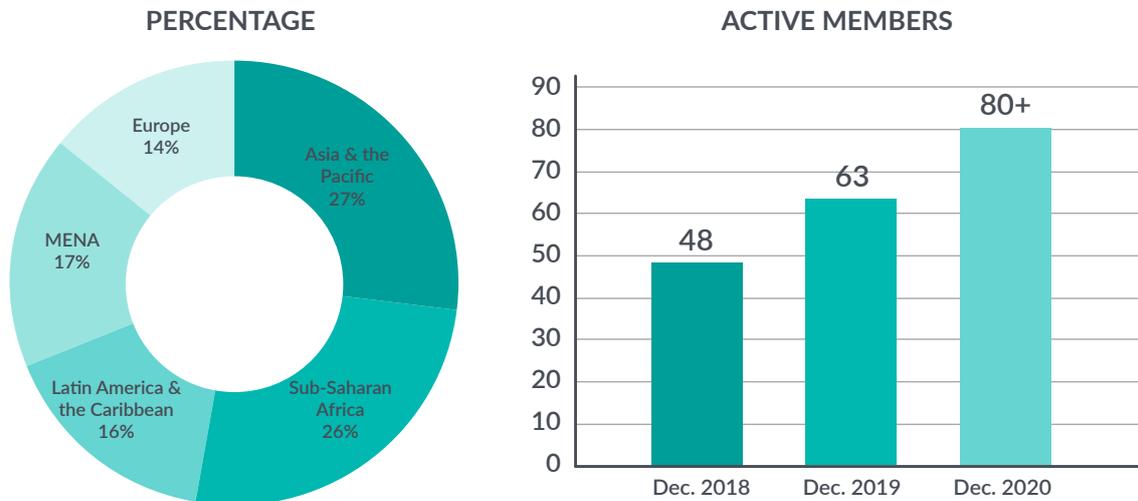
Covid-19 has taught everyone that many of the big problems likely to face the world in the future cannot be constrained within national boundaries. While Covid is undoubtedly one of the most pressing topics in global research today, other global challenges like climate change are beginning to affect billions of people around the globe. Indeed, most of

the United Nations SDGs on which WAITRO has focused its attention generate a need for cross-border collaboration. The WAITRO membership structure of organizations rather than countries make it rather unique within the UN system and, where countries often find reasons to disagree, at the research technology organization (RTO) level one tends to mostly find individuals who simply want to work together to solve problems. Properly empowered, this WAITRO resource can make major contributions to advancing the SDGs.

There are many innovative ideas about 'how' challenges around the globe can be addressed. However, the translation of innovative ideas into actions and impact is much more difficult. Changing the future sustainably requires more partnering, creative thinking and a stronger focus on concrete outcomes and impact. To create real impact, those who are facing the greatest challenges must be empowered to bring forward their own solutions. Indeed, many workshops and conferences take place every year but fail to move beyond the output of the events themselves. Despite an abundance of good intentions and visionary, there are too many discussions without conclusions, conferences without follow-through, plans without realization, and implementations without achieving the intended impact. To address global challenges requires bottom-up perspectives, full stakeholder involvement, and shared ownership in the decision-making processes.

The dramatic growth, over 100%, in WAITRO active membership over the past two years underlines the continuing relevance of WAITRO and demonstrates that it offers value to a broad range of stakeholders around the world. Furthermore, WAITRO's strengths

Figure 1 Growth and geographical distribution of WAITRO members in good standing during the 2019-20 Secretariat.



and global opportunities make it the ideal international organization to address global problems by strengthening individual member organizations and combining their diverse strengths and ideas across national borders to generate innovative and impactful solutions.

The WAITRO mission and vision statements have been sharpened to focus these strengths on a particularly impactful problem set. The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) that were adopted by the United Nations in 2015 have brought a sea change in global focus and a key opportunity for WAITRO to contribute. This is especially true, since science, technology and research cooperation are listed as means of implementation for a number of thematic goals. Indeed, innovation itself is one of the SDGs (SDG 9) and is also embedded implicitly in various other goals and targets across the Agenda through references.

WAITRO's new strategic plan therefore now aligns with the 2030 UN Agenda and prepares and enables its membership to contribute to the SDGs. The WAITRO Innovation Ecosystem (WIE), which includes (among other elements) SAIRA®, the WAITRO Innovation Award and the Global Innovation Summit, encourages a focus on a different subject relevant to

the SDGs in each cycle. In 2020, WAITRO focused the WIE on solving water-related challenges (SDG 6). In 2021, food security and sustainable agriculture (SDG 2) will be the focus. At the end of 2021, the WAITRO General Assembly will select the topic for the next Innovation Award. The focus is not exclusive, and broader collaborative research relevant to the SDGs is always encouraged.

This document is intended to:

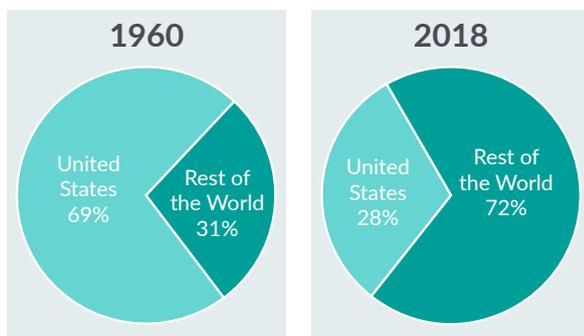
- set out WAITRO's overall strategic direction for the next ten years, and what goals will be prioritized in the remaining life of the current Secretariat in order to align with that direction;
- define WAITRO's strategy and competitive advantages to advance the SDGs;
- strengthen the organization to deliver the changes that we seek;
- set the work program and priority action items for 2021-22.

2. GLOBAL TRENDS AFFECTING WAITRO

The effective globalization of research capacity

While industrial research in the 1960s was concentrated in the northern hemisphere, in particular the USA, the founders at UNIDO had the foresight to specifically recommend (in the WAITRO founding document) that, in addition to international collaboration, the new Association should promote “...regional and

Figure 2 U.S. Share of Global R&D



SOURCE: 1960: CRS analysis of U.S. Department of Commerce, Office of Technology Policy, The Global Context

interregional cooperation and coordination of activities...” Since then, the importance of that regional cooperation has grown. According to data from the Congressional Research Service¹, for example, the share of global research and development funded in the USA fell from 69% to just 28% in the years from 1960 to 2018. Capacity building, some of which was carried out by WAITRO itself, and local investments in research infrastructure, now enable researchers in many countries that previously lacked a highly-developed industrial base to collaborate internationally on equal terms. Regional cooperation has therefore become increasingly productive and important, and will continue to grow.

¹ Global Research and Development Expenditures: Fact Sheet, Updated April 29, 2020, Congressional Research Service, <https://crsreports.congress.gov> Accessed January 5th 2021

The age of networks and connectivity

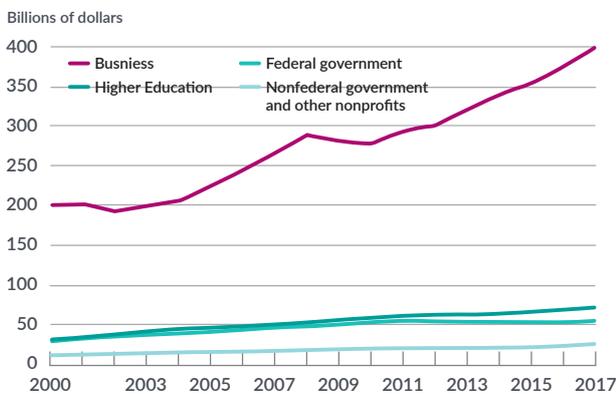
Since it was founded, the importance, and the true value of WAITRO, has lain in the network that its members create. In 1970, however, research networks were clumsy things with long latency in communication and almost no capacity to collaborate in a group without traveling to physical meetings. The 21st Century, however, might be termed the “age of networks” and there are multiple highly successful models for how to operate in this new environment: Facebook, LinkedIn, Instagram, to name but a few. This not only affects how members collaborate, but how WAITRO funds itself. In the age of networks, monetization is a result of engagement rather than the other way around. Getting members to “check out” to pay an annual membership fee is being replaced by incentivizing customers to “check in” and create value. Since it is now accepted that the value of any network depends on its size (Metcalfe’s Law), it is important to grow WAITRO to optimize its effectiveness.

Increasing percentage of RTO support from industry

The UNIDO Founding Document itself specifically highlights a “...need for closer integration of industrial research with industrial development...” and this has only become more compelling because most RTOs are required to seek increasing portions of their funding from industry and other non-governmental sources. This creates a valuable potential for WAITRO to validate the importance of RTOs to their respective national governments, both to advocate for RTO funding at the national level as a long-term driver of economic growth and national security and to assure

governments that their research investments are in the hands of organizations capable of efficiently transferring the results into real, local economic growth. Although research budgets have generally increased worldwide, an increasing percentage of that support is coming from for-profit business. This is most clearly illustrated by the data above from the USA² but anecdotal evidence suggests that many of WAITRO’s member RTOs are being steadily asked to secure more of their funding from non-governmental sources.

Figure 3 U.S. R&D percentages by performing sector



SOURCE: NCSSES, National Patterns of R&D Resources. Indicators 2020: R&D and Academic R&D

mitigation efforts. Awareness of the global nature of climate change is increasing. Solving these problems will require not only shifts in technology but also in political regulations and the behavior of regional stakeholders. The structure of WAITRO as a network at the RTO level potentially makes it an unparalleled force as both an advocate for action and a source of solutions, combining an understanding of regional stakeholder priorities at the local level with the development of solutions at the international level.

Travel restrictions resulting from pandemic control

It seems unlikely that international travel will return to its old normality in the near term, with some degree of restriction due to Covid-19 persisting at least for 2021 and maybe into 2022. Regional travel corridors may open up sooner, but there are likely to be periodic quarantine requirements to control virus outbreaks and testing or vaccination and/or immunity certifications that will amount to additional visa restrictions on cross-border mobility. The importance of virtual collaboration is unlikely to diminish.

Increasing global impacts of climate change

Air pollution excess CO₂ emissions, do not respect national boundaries. The effects of climate change such as uncharacteristic severe weather and rising sea levels are similarly unrestrained by national borders. The past six years have seen the hottest six average annual global temperatures on record, and the level of CO₂ in the atmosphere was reported to have reached a new record in 2020, despite a small reduction in emissions due to Covid lockdowns. On the other hand, a rise of nationalism has led to major economies such as the USA withdrawing from global climate

² 2020 NATIONAL SCIENCE BOARD SCIENCE & ENGINEERING INDICATORS: The State of U.S. Science & Engineering January 2020 Publication NSB-2020-1

3. LESSONS LEARNED FROM 2019 - 2020

The year 2019 was one of dramatic changes for WAITRO that resulted in a steep learning curve for the Secretariat. It started with the transition to the first ever Secretariat split between two offices in different countries. The two, physically distant offices in Nanjing and Sankt Augustin had to learn to work together effectively while simultaneously developing a new strategy for the Association. Lessons learned include:

High Commitment from Individuals at Core Member Organizations

Individuals who have been closely involved with WAITRO, particularly those who held positions in the Secretariat or Executive Board, clearly hold it in high regard. Past Board members, in particular, were active participants in the WAITRO://50 Virtual Innovation Forum and expressed interest in creating an alumni advisory board.

Poor Communication with Individuals at Member Organizations

Communications between the Secretariat and individuals at many member organizations were occasionally not effective. Although WAITRO's strength is that it is an Association of organizations, it is important to acknowledge that organizations do not solve problems, innovate or create new ideas, or participate in events. Individuals within those organizations do. One example was the WAITRO survey early on in the Covid-19 outbreak (sent to each organization's contact person) that indicated strong support for establishing an open access site on SAIRA® for Covid-related information. Once established, the subsequent six months generated almost no interest in terms of actual use. The difficulty of getting more use out of SAIRA® in terms

of registrations and project matches is in part attributed to ineffective communication.

Fragility of Travel Freedom

Once the dangers of Covid-19 became apparent, international borders closed down remarkably quickly and a key avenue for cooperation that we had all taken for granted disappeared with no warning. Countries such as Australia have already disclosed that they are unlikely to open borders before the end of 2021. These unprecedented restrictions on the freedom to travel necessitate a radical reassessment of how WAITRO operates to achieve its mission.

Digital Solutions Work Regionally and Globally

WAITRO's innovation and collaboration platform SAIRA® was launched in 2019 to facilitate collaborations and connections between WAITRO members. Online platforms allow researchers in all parts of the world to participate in international research, while also allowing them to access knowledge about distant local challenges. SAIRA® has the potential to leverage the power of WAITRO's member organizations to support and complement their innovations focused on SDG-related solutions. Platforms such as SAIRA® can also function as open-access portals for members to exchange information.

Meetings in the Cloud Succeed

The Covid-19 pandemic caused an interruption in international travel that might have been expected to completely shut down an organization such as WAITRO. However, WAITRO was delighted to find that it was not only possible to successfully execute management tasks such as Executive Board Meetings

online, but they were generally considered to be more focused and productive than the traditional in-person meetings. Furthermore, several capacity development events and, eventually, the 50th Anniversary meeting and 25th General Assembly, WAITRO://50, were organized entirely online and generally judged to be a success.

Physical Meetings have Unique Benefits

There was less time for discussion due to huge time differences between Board members, necessitating strict time management and, in some instances, additional sessions to cover all topics. Furthermore, nonverbal discussion in a face-to-face meeting adds richness that is lacking when 10+ persons are only seen as very small tiles on a screen. Personal networking and interactions during breaks, meals and recreation time are also missing from online meetings. The way forward might be a mix of online meetings with at least one physical Board Meeting per year, while the Summit and the General Assembly (GA) take place every second year and should be physical meetings whenever possible. A hybrid solution might be offered for those who cannot attend the Summit or the GA by streaming some parts of the meetings.

High Number of Inactive Members

By the end of 2018, a high proportion of WAITRO members were “inactive.” In some cases, this meant they had merely not paid membership fees. In others, it transpired that there had been no successful communication with the Secretariat for some time. An audit revealed that the total number of active members in good standing was 48. A related problem was that most members found themselves in the higher (more expensive) membership categories due to a long interval without updating the gross national income bands. As an incentive to build the active membership, the upfront membership fee was

waived in 2019, subsequently extended for 2020 and now approved to be waived until 2022, when a new set of categories will come into force unless a new membership scheme is agreed. Qualification for “good standing” was temporarily changed from a membership fee to contact information uploaded to the WAITRO website. These changes, and a membership drive by the Secretariat in partnership with the Regional Focal Points, increased the members in good standing to over 80 by the end of 2020 despite the year-long travel shutdown.

Closing the Loop

There was insufficient evaluation of activities such as workshops and conferences, few reports about activities and insufficient communication in the form of newsletter articles, etc. This is important to capture the value of WAITRO activities and to allow members who did not attend in person to learn from these events.

The Demand and Enthusiasm for Capacity Development

Several success cases demonstrate this, from small scale, bilateral collaborations (e.g., development of strategies), to joint workshops and projects, to large-scale, multiple stakeholder consortia (e.g. Horizon 2020 and Horizon Europe consortia).

4. MISSION, VISION, VALUES AND PRINCIPLES

The mission statement adopted in 2018 at the Langkawi workshop was:

“To facilitate action-oriented science, technology and innovation (STI) partnerships among members that contribute to sustainable development.”

The term “among members” is considered too restrictive, since we want and need non-WAITRO-member stakeholders to work with the Association. Again, the value of a network is proportional to its size, so opening up the WAITRO network to outside collaboration can only increase its value. It was also left unclear what was meant by “STI partnerships” and there was no acknowledgement of the importance of capacity development to WAITRO members.

The revised mission statement incorporates the term “foster innovation” as an explicit reference to SDG 9. Capacity development is included as empowering member organizations, and it is clear that facilitating collaboration is anticipated to be not only among members, but also between members and external stakeholders.

MISSION STATEMENT

To foster innovation on a global scale and drive sustainable development by empowering member organizations and facilitating collaboration across borders and boundaries.

VISION STATEMENT

A global innovation ecosystem, in which research and technology organizations (incl. universities) collaborate, share knowledge, develop, and disseminate innovative technologies in partnership with the private and public sectors to deliver sustainable impact to societies and economies.

SUSTAINABLE DEVELOPMENT GOALS



WAITRO'S VALUES & PRINCIPLES

In delivering its programs and services, WAITRO is guided by the following values and principles:

DIVERSITY & EQUALITY OF OPPORTUNITY

To respect all people regardless of age, gender, ethnicity, religion, disability, sexual orientation or other status.

INCLUSIVENESS

To champion inclusiveness, bringing together the diverse strengths, needs, voices, and backgrounds of all member organizations and individuals to solve problems.

GOOD GOVERNANCE

To ensure transparency and accountability and work towards maximum efficiency and effectiveness by ensuring that WAITRO's resources are directed towards fulfilling WAITRO's mission.



5. STRATEGIC GOALS AND OBJECTIVES

WAITRO IN 2030

STRATEGIC GOAL 1

WAITRO will be an association with a diverse, globally represented and engaged membership.

STRATEGIC GOAL 2

WAITRO will be a hub for collaboration and innovation for sustainable development.

STRATEGIC GOAL 3

WAITRO will be a provider for capacity development and accreditation.

STRATEGIC GOAL 4

WAITRO will be an advocate for and influencer of sustainable innovation.

STRATEGIC GOAL 1

BECOME AN ASSOCIATION WITH A DIVERSE, GLOBALLY REPRESENTED AND ENGAGED MEMBERSHIP

Objective 1.1

Increase the number of full member organizations, and increase the engagement of individuals at those organizations.

- The value of WAITRO is the network of members and its capacities. Metcalfe’s Law teaches us that the value of any network of equal partners increases as the square of the number of nodes. A growing membership will increase WAITRO’s relevance, membership benefits and will also ensure its future sustainability.
- WAITRO will focus on building a critical mass of member organizations, and individuals working at them, that will result in an increased value for members and enable WAITRO to achieve greater impact.
- In 2020, a new membership fee structure was adopted during the 25th General Assembly. However, it was unanimously decided to waive the membership fees for 2021 and 2022 to stimulate the growth of WAITRO.

- Not only the geographical expansion in terms of numbers, but also the quality and quantity of connectivity is crucial for WAITRO’s success. A committed and engaged membership is vital for WAITRO’s credibility and effectiveness and will shape the mission and purpose of WAITRO. Organizations may constitute WAITRO’s membership, but individuals contribute ideas and represent WAITRO’s greatest asset: the capacities of re-searchers and innovators at member organizations.
- Therefore, it is key to improve and amplify WAITRO’s services and programs, but also provide members with relevant information about WAITRO’s value and the benefits of membership and ongoing opportunities.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Implement a membership recruitment strategy.**
- **Strengthen the role of Regional Focal Points.**
- **Implement a WAITRO membership management strategy.**
- **Implement a communication and marketing strategy.**
- **Redefine WAITRO’s value proposition and develop tailored messages for key stakeholders.**

Objective 1.2

Increase the number of associate members participating from all regions.

- The Founding Document of WAITRO (by UNIDO) itself specifically highlights the “need for closer integration of industrial research with industrial development”. This has only become more compelling because of a trend that most RTOs are required to seek increasing portions of their funding from industry and other non-governmental sources.
- Over the past decades, interest and engagement from the private sector in collaboration for sustainable development increased.
- Associate membership of WAITRO gives for-profit industry an opportunity to scale its social, economic and environmental impact by working with research and technology organizations and research universities from across the globe.
- Associate WAITRO members can benefit from WAITRO services and programs as well as the studies of best practices for effective collaboration, to ensure the highest quality outcomes with the most efficient use of financial resources (see objective 3.1).

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Recruit and approve Associate Members.**
- **Open up and promote the WAITRO Fellowship Program to Associate Members.**
- **Create new opportunities for Associate Members and private sector stakeholders to be involved in WAITRO programs.**
- **Improve communication between WAITRO and private sector stakeholders.**
- **Create a WAITRO Advisory Board.**

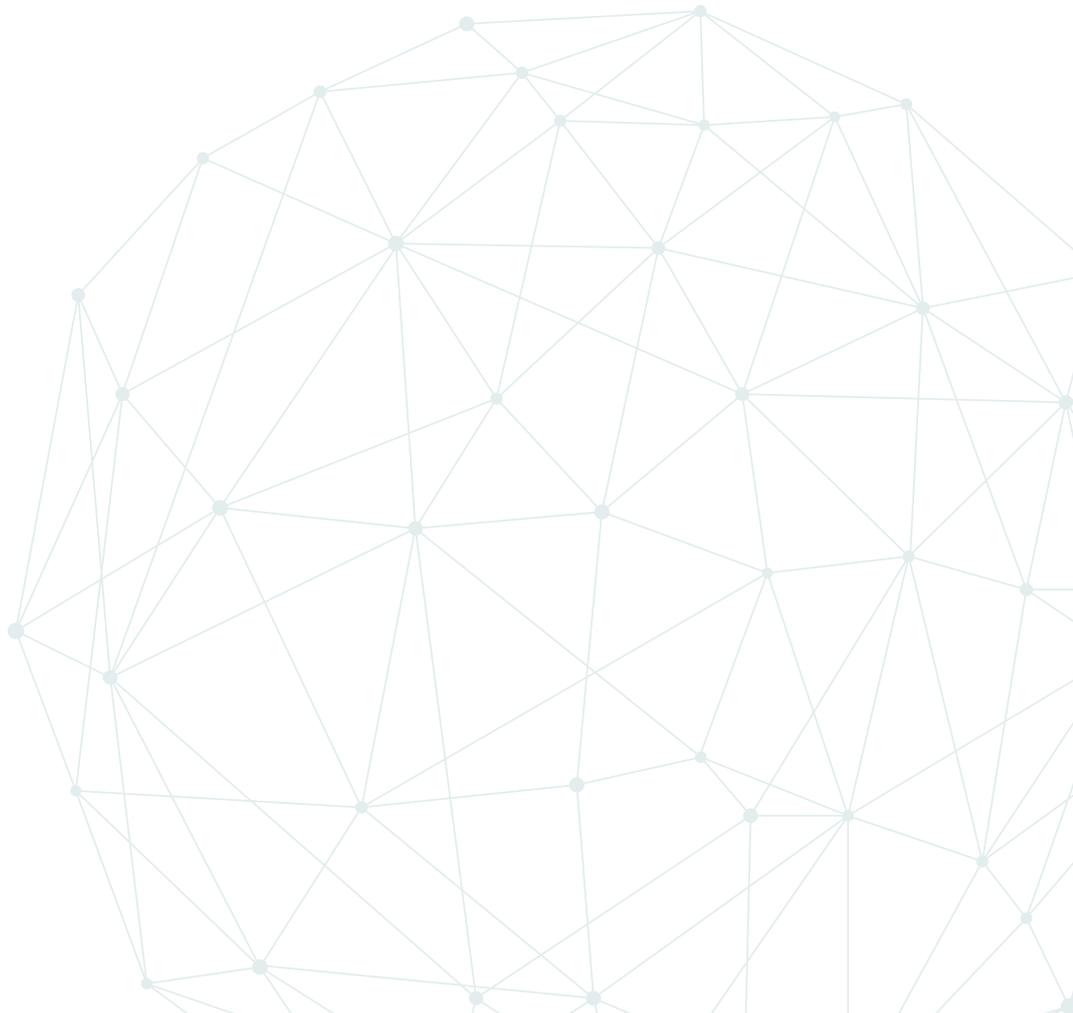
Objective 1.3

Improve WAITRO’s transparency and accountability.

- WAITRO’s vision of a global innovation ecosystem that enables collaboration, knowledge-sharing, and the development and dissemination of innovative technologies for a sustainable future can best be realized by being more accountable and transparent.
- Accountability to members, partners, donors, and other external stakeholders is the basis for developing trust and strengthening the legitimacy and integrity of WAITRO, and will contribute to greater program impact.
- Being transparent, both in disclosing information and in decision-making processes, as well as improving accountability, are important objectives of WAITRO’s updated strategy.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- Consolidate and improve reporting by publishing regular Annual Reports.
- Provide access to timely, relevant information about WAITRO activities and policies.
- Make information about WAITRO operations (including its governance, finances, programs, and activities) widely available to the public.
- Publish key documents (Strategic Plans, Joint Communiqués, etc.).
- Promote stakeholder involvement in General Assemblies (observers).
- Conduct impact study to assess the contribution of WAITRO to the Sustainable Development Goals.



STRATEGIC GOAL 2

BECOME A COLLABORATIVE INNOVATION HUB FOR SUSTAINABLE DEVELOPMENT

- Supporting collaboration, technological research and innovation for sustainable development is one of WAITRO’s main purposes.
- SAIRA®, WAITRO’s open innovation hub, is a cornerstone of WAITRO’s services and will play a key role in reaching WAITRO’s second strategic goal, developing the association into a hub for collaboration and innovation for sustainable development.

Objective 2.1

Facilitate the participation of member organizations in publicly-funded collaborations.

- Different institutions around the globe are involved in funding research and innovation, allocating billions of dollars to projects.
- Project funding does not only benefit research and technology organizations and universities (Full Members), but also companies (Associate Members) and public bodies (Partners).
- WAITRO will focus on building consortia constituting of member organizations and partners that apply for funding provided by government and intergovernmental organizations and thus will be facilitating the participation of member organizations in publicly-funded research collaborations.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- Support the identification of funding opportunities for WAITRO members.
- Establish core working groups for (regional) funding programs and schemes.
- Organize regular (online) matchmaking events and support the identification of project leaders/coordinators.
- Support project leaders/coordinators to find consortia partners (full and associate members) via SAIRA®.
- Empower members to successfully apply for research grants by offering workshops for improving skills in proposal writing.

SAIRA

Objective 2.2

Facilitate collaboration and technology transfer between (full) member organizations and the private sector (incl. associate members).

- Research and technology organizations (RTOs) and research universities (i.e., full WAITRO members) collaborate with private sector companies for contract research.
- With SAIRA[®], WAITRO offers a gateway that enables private sector companies to access one of WAITRO's greatest assets: the capacity of its (full) members to innovate and develop solutions for the private sector.
- As a global network of RTOs and research universities, WAITRO is capable of reducing transaction costs for companies to access, acquire, assimilate and exploit external knowledge to develop and sustain competitive advantages.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Improve SAIRA[®] and make it more attractive to the private sector.**
- **Build connections with associations representing the private sector (e.g., SMEs) to increase the number of SAIRA[®] users.**
- **Support private sector companies to find research partners (full members) via SAIRA[®].**
- **Build partnership with industry players (e.g. multinationals) to explore commercial based collaborations between private sector companies and full members.**
- **Develop and offer complementary offline services targeted at private sector companies.**
- **Improve communication with the private sector to address its needs.**

Objective 2.3

Foster collaborations towards the development and deployment of innovative technologies with impact on sustainable development.

- Researchers at WAITRO member organizations provide a vast resource of ideas, solutions, complementary competences, and skills that are needed for developing innovative solutions that tackle challenges on local, national, or even global scale.
- With the WAITRO Innovation Award, WAITRO offers a bottom-up approach to foster collaboration between WAITRO members (full and associate) to unlock the potential of these resources.
- WAITRO provides a mechanism to enable cross-border collaboration, kickstart ambitious project ideas that aim at solving SDG-related challenges, and support them during the implementation process.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Refine the WAITRO Innovation Award program and introduce new ideas.**
- **Organize global conferences (such as the WAITRO Global Innovation Summit) that offer project teams a platform from which to present their project ideas to a global audience.**
- **Build partnerships with development banks, donors and impact investment fund that support the WAITRO Innovation Award program.**

STRATEGIC GOAL 3

BECOME A PROVIDER OF CAPACITY DEVELOPMENT AND ACCREDITATION

Objective 3.1

Improve operational practices and business performance of WAITRO members and enhance scientific research and technological capacities of individuals.

- WAITRO's Capacity Development Program aims to support member organizations to work at the peak of their capabilities.
- At the organizational level, WAITRO focuses on measures to improve internal structures, policies and procedures that determine an organization's effectiveness. Identifying, understanding and adapting best practices and processes will lead to improved performances and collaboration with the private sector (benchmarking).
- Publishing a sustainability report has become standard practice for businesses worldwide. It also enables organizations to benchmark against other organizations, support change processes, assess their performance over time, and dialogue with stakeholders about their sustainability impacts. WAITRO will support its members to improve their sustainability reporting.
- At an individual level (of researchers), WAITRO supports the development of skills, experience and knowledge that allow each person to enhance their scientific research and technological capacities.
- Evaluating and measuring the impact of projects (on the SDGs) is key. WAITRO will support its members to make use of frameworks for measuring the impact of their projects.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Organize demand-driven workshops and training.**
- **Organize targeted workshops with WAITRO partners and relevant stakeholders.**
- **Stimulate the sharing of knowledge and best practices among WAITRO member organizations.**
- **Work with experts at member organizations and where necessary contract external experts.**
- **Provide a platform for members to articulate their needs so that other members are able respond and fill gaps by partnering.**
- **Organize a new benchmarking activity that offers benefits for full and associate members.**
- **Build the foundation for the support of member organization in sustainability reporting**
- **Seek partnerships with organizations that offer SDG impact assessment tools and offer trainings for WAITRO members.**

Objective 3.2

Strengthen and validate the capabilities of member organizations and establish “WAITRO Certified” as a brand of value.

- Improved internal structures, policies and procedures of member organizations improve their organization’s effectiveness.
- WAITRO can support these organizational changes (WAITRO Capacity Development program), validate their performance, and certify their compliance with standards.
- Members could be recognized by WAITRO as solution providers for sustainable development and service providers of professional R&D services.
- Members would benefit through global recognition and improved performance and impact.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Build a foundation for the development of an accreditation program for member organizations.**
- **Seek strategic partnerships with relevant stakeholders for an accreditation program.**

Objective 3.3

Augment international experience of researchers and staff of member organizations.

- Practical experience in foreign countries sharpens professional skills and enables the development of cultural competencies.
- WAITRO offers the unique combination of facilitating hands-on experience via the WAITRO network and contributing financial support to gain experience abroad.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Improve WAITRO Fellowship Program and prepare for post COVID-19 area.**
- **Open up and promote fellowship program to associate members.**



STRATEGIC GOAL 4

BECOME AN ADVOCATE FOR AND INFLUENCER OF SUSTAINABLE INNOVATION

Objective 4.1

Become a respected global advocate for the impact of science, technology and innovation on sustainable development.

- WAITRO's most valuable asset is the capacities of members to innovate and contribute to the UN Sustainable Development Goals.
- WAITRO will emphasize and promote members technological solutions and their impact on sustainable development.
- This approach includes new tools and formats, including digital, that allows members to share results and impact stories, which will increase the visibility of WAITRO members and its activities on a global scale.
- WAITRO will also serve its member organizations by acting as their advocate and spokesman at the national and international level on issues of mutual concern/interests (conferences, events).

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Promote WAITRO members activities on WAITRO website.**
- **Present WAITRO member activities at conferences and events.**

Objective 4.2

Position WAITRO to be an influential organization in the global policy and strategy market.

- Marginalized/under-represented populations lack the economic and political power to shape innovation systems to meet their needs.
- As an international association, WAITRO can build consensus, coordinate global efforts, and act as an honest broker.
- WAITRO can partner with synergistic organizations to help align innovation systems toward sustainable development and strengthen incentives for investing in the development of sustainable technology.
- Through advocacy, convening, policymaking, and partnerships seeded through the Fellowship Program and the WAITRO Innovation Award, WAITRO can influence global-scale efforts towards sustainable technology.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- **Partner with organizations at a national, regional and international level to advocate towards realigning innovation systems toward sustainable development.**

- Increased policy-level and operational collaboration between WAITRO and both regional and international organizations.
- Establish a task force to develop policy guidelines aimed at helping RTOs fulfil their national mandates.

Objective 4.3

Position WAITRO as a consultant at the intersection of science, technology, and innovation and sustainable development.

- WAITRO curates a global network of research and technology organizations and research universities. Beneath the organization-level membership, there lies a rich resource at the individual level consisting of experts in diverse research areas and STI-related topics that are highly relevant and needed for realizing the UN Agenda 2030.
- WAITRO can use this resource to support the development and implementation of sustainability strategies based on WAITRO's cumulative network expertise and deep knowledge, front-line operating experience, and a proven ability to drive organizational transformation.
- WAITRO can offer advice and expertise to stakeholders, such as governments, organizations, companies, to help them improve their performance in terms of operations, profitability, management, structure and strategy at the intersection of research, technology and innovation and sustainable development.
- In some cases, the WAITRO Secretariat itself is able to give advice on STI related topics, projects, for example it can help investors/funders to identify projects, businesses, and infrastructure in a way that supports the UN Sustainable Development Goals, drawing on WAITRO's unique ability to combine expertise in R&D with deep insight into environmental and social challenge, especially in emerging economies.
- In other cases, the WAITRO Secretariat can function as a gateway for connecting with the right expert for specific topics or the development of technology roadmap for different regions to reduce the gaps and to contribute to economic and societal well-being.

KEY ACTIONS TO ACHIEVE THE OBJECTIVE:

- Set up a database of experts at member organizations.
- Analyze the environment and build a foundation for a consulting portfolio.
- Prepare and conduct a portfolio development workshop.
- Promote the WAITRO consulting portfolio on the WAITRO website.
- Create content / write articles for social media, magazines, or online blogs on topics that represent WAITRO's consulting portfolio.
- Build new leads with relevant stakeholders / Build a network of strategic partners relevant for the intersection of research and development and sustainable development to position WAITRO as a consultant.
- Evaluate options of becoming a member or partner of organizations and associations that offers networking opportunities.
- Improve the project management skills of staff and provide training for Secretariat staff.

6. WORK PROGRAM

ACTIONS	OBJECTIVES	2021				2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Launch of new WAITRO website	1.1, 1.2, 4.1, 4.2	█							
Implement a membership recruitment strategy	1.1, 1.2		████████████████████						
Implement a membership management strategy	1.1, 1.2		████████████████████						
Launch of SAIRA 2.0	2.1, 2.2, 2.3		██						
WAITRO Innovation Award	2.3, 2.2		██████████				██████████		
WAITRO Global Innovation Summit	2.3, 4.1, 4.2				██				██
Workshops / Trainings	3.1, 3.2		████████████████████						
Benchmarking	3.1, 3.2, 4.1			████████████████████					
Accreditation	3.1, 3.2, 4.1					████████████████████			
Publish key documents (e.g., annual report)	1.3	██████████				██			
Fellowship Program	3.3					████████████████████			
Develop WAITRO consulting portfolio	4.3			██████████					

Uncertain due to COVID-19



7. MONITORING AND EVALUATION

The WAITRO Secretariat and the Executive Board are responsible for monitoring the delivery of the objectives set out in this Strategic Plan and Work Program. To this end, the WAITRO Secretariat will convene internal evaluations of activities and progresses.

WAITRO's contributions can be measured through a number of quantitative proxies, e.g., number of connections via SAIRA[®], number of organized workshops, webpages online, reports, webpage visitors, downloads. Measuring WAITRO's impact, however, is a more complex endeavor. Qualitative feedback from members, partners and stakeholders through surveys will be highly instrumental in this regard.

WAITRO Annual Reports for 2021 and 2022 will be published.



WAITRO



WORLD
ASSOCIATION OF
INDUSTRIAL &
TECHNOLOGICAL
RESEARCH
ORGANIZATIONS



WAITRO Secretariat
WAITRO Executive Board

WAITRO 2020/2021
www.waitro.org