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# ENRICH MONTHLY

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### Innovation Talks on Digital Transformation & Healthcare

An online panel discussion on the Challenges of Modern Healthcare after the COVID Pandemic.

#### Priority Topic: Digital Transformation

Which innovation strategies to embrace in the digital age and innovability?

#### Country Profile: Netherlands

Netherlands has an innovative business community hungry for new, high-quality products, representing a reliable economic environment

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MONTHLY BUSINESS & INNOVATION NEWS COMPILED BY ENRICH IN LAC





Dear Reader,

a warm welcome and thank you for your time and interest in our May edition of the ENRICH Monthly. In each edition we provide you with the latest Science, Technology and Innovation related news from Europe, Latin America and the Caribbean.

Innovation Talks on Digital Transformation & Healthcare, an online panel discussion on the Challenges of Modern Healthcare after the COVID Pandemic organized by RCISD. The event gathered 37 participants, including panelists, and the audience was composed by university/PhD students, representatives of R&D companies, policymakers and clusters. We share with you a summary of the event (p. 18).

Which innovation strategies to embrace in the digital age and innovability is disscussed in digital transformation priority topic article from ANPEI. Innovation management has never had a "one size fits all" recipe, as it depends on several factors related to the industry. The two great forces driving innovation in this new era are the digital and innovability. The main question now, is: How to do innovation management in

practice in this new world that presents itself to us? Customer expectations and behaviour were profoundly impacted by new business models that emerged with the digital transformation, which pressured traditional companies and, as a result, the disruption of several markets.

With the most advanced logistics and distribution network in Europe, the Netherlands has an innovative business community hungry for new, high-quality products, representing a reliable economic environment for innovation cooperation with LAC. An in-depth country profile, including economic forecast, science technology and innovation (STI) landscape, national STI priorities, previous contribution to Horizon 2020 and further opportunities in Horizon Europe can be found in the article.

If you enjoy reading ENRICH Monthly E-magazine, please do not hesitate to recommend it to your peers and share the following subscription <u>link</u>. We also welcome your feedback by <u>e-mail</u>.

All the best for you, ENRICH in LAC Team

### SNEAK PEEK OF WHAT'S INSIDE:



PUBLIC CALLS

**INNOVATION TALKS ON DIGITAL TRANSFORMATION & HEALTHCARE** 

**PRIORITY TOPIC: DIGITAL TRANSFORMATION** 

**KNOWLEDGE PILL: RENEWABLE ENERGY** 

**COUNTRY PROFILE: NETHERLANDS** 

### LATEST NEWS

# LAC AND EUROPEAN UNION

### Position paper "Tackling global challenges together with Latin America"

The Association for Latin American (LAV) together with the Latin America Committee of German Business (LADW) published a position paper on "Meeting Global Challenges Together with Latin America" that contains recommendations for expanding cooperation with this relevant region.

In view of the rising global challenges, cooperation with the Latin American economies is gaining increasing strategic importance for German business. With almost 650 million predominantly young inhabitants, the LAC region not only offers an innovation-friendly market with a great deal of potential for German companies, which have been on the market for over a hundred years, but can also make a decisive contribution to the success of a comprehensive ecological and digital transformation in Germany and the in EU. This is because common ground in fundamental political, economic and social values can make the region an important ally for Germany in driving forward climate protection, digitization, sustainable raw material and energy supplies, for example.

To achieve this, bilateral cooperation depends on the commitment of German policymakers so that Germany's once high political and economic standing can be restored in the Latin American markets. Against this background, this position paper summarizes concrete recommendations for action in key areas.

Full paper can be found <u>here</u> (also available in German and Portuguese).

Source: Association For Latin America, 2022

#### **EUROPEAN UNION**



### The X International Conference of the European Council for Social Research on Latin America

The X International Conference of the European Council for Social Research on Latin America (<u>CEISAL</u>) will take place in Helsinki, Finland between 13– 15 June 2022. CEISAL2022 is also the Nordic Latin American Research Network (<u>NOLAN</u>) 11th Conference.

The region that opened up its economies and societies to global forces is now witnessing a new surge of protectionism and fierce competition at all levels by the economic and political superpowers. At the same time, environmental destruction, the rise of populism, as well as the restructuring of global networks and relations have created profound changes in Latin America and in the global arena. Obviously, no single strategy or remedy can address the multi-faceted challenges Latin America faces today. The conference aims to bring together researchers working on all aspects of Latin American Studies, with the goal to explore the changing conditions that are shaping Latin American societies after globalization. The conference focuses on local and regional responses to these developments and on re-examining ways Latin America is portrayed and understood. With such diverse, fluid, non-linear and uncertain trajectories, how are Latin American futures formed and transformed?

The conference will be held in Spanish, English and Portuguese. Further information can be found <u>here.</u> Source: German Research Association about Latin America (ADLAF), 2022

#### Science and Policy Matchmaking Event

The European Commission's Joint Research Centre (JRC) and Directorate-General for Education, Youth, Sport and Culture (DG EAC) are organising a pilot **science and policy matchmaking event** to bring together researchers and potential policy-related host institutions.

The event will focus on the opportunities under the **Marie Sklodowska-Curie Actions (MSCA)** for linking researchers and policymakers, since MSCA is one of the key programmes fostering intersectoral, international and interdisciplinary research cooperation.

The pilot virtual session, which will be held on 31 May 2022 (9.30-13.00 CEST), will specifically discuss MSCA Postdoctoral Fellowships (PF). Next MSCA PF call is opening in May 2022 (closing mid-September 2022) and the event aims at bring together researchers applying for PF, who are looking for placement hosts, and policymakers interested in hosting researchers as part of their science-policy work.

To register: <u>click here</u> (deadline: 25/05/2022) Source: EURAXESS, 2022



#### ARGENTINA

### Argentina and Spain sign agreement on science, technology and innovation

The Ministry of Science and the Spanish Foundation for Science and Technology (FECYT) signed a cooperation agreement for the exchange and development of activities and initiatives in the field of communication and dissemination of Science, Technology and Innovation. A report on scientific collaboration between the two countries was also presented.

The document aims to promote joint work for the development of cooperation activities and initiatives in science, technology and innovation, as well as the generation of capacities and benefits to the competent institutions in the field. In this regard, emphasis will be placed on the dissemination, communication, dissemination and co-production of audiovisual materials of an educational, scientific and technological nature to promote the interest of the general public and encourage the production of knowledge; as well as the generation, exchange and dissemination of information and other specialized audiovisual content for the Argentine and Spanish population.

The report "Analysis of scientific production in collaboration between Spain and Argentina 2011-2020" which is available for consultation and download on <u>the FECYT website</u>, reflects that both countries support the global approach to science, since, in the period studied, 46.8% of scientific production in Spain is published in international collaboration and, in the case of Argentina, the figure is 43.7%.

Further information can be found <u>here</u>. Source: Ministry of Science, Technology and Innovation Argentina, 2022

#### CANSAT Argentina was launched, the competition that invites young people from all over the country to develop their own satellites

Until May 31, registration is open for CANSAT Argentina, an initiative organized by the Ministry of Science, Technology and Innovation (MINCyT) and the National Commission for Space Activities (CONAE). CANSAT is an international competition promoted by several space agencies around the world – including NASA (United States) and ESA (Europe) – that proposes to students to build a payload, whose size does not exceed that of a can of soda, and launch it on a rocket to an altitude of approximately one kilometer. Hence, the term CAN (can) and SAT (satellite).

In line with the National Space Plan, which has among its priorities to carry out education and training activities, CANSAT Argentina intends to reproduce at scale the process by which a satellite is designed, built, tested, launched and operated. This will be the first national edition organized by our Space Agency.

To intervene in CANSAT each group of students must be formed as a space mission team, which will aim to develop a scale satellite contained within a can, using free software and hardware. The teams will compete to advance in the different stages and must deliver progress tests to account for the development of their payloads. Once a final validation stage has been completed, the finalist teams of the call will be selected, who will have the opportunity to travel and participate in a day of launch of their satellites, where they will carry out different tests and measurements, accompanied by professionals from CONAE and with the collaboration of specialists from the National Technological University (UTN).

It should be noted that secondary schools from all over the country can participate and that it is not necessary for the teams to have previous knowledge in the subject when registering. Those who compete will have training for teachers and students, which will allow them to acquire the knowledge, tools and materials necessary to carry out the development of the project.

For registrations consult the requirements <u>here</u>. For more information, rules and conditions visit <u>https://www.argentina.gob.ar/ciencia/sact/cansat-</u> argentina

Source: Ministry of Science, Technology and Innovation Argentina, 2022

# LAC AND EUROPEAN UNION

### LATEST NEWS

# LAC AND EUROPEAN UNION

A new edition of the survey that measures investment in R&D in the Argentine business sector begins

In order to measure the investment in research and development (R&D) made by companies in the country in 2021, as well as the human resources affected by these activities, the Ministry of Science, Technology and Innovation launches a new operation of the Survey on R & D of the Argentine Business Sector (ESID).

Between May 16 and September 30, the ESID will relieve about two thousand companies destined to R & D of all productive sectors, constituting practically a census of companies that carry out this type of activities in the national territory. The survey is in charge of the National Directorate of Scientific Information (DNIC) of the Undersecretariat of Studies and Foresight and part of the fieldwork is carried out jointly with the SME Observatory Foundation (FOP).

The ESID was first implemented in 2014, establishing itself since then as an annual survey. The latest measurement, the ESID 2020 report, provided information on the performance of companies during the first year of the COVID-19 pandemic. In this context, 941 firms were registered carrying out R&D activities in the country, which invested just over 54 billion pesos and employed 19,052 people to carry out this type of activities.

As a whole, the business sector executed 38% of the country's R&D investment in 2020, registering an increasing trend since 2015 in its level of participation in the global total. This phenomenon is explained by a double process: on the one hand, by the growth of investment in the business sector, which in the period

#### ARGENTINA



2015-2020 was 22% in real terms; and on the other hand, and even with a greater impact, due to the contraction of public investment in R & D, which had a fall in real terms of 43% in that period.

In relation to the gross domestic product (GDP), investment in R&D in the sector also showed a slow but steady growth over the last few years: it went from 0.14% in 2016 to 0.20% in 2020. This figure is below that observed in countries of the Organization for Economic Cooperation and Development (OECD), which reached on average 1.76% of GDP, but slightly above the rest of the countries of Latin America, where, on average, investment in the business sector represented 0.19% of GDP in 2019.

In that sense, in 2020, only ten firms explained 42% of all the investment in R & D made by the business sector, of which nine were of multinational capital. At the other extreme, there were 500 companies doing R&D that, together, did not represent 2% of the sector's investment. This concentration of resources dedicated to R&D in a limited group of large and multinational companies should not blur a prominent phenomenon of the dynamics of these activities in the Argentine business sector: the **companies that present the greatest intensity in the effort to develop R&D activities are SMEs.** Further information can be found <u>here.</u>

Source: Ministry of Science, Technology and Innovation (Argentina, 2022)

### Intellectual Property in the National System of Science, Technology and Innovation

A meeting was held dedicated to "Intellectual Property in the National System of Science, Technology and Innovation" with the participation of the Minister of Science, Technology and Innovation, Daniel Filmus; the president of the National Agency for the Promotion of Research, Technological Development and Innovation (R&D&I Agency), Fernando Peirano, and the president of CONICET, Ana Franchi. The meeting also had the contribution of the Interinstitutional Group on Management of Intangible Assets, Intellectual Property and Technology Transfer (MINCyT, CONICET, R&D&I Agency), headed by the Secretary of Planning and Policies in Science, Technology and Innovation, Diego Hurtado; experts who presented on policy guidelines and The Intellectual Property and Intangible Assets Unit of the R&D&I Agency and at the closing, the presentation of the book "Policies for the promotion of knowledge intellectual property rights: experiences, and proposals and debates for Argentina", carried out jointly by the R&D&I Agency and the Interdisciplinary Center for Studies in Science, Technology and Innovation (CIECTI).Further information can be found here.

**Source:** Ministry of Science, Technology and Innovation Argentina, 2022



#### BRAZIL

#### Save the date - ANPEI Conference 2022

**SAVE THE DATE** - ANPEI is organising its annual Conference next November 30th and December 1st at Campinas, Sao Paulo - Brazil.

The objective of the ANPEI Conference is to share, discuss and present suggestions and forward actions so that science, technology and innovation can better fulfill their role in advancing the technological competitiveness and social impact of the country. Stay tuned for updates **here**.

### Podcast - Will Telemedicine Ease the Access to Healthcare for Brazilians?

In this podcast episode organized by CNI (Brazilian National Confederation of Industry CNI) the discussion is a controversial topic in medical care: telemedicine. Telemedicine gained strength at the beginning of the pandemic to facilitate medical appointments at a time when hospitals were overloaded with Covid-19 cases.

As the experience worked well, a bill was created to regulate remote medical care in Brazil. This bill is in the final stages of approval in Congress, and more than making life easier for patients and doctors, it proposes the democratization of access to health care, since access to medicine can be challenging in Brazil. In spite of the good results, telemedicine remains a controversial subject.

The guests of this episode are Katyana Aragão, executive manager for Health and Safety in Industry at the Industry Social Service (SESI), and Claudio Patrus, specialist in Industrial Development, also from SESI, who will better explain the bill proposal and discuss the landscape of telemedicine in Brazil. The podcast in available in Portuguese.

Source: Portal da Indústria, 2022

#### São Paulo Innovation and Science Diplomacy School

The São Paulo Innovation and Science Diplomacy School (InnSciD SP) is collaborating with The World Academy of Sciences (TWAS) on the Innovation and Science Diplomacy School 2022. The initiative, organized by the University of São Paulo (USP), will be held in virtual format, between <u>August 1st and 5th</u>. Applications are open until <u>May 31</u>.

Since 2019, InnSciD SP has been providing training to scientists, diplomats, and representatives of the private sector from all over the world on the rich and multidisciplinary intersection between science, technology, innovation, and foreign policy.

This year's program will be divided into two tracks:

- Science diplomacy, with classes and panels on scientific colonisation, the relationship between the Global North and South, legal aspects of science diplomacy and international biodiversity regime;
- Innovation diplomacy, in which topics such as international open innovation programs, social innovation, innovation and equality, the international dimension of venture capital funds, technology and geopolitics, among others, will be covered.

Additional information, program and registration can be found on the website: <u>https://2022.innscidsp.com/</u> Source: <u>São Paulo Innovation and Science Diplomacy</u> <u>School, 2022</u>

+ content + networking + accessible with great innovation players November 30 and december 1 Compension Com

# LATEST NEWS LAC AND EUROPEAN UNION

#### **Probral Program Fosters Joint Research Projects**

The new call for proposals of the EPOS program has been launched. The program offers DAAD (German Service for Academic Exchange) scholarships for several postgraduate courses in Germany in fields of study related to sustainable development. The Entwicklungsbezogene Postgraduiertenstudiengänge (Development-Related Postgraduate Courses) program targets young professionals and academics from developing countries, who can choose from 39 master's or doctoral courses, taught in German or English, in one of the following areas:

- Economic Sciences and Economic Policy
- Development Cooperation
- Engineering and related disciplines
- Urban and Regional Planning
- Agronomy and Forestry
- Natural Sciences & Environmental Sciences
- Medicine and public health
- Social Sciences, Education, and Law
- Media Studies

The new booklet with details about courses for the period 2023/2024 can be found <u>here</u>. In addition to excellent academic performance, the basic prerequisite for an application is a minimum of two years of professional experience in the desired course area after graduation. The duration of studies lasts from 12 to 42 months. Recipients receive a monthly scholarship, health insurance, airfare allowance, and preparatory German language course.

Candidates for EPOS must be active in the planning and execution of projects related to development policies or development cooperation, either in public or private institutions/companies. They must also be able to demonstrate the level of German or English required by each institution.

The list of courses that are part of the EPOS Program and their application deadlines (according to the university) can be seen in this <u>table</u>. The application deadlines for EPOS with DAAD scholarship go until 03/31/2023. Important notice: the application needs to be made through the German university's website, not through the DAAD. In 2022 EPOS gained a new course. It is the doctoral program "Resource Nexus for Sustainability Transformations (NEXtra)" (TU Dresden/United Nations University - FLORES). The first application deadline of this call is March 31, 2022.

Source: DAAD Brasil, 2022

#### **Brasil Investment Forum 2022**

The Brasil Investment Forum 2022 (BIF 22) will be the 5<sup>th</sup> edition of the largest foreign investment event in Latin America. Organized by ApexBrasil, the Inter-American Development Bank (IDB) and the Federal Government, it will take place online on June 14 and 15, 2022.

In 2022, the Forum will keep its traditional proposal to present investment opportunities and highlight the evolution of the business environment in the country. Strategic sectors will be addressed, such as agribusiness, infrastructure, energy, and information technology. Topics of interest to investors will also be discussed, such as new business models, equity investment initiatives and movements in global value chains.

This will be the second edition of BIF in an online format. Several panels, with authorities, executives from major companies in Brazil and the world, and experts from various sectors, will be streamed with simultaneous translation into Portuguese and English. Participants will also be able to make business contacts and find virtual booths where they can seek support to develop their projects in Brazil. The networking platform will be made available to registrants ahead of the event.

Source: Brazil Investment Forum, 2022



#### CHILE



# INIA participates in an event that seeks to align strategic efforts for the international agricultural sector

Two days of hard work and regional strategic definitions, carried out by the delegation of the Institute of Agricultural Research (INIA) in Argentina, participating in the construction of a common agenda for the member countries of Procisur for the coming years.

The Cooperative Program for Agri-Food and Agro-Industrial Technological Development of the Southern Cone (PROCISUR), made up of Argentina, Brazil, Paraguay, Uruguay, Chile – in addition to the Inter-American Institute for Cooperation on Agriculture (IICA) – met in the trans-Andean capital to evaluate the 2020-2022 work plan and the strategy for the coming years (2023 -2026), considering the current and future challenges among the research institutes of the member countries.

On behalf of INIA Chile, the national director Iris Lobos participated, together with the head of international cooperation of the institute, María Teresa Pino. After the meetings, "we have seen that there are common challenges and capacities that we can integrate among all countries to reach practical, multilateral solutions that allow us to advance together and support the agricultural development of the region, transferring knowledge to all actors and peasant families in each country," said the director.

One of the main challenges of the international meeting is the coordination of a work agenda on common themes for nations on topics such as sustainable intensification of agriculture, climate change and risk management, family farming, Institutional Development, Plant and Animal Health and Natural Resources.

In this regard, María Teresa Pino said that "INIA Chile has the capabilities to join and generate international and multidisciplinary work teams to lead research in the key areas in which we seek solutions for the coming years. We have the mandate to articulate our own R&D&I capacities with the Procisur countries, to advance together in the fulfillment of the challenges that we have identified for the coming years".

Further information can be found <u>here.</u> Source: Institute of Agricultural Research Chile, 2022

### Nanotechnology to detect pesticides in less time and in a simple way

As a contribution to agricultural producers and food safety, research conducted by the Center for the Development of Nanoscience and Nanotechnology (CEDENNA) and the Agricultural Research Institute (INIA) develops a technique that uses fluorescent nanoparticles to detect concentrations of pesticides in fruits and vegetables.

This innovation will facilitate the measurement of the Maximum Residue Limit (MRL) of pesticides in fruits and vegetables, saving time and resources for producers, compared to other traditional methods used to determine levels of these substances to combat pests.

"We intend to address two main points: time and cost. That is, nanoparticles and new technologies will allow to achieve shorter analysis times and lower operating cost, "says Rafael Melo, CEDENNA researcher and head of the Laboratory of Pesticide Residues and Environment of INIA La Platina.

Further information can be found <u>here.</u> Source: The Center for the Development of Nanoscience and Nanotechnology, 2022

# LATEST NEWS LAC AND EUROPEAN UNION

**COLOMBIA** 

### Temperature recorded 34°C in coastal areas of the Antarctic Peninsula

A maximum of 34 degrees Celsius was part of the record recovered by sensors installed since February 2019 in the rocky area of Fildes Bay, King George Island, on the Antarctic Peninsula.

These devices are part of the "Pole to Pole Marine Biodiversity Observation Network of the Americas", an international project in which more than 30 scientists carry out an information survey on various coasts of the American continent in order to study marine biodiversity. The sensors, developed by researchers in Portugal, are attached to real shells of mollusks or simulate the shape of these. Thanks to Near Field Communication (NFC) technology, it is possible to extract the data obtained from a cell phone, without the need for cables or the removal of equipment.

The record of these temperatures was recovered by Dr. Erasmo Macaya Horta, researcher at the Center for Research Dynamics of High Latitude Marine Ecosystems (IDEAL) of the Austral University of Chile (UACh) and academic of the University of Concepción (UdeC).

The researcher added that "for these records there must be some conditions, such as a clear day, little wind and low tide. However, they are temperatures measured in the substrate used by different marine organisms, such as invertebrates or algae, and that those with a certain degree of mobility can avoid. However, they are organisms adapted for a long time to very low temperatures or not so high fluctuations, so these peaks could have negative consequences.

Further information can be found <u>here.</u> Source: Chilean National Agency for Research and Development ANID, 2022

### LATEST NEWS

LAC AND EUROPEAN UNION

### Minciencias signs three cooperation instruments with Spanish institutions

The Minister of Science, Technology and Innovation, Tito José Crissien and the Deputy Minister of Talent and Social Appropriation, Nelson Orozco, during their high-level visit to Spain, signed three cooperation instruments with the aim of continuing to strengthen the development of the Colombian scientific ecosystem.

In this regard, the head of the Ministry indicated that "Minciencias is identifying and promoting opportunities for cooperation and spaces for dialogue between different Spanish entities, in order to facilitate the mobility of postgraduate students and Colombian researchers. This is how it contributes to the construction of a knowledge-based society that contributes to generating social and economic benefits for the country."

The first instrument was signed with OBREAL GLOBAL and it is expected to strengthen the capacity to transfer the technology and knowledge produced by the Universities attached to this entity, through the improvement of the connectivity of academic research and education networks.

OBREAL is a network of academic institutions and research centers from Europe, Latin America, Asia, the Middle East and Africa, in charge of promoting dialogue and synergies between the governmental, academic and social sectors, taking into account the specificities and heterogeneity of each region of the world.

On the other hand, with the CEU San Pablo University and the International University of La Rioja UNIR, through the instruments of cooperation, it seeks to establish strategies for the advancement of scientific knowledge, sustainable, environmental, social, cultural development, through the promotion of activities that allow student mobility between both parties, to favor reciprocal cooperation between universities and other higher education institutions and research centers.

It is with facts and as a team, that the Government of President Iván Duque, has promoted the generation of knowledge and research with a view to advancing in the field of Science, Technology and Innovation.

Source: The Ministry of Science, Technology and Innovation Colombia, 2022

### LATEST NEWS

# LAC AND EUROPEAN UNION

### \$90 billion for the execution of environment and sustainable development projects in the country

The Collegiate Body of Administration and Decision (OCAD) of Science, Technology and Innovation (CTel), approved in its session N°21 of 2022, \$90 billion from the General Royalty System (SGR), for the execution of ten R + D + i projects for the environment and sustainable development of the country.

The development and implementation of these CTel initiatives have scope in: environment; biodiversity and ecosystem services; habitat and sustainable development; and climate risk mitigation, adaptation and management, which are expected to benefit more than 1.1 million people in 14 departments of Colombia.

"With the approval of these projects, science, technology and innovation in the territories are strengthened, through actions that allow a balance between the conservation of the environment and the production of goods, so that the natural wealth of the country is appropriated by the communities as a strategic asset of the country. In addition, with the approval of projects in this area we are contributing to the recommendations of the Mission of the Wise and working for a bio-diverse, productive, sustainable and equitable Colombia, "said the Minister of Science, Technology and Innovation, Tito José Crissien.

During the implementation of these projects, it is expected to generate approximately 274 direct jobs and 548 indirect jobs. In terms of results, the following are contemplated:

- 240 financial supports for the generation of new knowledge.
- 60 supports for the transfer of knowledge and technology.
- 30 articles and research papers.
- 60 supports for the implementation of innovation in companies.

It is with facts and as a team, that it has been possible to contribute to the construction of a more equitable society from the promotion of knowledge, the impulse to productivity, development and competitiveness of the country.

Source: The Ministry of Science, Technology and Innovation Colombia, 2022

#### Ecopetrol, MinCiencias and MinEnergía announce us\$11 million agreements to promote projects for energy transition and technology transfer

Based on two cooperation agreements, Ecopetrol, the Ministry of Science, Technology and Innovation (MinCiencias) and the Ministry of Mines and Energy (MinEnergía) will promote actions on issues such as carbon capture, hydrogen generation and technology transfer processes to improve the operation of the industry.

The cooperation agreements are valued at US\$11 million and are part of a framework agreement signed between Ecopetrol and the National Government, through the Ministries of Science, Technology and Innovation, and Mines and Energy. Its objective is to promote the implementation of the recommendations delivered by the International Mission of the Wise of 2019 on the uses of water, natural sinks of carbon dioxide, advanced materials, biotechnology for sustainability and the promotion of processes of creation and transfer of knowledge and technology.

This institutional effort between Ecopetrol, MinCiencias and MinEnergía is committed to strengthening the country's capacities in terms of sustainability, climate change mitigation and adaptation to the energy transition. In total, resources of US\$30 million are planned over the next three years.

Further information can be found <u>here</u>. Source: The Ministry of Science, Technology and Innovation Colombia, 2022

COLOMBIA



# LATEST NEWS LAC AND EUROPEAN UNION

#### AUCI and the Spanish Foundation for Science and Technology agreed to support the strengthening of the regional scientific system

On Tuesday, May 10, at the Executive Tower, a meeting took place in which the Spanish Foundation for Science and Technology (FECYT) and the Uruguayan Agency for International Cooperation (AUCI) agreed on institutional support to implement an agenda of activities with national and regional public actors in science, technology and innovation. The actions are foreseen to have a five-year term.

Claudia Romano, Manager of the agency, said that AUCI will seek to enhance the access and work of scientific institutions in Uruguay and the region in the European Union's framework programs, in particular the actions are aimed at the Horizon Europe research and innovation program.

The collaboration between both entities will allow the implementation of actions aimed at the promotion and participation in European research, innovation and development programs, the promotion and attraction of scientific-technological vocations with gender equity; the impulse for the development of mobility and research careers and the promotion of scientific diplomacy actions.

The entities will develop joint collaboration projects, in coordination with national institutions of specific competence, which will be able to exchange bibliographic funds, publications, news and scientific information. Other actions foreseen are joint reports, studies and research, among others. It will also enable FECYT to provide technical support to the Latin American and Caribbean Network of National Contact Points (RED LAC NCP), for the promotion of virtual and face-to-face workshops in Latin America and the Caribbean, as well as presentations in European programs.

Source: AUCI, 2022

#### Validation of Business Ideas (VIN) – 2022

The purpose of the program VIN (Validation de Ideas de Negocios) is to accompany entrepreneurs in their first steps towards entrepreneurship, to support projects that propose validation experiments for the development of a minimum viable product and its testing in the target market, that require economic funds for their execution and whose objective is to prove the commercial viability of the product or service.

The aim is to finance projects with the potential to incorporate differential or innovative elements at the level of product, service, process or way of commercialization, with respect to the targeted market.

This instrument, developed jointly with ANDE (National Development Agency) and the Agencia Nacional de Investigación e Innovación (ANII), aims to provide tools and support entrepreneurs in the process of commercial validation of a business idea. The beneficiaries will be provided with:

- Support from a Venture Sponsoring Institution (IPE VIN) during the design, formulation, and execution stages of the project.

- Technical assistance from an expert during the preparation of the validation plan and its implementation if the project is approved.

- Non-reimbursable funding of up to US\$ 200,000 to carry out the validation plan.

To apply it is necessary to contact a VIN Venture Sponsoring Institution (VIN IPE). There will be three application rounds with deadlines between June and November 2022.

Further information, relevant documents and application form can be found <u>here</u>. Source: <u>ANDE, 2022</u>



# SCHOLARSHIPS

### **FUNDING**

### ANNOUNCEMENTS

### EU PUBLIC CALLS

# List of Horizon Europe Calls targeting LAC region

The Science, Technology & Innovation (STI) Section of the Delegation of the EU in Brazil published an Indicative List of calls of the 1st Work-Programme (2021-2022) of Horizon Europe with focus on International Cooperation, Brazil and Latin America and is available <u>here</u>.

Please note that this list is not intended to be exhaustive and does not engage the European Commission. The aim is to provide an indication of the calls where BR or LAC countries participation are desired or required. The Horizon Europe programme has an openness principle and many other calls are available on the Funding&Tenders Portal.



ndicative List of calls of the EU R&I programme, Horizon Europe with focus on International Cooperation, Brazil and Latin Ame 1<sup>st</sup> Work-Programme (2021-2022)

WP pert	topic code with hyperlink	topic title	Type of action	Open and close	int'i Coop?	Specific countries or regions targeted	References to International coop in topic's text
CLUSTON 2	HERIZON-CL2-DD2- TRANSFORMATIONS- ULUI	Public policies and indicators for well- being and sustainable development	πia	10/01/2022 20/04/2022	HES.	Ahlog Asiag Latin America, North America	Proposali should sover a broad range of European countries (pile the regional dimension where aproperties), as well as a different number of non-European countries (e.g. from Africa, Asia, Ion America, America) for ensuing an informational comparison of the analysis, this international cooperation is already uncompared.
CLUSTER 5	HOR2014-0.5-2022- 03-02-01	Digital solutions for defining synergies in International renovable energy value charts	RW	25/05/2022 27/10/2022	VES (required)	Mission Innovation countries	The consortium must include as a beneficiary at least one legal entity established in a Mission innovation Country, not being Member State or Associated Country
CLUSTER 5	H0R20N-0.5-2022- 03-03-02	Bert International practice for scaling up subtainable biofuels	RM	05/09/2022	VES	Mission Innevation countries	International cooperation with Mission Internation countries is expected

### AL-INVEST Verde- 1st Call for Proposals for Innovative Partnership Projects

AL-INVEST has been the European Union's (EU) flagship programme for SME promotion and support in Latin America (LA) over the last two decades. The Current Programme aims to promote economic growth alongside environmental sustainability by mobilising EU know-how and investment in support of green transition-related alliances with the private sector in LA.

This Call for Proposals aims at supporting innovative partnership projects between Latin American and European institutions and organisations. The following priorities will be pursued for this first call for proposals:

1. Sustainable, deforestation-free agri-food systems and value chains

2. Transition towards low carbon, resource efficient and circular business models

Deadline: 27 June 2022 (12:00 pm Brussels time) Call Guidelines (for a quick information about the call): <u>https://alinvest-verde.eu/wpcontent/uploads/2022/03/AIV\_CfP1\_Guidelines</u> <u>EN\_final-1.pdf</u>

For all other documentation: <u>https://alinvest-verde.eu/documents\_relevant-guidelines/</u>

AL-INVEST Verde web-site: <u>https://alinvest-</u> verde.eu/#programme

Networking Platform for this Call: <u>https://al-invest-verde-1st-call.b2match.io/</u>

# AL-INVEST Verde Ø

AL-INVEST Verde promotes sustainable growth and jobs creation by supporting the transition towards a low-carbon, resource-efficient and a more circular economy as well as sustainable agri-food value chains in Latin America

	QUICK FACTS Component 1	ENVISAGED OUTCOMES		
Funded by	European Commission SMEs in Latin America adopt less polluting and more resource efficient	Promote the green transition of Latin American SMEs and sustainable agri-food value chains. Facilitate the use of more resource-efficient and low- carbon production models through innovation and digitalisation.		
Specific Objective	products, processes and services while more sustainable consumption patterns are adopted by countries.			
Budget	31.25 Mio. EUR (80% from EU)	Indicators aimed at improving the competitiveness of SMEs through the adoption of sustainability practices to increase their employability, especially among		
Duration	01.12.2021 – 30.11.2025 (48 months)			
Approach	Facilitation and management of sub- grants for projects of EU and LA partners. Provision of technical assistance, support	young people and women.		
Approach	transversal activities, networking and	INNOVATIVE PARTNERSHIP PROJECTS		
	exchange.	AL-INVEST Verde wants to mobilise EU know-how and investment in support of building alliances with the		
	EU and Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El	private sector in LA.		
Location	Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela	For the twinning of innovative partnership projects between EU and LA 25 Mio. EUR are earmarked (including 20% own contribution).		
Lead	sequa gGmbH, Bonn, Germany	Networking events and transversal activities will foster		
	→ AGEXPORT, GT	synergies and exchange.		
Project	<ul> <li>→ CACB, BR</li> <li>→ CAINCO, BO</li> </ul>	Innovative Partnership Projects     Contribute to the achievement of the		
Partners	<ul> <li>Chamber of Lima, PE</li> </ul>	objectives, results and indicators of the AL-		
	COPARMEX Jalisco, MX	INVEST Verde Programme		
	→ EUROCHAMBRES, BE	<ul> <li>Selected through open call for proposals (CfP)</li> <li>Projects submitted by LA and EU business</li> </ul>		
		organisations and institutions		
مول المتحرية الماء	and the second and	<ul> <li>Duration between 20 and 30 months</li> <li>EU contribution between 250.000 and 300.000</li> </ul>		
	Constant of the second second	EUR (maximum 80 % of the total budget)		
い、「大学		• Launch of 1 <sup>st</sup> CfP: 28 <sup>th</sup> of March 2022		
·		<ul> <li>Deadline for submission of proposals: 27<sup>th</sup> of June 2022</li> </ul>		
Levie to	Contraction of the second	<ul> <li>Guidelines, application forms and relevant</li> </ul>		
and they	and the second sec	information can be downloaded at		
	· · · · · · · · · · · · · · · · · · ·	www.alinvest-verde.eu		









CACBS cainco

### SCHOLARSHIPS

### FUNDING

### ANNOUNCEMENTS

### EU PUBLIC CALLS

#### Capes-Humboldt Research Fellowship

Attention, researchers from Brazil! The Capes-Humboldt Research Fellowship supports postdoctoral researchers and experienced researchers with their research in Germany.

2013. the Brazilian research funding In organization Capes (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) and the Alexander von Humboldt Foundation launched the Capes-Humboldt Research Fellowship Programme. As a fellow, you will benefit from individual support from the Humboldt Foundation and their diverse sponsorship portfolio.

#### What the program offer:

The Capes-Humboldt Research Fellowship allows you to conduct your own research at various stages of your career in collaboration with a host at a German research institution of your choice. Host institutes will generally receive a subsidy towards research costs.

#### Postdocs

Benefit from research sponsorship in Germany at the beginning of your academic career. The Capes-Humboldt Research Fellowship for Brazilian postdoctoral researchers enables you to conduct research in Germany. The monthly fellowship amount is €2,600. Fellowships may last from 6 to 24 months.

#### **Experienced researchers**

You can still apply for research sponsorship in Germany even if you are already well advanced in your academic career. The Capes-Humboldt Research Fellowship for experienced Brazilian researchers enables you to conduct research in Germany. The fellowship amount is €3,100. Fellowships may last from 6 to 18 months and can be divided into up to three stays within three years.

#### Deadlines:

The application deadline shall be 23:59 Brasilia time on the last working day in May or November respectively of the year preceding the planned research stay.

#### How to apply:

If you would like to apply for the Capes-Humboldt Research Fellowship, please submit the necessary documents online only to both the Humboldt Foundation and Capes.

You can find the <u>Capes</u> application documents and further information on the application process on the Capes website.

If you have any doubts or questions, please contact us (<u>info@avh.de</u>) before submitting your application. We are happy to help.

Further information: <u>Capes-Humboldt Research</u> <u>Fellowship - Alexander von Humboldt-Stiftung</u> (humboldt-foundation.de)

### SCHOLARSHIPS

### FUNDING

### ANNOUNCEMENTS

### EU PUBLIC CALLS

## European Research Council – International Arrangement Funding

International Arrangement funding is available via national funding agencies. These can be national funding bodies or science ministries.

You can be of any age and work in any discipline as long as you are an early-career scientists supported by non-European funding agencies.

Conditions vary according to funding agency's requirements and the positions available in ERC research teams.

Currently the following Implementing Arrangements are in place for LAC countries:

#### Argentina

Signed in March 2015 with the Ministry of Science, Technology and Productive Innovation Read more: agreement <u>ES | EN</u>, <u>press highlight</u> For the interested CONICET-funded scientists, see more <u>here</u>

#### Brazil

Signed in October 2016 with the Brazilian National Council of the State funding agencies (CONFAP)

Read more: agreement EN, press highlight, leaflet

#### Mexico

Signed in November 2015 with the Mexican National Council of Science and Technology (Conacyt)

Read more: agreement **ES EN**, **press highlight** 

#### How to apply:

Positions in ERC-funded projects are available following ERC <u>calls for Principal Investigators</u> (PIs) to express an interest in hosting early-career scientists supported by non-European funding agencies. The ERC then sends each funding agency a listing of interested PIs or teams, with a description of their projects.

- Find out whether you are eligible for funding under one of the International Arrangements.
- Apply directly to the relevant funding agency.
- If you are accepted, it will tell you which opportunities are available.
- You can then **contact the PI offering a position** to express an interest in working in the research team.
- When you and the PI have agreed on the details, the Host Institution will send a 'letter of intent' or 'support letter' on behalf of the PI to your funding agency to apply for funding
- Your funding agency can then fund you to work on the project.

Each funding agency follows its own criteria and procedure for selecting scientists for funding under their Implementing Arrangement. The **ERC** does not intervene in this selection.

Calls normally take place in October each year. Main grants (Starting Grants, Consolidator Grants and Advanced Grants) and Synergy Grants that have at least 18 months until the end of the project are eligible.

Further information: Additional opportunities | ERC: European Research Council (europa.eu)

### ENRICH GLOBAL



### ENRICH GLOBAL TO SUPPORT UKRAINE INNOVATION: THANK YOU ALL FOR YOUR ASSISTANCE & CONTRIBUTIONS!



ENRICH GLOBAL launched an initiative to support Ukraine Innovation, details regarding the initiative can be found <u>here.</u> Robert Sanders is coordinating this important activity.

We would like to thank and acknowledge colleagues within and outside ENRICH GLOBAL who have been a great support to the development of this initiative. We would like to thank all partners who have offered support and additional ideas on how they could support Ukrainian colleagues and those who sent donations or have pledged to send donations.

CIVITTA is running an Erasmus for Young Entrepreneurs programme and could send starting Ukrainian entrepreneurs to a host organisation abroad. If ENRICH GLOBAL or European ENRICH GLOBAL members are interested to be a host organisation, this could be another opportunity. SPI and ANPEI already offered to host Ukrainian colleagues, many thanks to them!

We would also like to give a special thanks to Romain Gregorio, founder of <u>Deuxième Etage</u>, the French design company, who regularly works with G.A.C. for the development of visual identities and who voluntary designed a logo dedicated to ENRICH GLOBAL initiative to support Ukrainian innovation.

We are very proud to have witnessed such solidarity within the ENRICH GLOBAL network and we hope this initiative will lead to the development of other ENRICH GLOBAL activities worldwide!

The Call for donations is running, please do share your donation intentions by email to Robert Sanders and G.A.C. team. The donors – individuals or organisations - will be featured on the website of ENRICH GLOBAL. For more details please contact <u>robert.sanders@ebn.eu</u>.



#### **NEWS FROM THEMATIC GROUPS**

Science Diplomacy: 2nd meeting on April 28th, 2022

The DLR Project Management Agency carried out an interactive brainstorming exercise focusing on the following questions:

- What are concrete needs requiring SD?
- How could the ENRICH network contribute to solving the SD needs?
- Which specific SD activities can the ENRICH network jointly implement?

At the virtual meeting, the participants identified the need for tailor-made training on SD for three different target groups:

- 1. for ENRICH members;
- 2. for partners of the ENRICH Global Network;
- 3. for diplomats.

Regarding 1) and 2) it was agreed to use already existing training opportunities and to propagate them on the ENRICH Global website. (e.g. AAAS Online Course "<u>Science Diplomacy: An Introduction</u>" and S4D4C Online Course "<u>European Science Diplomacy</u>" as well as current supporting initiatives e.g. <u>European Union Science Diplomacy Alliance</u>). With regard to 3), the interest of the COM (EEAS) will be verified and a corresponding targeted concept could be prepared on demand.

The Thematic Group decided that concrete SD pilot actions should be discussed with other ENRICH GLOBAL Thematic Groups (e.g. Young Researchers and Health Innovation). Furthermore, it was deemed important to expand the Thematic Group's scope to include Innovation Diplomacy.

If you are interested to learn more about the ENRICH GLOBAL Thematic Group on SD, please do not hesitate to contact its coordinator, Dr Stephanie Splett-Rudolph (Stephanie.Splett@dlr.de).

#### IDIH sustainability ensure through the ENRICH GLOBAL Health Innovation Thematic Group

The EU-project IDIH project was initiated by some ENRICH GLOBAL members, notably APRE, ATC and G.A.C., with the objective to further enhance international collaboration to advance digital health supporting AHA through innovation. To work towards this goal, IDIH had created the Digital Health Transformation Forum, a long-lasting and expert-driven catalyst to foster collaboration between the EU and five Strategic Partner countries, i.e. Canada, China, Japan, South Korea and the USA, which brought together experts, policymakers, and users from the six regions to jointly develop a roadmap towards enhanced international collaboration in this field, which will be available on the website shortly!

The project also produced guidebooks that provide information on funding opportunities, and numerous other materials and tools, such as podcasts, magazines, a dedicated helpdesk, etc. An overview of the IDIH results can be found here. Now that the project came to an end in April 2022, the IDIH Consortium will ensure the sustainability of its Digital Health Transformation Forum and its experts, as well as the wider community of the project, the Users Consultation Group and the Programme Level Cooperation, through the ENRICH GLOBAL Heath Innovation Thematic Group. The new Forum within this group will further enhance international cooperation, starting from the field of Digital Health for AHA, but also going beyond, embracing R&I on global health challenges at large.



### MAY 4TH, 2022

# INNOVATION TALKS ON DIGITAL TRANSFORMATION & HEALTHCARE

### Digital transformation in elderly care (incl. AAL – Ambient Assisted Living)

RCISD organised on the 4th of May 2022 an online panel discussion on the Challenges of Modern Healthcare after the COVID Pandemic. The event gathered 37 participants, including panelists, and the audience was composed by university/PhD students, representatives of R&D companies, policymakers and clusters. The panelists of the event were:

Paola Amar, Colombia

Alexander Nikolov, Project Manager – platformUptake.eu

Sandra Saiz, EHealth Lead Manager, Innsomnia, Spain

Gisela Garcia, Managing Director, Cluster Saúde de Galicia

Luis Azevedo, Technology Management Specialist, Uruguay

Marcus Figueredo, CEO HiLab, Brazil

Simona Brezar, R&D Project manager, Caretronic, Slovenia

The main findings of the discussions were the following.

International and intersectional cooperation (private and public sectors) allow for a great partnership opportunities between EU and LAC in the health sector. Shared infrastructures could be considered, however there are certain constraints and barriers (GDPR, data sharing) on EU side. For instance, from the LAC point of view, becoming international is a challenge in healthcare and involves many barriers. Soft-landing possibilities could offer new ways to start business and test their solutions in other countries. Latin-America is certainly a very interesting market for European developers and they are eager to hear the needs of this market. The digital technology in healthcare is very dependent on the local conditions – but there is an opportunity to find international solutions, enter a foreign market with a proof of concept.

Knowledge exchange – at events such as this ENRICH panel discussion – with LAC countries essentially contribute to a better understanding of the diverse regional ecosystems. In some countries, for example in Germany, the R&D sector has access to the public health system – unlike in Spain – and this results in a better opportunity to move forward, also in terms of technological developments. New policies are also needed for these type of "international" solutions.



Cooperation with PhD students in research has also been tackled. Students are regarded as an intellectual source, therefore special programmes are offered to them (scholarships, internships, etc.). For organisations, it is a more delicate topic due to intellectual property rights (IPR). However, the problem can be solved with a clear IPR policy.

Certainly there is a technological gap to overcome. Elderly people are generally reluctant to new technology. There is some scepticism as people are concerned with the use of their data. It is also important to make it clear for elderly patients that digital solutions do not substitute human care, but complements it. The technology has to be adapted to real human needs. Thus, technology has to be combined with social science in a holistic approach. Finally, a concrete example given by our keynote speaker, the "smart senior room" where people are invited to try the robots and their solutions. It has been a great success, not just in terms of technology, but also for social interaction between seniors – an added social impact.

Events like the Innovation Talks on Digital Transformation and Healthcare offer a great opportunity for information exchange and knowledge sharing. Providing an overview of the developments implemented in different countries and regions of the world to be held live.



#### Innovation Talks

Challenges of Modern Healthcare after the COVID Pandemic

#### Digital transformation in elderly care (incl. AAL - Ambient Assisted Living)

 Date:
 May 4th 2022 (ONLINE EVENT)

 Time:
 15.00-17.00 CET
 08.00-10.00 COT

 10.00-12.00 BRT
 08.00-10.00 COT

Experts from various innovation sectors – business, R&D, policy, EU initiatives – will share insights, exchange experiences and discuss potential responses to actual challenges in their respective fields. Our keynote speaker Balázs Barta, CEO of <u>Pannon Business Network</u> (Hungary) will be joined by the following panel members:

- Paola Amar, CEO Macondolab, Colombia
- María Alejandra Saleme Daza, Coordinator of International Cooperation, EAFIT University, Colombia
- Alexander Nikolov, Project Manager platformUptake.eu
- Sandra Saiz, EHealth Lead Manager, Innsomnia, Spain
- Gisela Garcia, Managing Director, Cluster Saúde de Galicia
- Luis Azevedo, Technology Management Specialist, Uruguay
- Marcus Figueredo, CEO HiLab, Brazil
- Simona Brezar, R&D Project manager, Caretronic, Slovenia

JOIN HERE!

# ENRICH IN LAC

# **PRIORITY TOPIC:**

### **DIGITAL TRANSFORMATION**

#### By Marcela Flores and Rafael Navarro , ANPEI

### WHICH INNOVATION STRATEGIES TO EMBRACE IN THE DIGITAL AGE AND INNOVABILITY?

Innovation management has never had a "one size fits all" recipe, as it depends on several factors related to the industry, size, resources, competition, and mode of operation of each organization. Despite the apparently uncertain and random nature of the innovation process, it is possible to find a basic pattern of success, creating conditions, within a company, so that the effective resolution of multiple challenges under high rates of uncertainties is facilitated (TIDD et al, 2008).

The pursuit of each company's individual standard of success has to do with customising the various tools, methods, and concepts of innovation management according to each organisation's particular strategy, resources, and competitive patterns, thus developing successful management routines. These patterns reflect a basic set of shared beliefs about the world and how to deal with it and are part of the organisation's culture (TIDD et al, 2008)<sup>1</sup>.

The two great forces driving innovation in this new era are the digital transformation and innovability. The main question now, is: How to do innovation management in practice in this new world that presents itself to us?

In regions such as Brazil, we are experiencing the digital transformation in its fullness, even more

accelerated in the last year due to the worldwide pandemic. In а broad concept. digital transformation can be characterised as a comprehensive process of technological change promoted by the widespread and irreversible diffusion of integrated and disruptive digital technologies that impacts the entire spectrum of economic and social activity: from education to health, from services to industry, from energy to transportation, from the arts to science, human relations, politics, and government.

In practice, this technological change comes about through the organic combination of important information and communication technologies, the famous ICTs: the Internet of Things, cloud computing, big data analytics, and artificial intelligence (STURGEON, 2019).

The application of the digital transformation in companies' business models has profound implications in the way one creates, delivers, and captures value (VERHEOF et al, 2021; SCHALLMO et al, 2021), directly impacting strategic innovation management models. In this context, digital transformation is a way to renew the current companies' business through harnessing the full potential of information technology, in the digitalization of products, processes, relationships within the supply chain or other channels that add new benefits and services to customers and invigorate the value proposition (SCHALLMO et al, 2021).

However, success in renewing the current model opens new avenues for the incumbent companies to design entirely new and distinctive business models, exploiting, for example, opportunities for new services typical of the digital economy (SCHALLMO et al 2021; VERHOEF et al 2021).

Thus, a huge new range of opportunities features in the development strategy of new products, services, processes and business models, as well as in the technological strategy of companies, directly impacting the organisations' competitive strategy as a whole.

Customer expectations and behaviour were profoundly impacted by new business models emerged with the digital transformation, which pressured traditional companies and, as a result, the disruption of several markets.

Well-known cases such as Alibaba and Amazon, which led retail giants to bankruptcy and opened competition with other unexpected markets, such as banking and shipping, are clear examples of disruptive changes in traditional markets. In addition, we can mention the substantial reconfiguration in the music industry brought by Spotify, in the cable and movies industry by Netflix, and in the hotel industry by Airbnb, as further examples of the reach of the new business models generated by these digital platforms (VERHEOF et al, 2021).

A recent Brazilian case worthy mentioning is the Fleury group case, that developed the **Saúde iD** platform, a marketplace of diversified health services, which will integrate patients, physicians, clinical analysis and diagnostic laboratories, ambulatory and day clinic services, telemedicine, health insurance, and others. The platform consists of integrated environment, where the patient has access via the application to schedule remote consultations, check test results and manage chronic diseases. **Saúde iD** was created within the Fleury Group as a result of its innovative efforts in recent years, especially considering the digital transformation.

The Fleury Group developed **Saúde iD** internally, but its launch was a spin-off of a new company, in which Fleury Group is a partner and shareholder.

This is an important result, especially considering the perspective that digital transformation is not only about the digitalization of the current business model, but also the creation of new digital businesses. Therefore, this is a result that reflects Grupo Fleury's idea of becoming an ambidextrous company (FLEURY GROUP, 2019; SCHALLMO et al, 2021).

Also as an example from the Brazilian industry, Natura&Co developed and integrated a set of digital and mobile solutions that establish a very comprehensive network linking clients with the vendors, internal sales managers and the management network's system, called CNcommerce. A digital sales space, which connects, not only specific to the customer, but also connects the customers with the Natura vendors. The latter have access to a "SuperApp", which connects with the (internal) sales managers who direct assist with development and learning activities, such as conducting training sessions, payment negotiation, among others. Final preferences data, customers' as well as. consumption profile, among others, are part of Natura&Co's CRM system and used as sales information for the vendors.

The company has partnered with Brazilian startups to create a system of machine learning to optimise the data analysis. It also seeks to improve the effectiveness of each vendor, thus improving not only the company's results but also the life of the sales consultants, generating new benefits to key partners.

Currently, the company has more than one million active individual e-commerces (per vendor/sales consultant). Natura's product development time-to-market went from more than six months to weekly deliveries, and with the possibility to change the development direction almost instantaneously (SCHALLMO et al., 2007). Talking about innovability, which is the concept that comes from the association of the words innovation and sustainability, we expand the role of business in reducing economic and social inequalities, under the aspects of ESG Environmental, Social and Governance contributing to a more environmentally balanced and socially just planet.

Thus, we enter the universe of innovation in the development of products with the economy concept, which must be generated considering its sustainability and recyclability process. The circular economy is presented as a system that takes advantage of resources, betting on the reuse of elements that, given their properties, cannot return to the environment, thus involving an innovative are reused, in which products process remanufactured, and recycled (ARROYABE et al, 2021). It is an economic model of closed-loop production and consumer systems, where waste is defined as a valuable resource (BOCKEN et al, 2017). The more efficient use and reuse of resources resulting in an overall decrease in material input, energy, emissions, and waste dispensation can reduce negative impacts on the environment, without compromising growth and prosperity and achieving a better balance between economy, environment, and society (KIEFER et al, 2019; GEISSDOERFER et al, 2018; MANNINEN et al, 2018). The implementation of the principles of the circular economy generally requires new visions and strategies and a fundamental redesign of product concepts, service offerings, and channels for effective lasting solutions (LEWANDOWSKI, 2016).

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As an example of innovativeness, 3M recently committed to achieving carbon neutrality, reducing water neutrality, water use and improving water quality, as well as reducing waste and the use of petroleum-based plastics, and will invest 1 billion US dollars to do so over the next 20 years (3M 2021). In the case of Brazilian companies, we can mention Suzano that, following the concept of ambidexterity, balances the present and the construction of the future, stating in its strategy, bold goals established for 2030, such as substituting 10 million tons of plastic and oil derivatives for products of renewable origin, removing 40 million tons of carbon from the atmosphere and mitigating the problem of income distribution, removing 200,000 people from the poverty line in areas where it can influence (SUZANO, 2021). All these innovability initiatives are strongly supported by new business models of innovation, enhanced by digital transformation.

From where we are, there is no turning back.

Is your organisation ready?

Welcome to the era of digital transformation and innovability.

Enjoy the journey!

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# ENRICH IN LAC KNOWLEDGE PILL: RENEWABLE ENERGY

# THOMAS NOWAK

#### Debunking myths about heat pumps

A new ENRICH in LAC Knowledge Pill video, dealing with the topic of renewable energy is now available on our YouTube channel.

In this video, Thomas Nowak, Secretary General of EHPA (European Heat Pump Association/Brussels) speaks about new technology solutions of heat pumps. The way heat pumps work is that they use electricity to transfer heat from a cool space to a warm space, making the cool space cooler and the warm space warmer. Because they transfer heat rather than generate it, heat pumps can efficiently provide comfortable temperatures for a building. This Knowledge Pill offers information on the usage of heat pumps to support energy transition in the built environment. Thomas focuses on how heap pumps work positively in building renovation, system integration and energy transition. He debunks some myths surrounding heat pumps such as:

- Are heat pumps still using renewable energy?
- Can you put a heat pump into every building?
- How to use heat as a service?

To learn more about renewable energy and heat pumps, check out the entire video <u>here</u>.

# Renewable energy Debunking myths about heat pumps

#### **COUNTRY PROFILE**

# **EU & LAC REGION: NETHERLANDS**

With the most advanced logistics and distribution network in Europe, the Netherlands has an innovative business community hungry for new, high-quality products, representing a reliable economic environment for innovation cooperation with LAC.

#### By Luize Ferreira de Albuquerque, Fraunhofer IPK

The Netherlands is a geographically small, densely populated (17 million people) country occupying a highly strategic commercial location. The country is a key centre within the global business network, with advanced infrastructure geared towards the transportation of goods, people, and data. The country has capitalized on its location and advanced economy to become one of the top trading nations in the world. Its core distribution points include Rotterdam, Europe's largest port, and *Amsterdam Schiphol Airport*, the fourth largest airport in Europe for cargo (International Trade Administration).

The country was a founding member of NATO and the EEC (now the EU) and participated in the introduction of the euro in 1999. In October 2010, the former Netherlands Antilles was dissolved and the islands of Bonaire, Sint Eustatius, and Saba became special municipalities in the Netherlands administrative structure. The larger islands of Sint Maarten and Curacao joined the Netherlands and Aruba as constituent countries forming the Kingdom of the Netherlands. These overseas territories are not part of the EU, but they continue to link the Netherlands and the Caribbean region (<u>The World FactBook</u>).

The Netherlands ranks as the seventeenth largest economy in the world and the fifth largest in the

*European Monetary Union* (the Eurozone), with a gross domestic product (GDP) of \$912 billion in 2020. The country is consistently recognized as having one of the best business climates. The 2019 World Economic Forum Global Competitiveness Index ranked the Netherlands as fourth among the world's most competitive economies – Forbes ranked the Netherlands fourth on their 2019 Best Countries for Business list (International Trade Administration).

In the business landscape, the Netherlands is present in the LAC region through the *Holland House*, Dutch Commerce Chambers part of the international *NL Business HUB network*. They support Dutch entrepreneurs in their ambitions to internationalise to Latin America through their offices in Brazil, Argentina, Panama and Mexico (NL.IN Business).

The Netherlands ranks 4th out of 27 EU Member States in the 2021 edition of the *Digital Economy and Society Index* (DESI). Therefore, remains one of the top performers across Europe, with a widespread uptake of digital technologies among enterprises and use of online services, as well as high levels of basic and advanced digital skills. The Dutch Digitalisation strategy remains a solid political and strategic foundation for the country's digital ambitions: (1) 'Be in the vanguard and grasp opportunities'; (2) 'Everyone joins in and we work together'; and (3) 'Trust in the digital future'(<u>International Trade Administration</u>).

The most important sectors of the Netherlands' economy in 2020 were public administration, defence, education, human health and social work activities (21.7%), wholesale and retail trade, transport, accommodation and food services (20.4%) and Professional, scientific and technical activities; administrative and support service activities (14.7%). Intra-EU trade accounts for 66% of the Netherlands' exports (Germany 23%, Belgium 10% and France 9%), while outside the EU 8% go to the United States and 4% to the United Kingdom. In terms of imports, 42% come from EU Member States (Germany 15% and Belgium 8%), while outside the EU 17% come from China and 8% from the United States (European Union: Country Profile Netherlands).

#### **Economic Forecast**

The Netherlands is the ideal European starting point for new-to-export companies looking for their first European distributor. With the most advanced logistics and distribution network in Europe, the Netherlands has an innovative business community hungry for new, high-quality products (Inter American Development Bank). Thus, the Netherlands represents a stable and reliable economic environment for innovation cooperation with Latin America.

A distinctive feature of the Dutch economy is its historical and current openness to international trade and investment. The country's volume of imports and exports of goods and services with respect to its GDP is among the highest of the OECD countries. Favoured by its geographic position, the Netherlands has acted as а gateway to continental Europe and has become a major logistics hub, specializi ng in transport and adapting to this area emerging technologies such information as technologies (ICT)(Inter communication and American Development Bank).

The *Global Innovation Index 2021* ranked the Netherlands 6th most innovative economy in the world. Although the Dutch economy shrank by 3.7 percent in 2020 as a result of the ongoing global health crisis, the decrease was lower than in other

countries in the region. The *CBP Netherlands Bureau for Economic Policy Analysis*' 2021 macroeconomic outlook predicted GDP growth of 3.5 percent in 2022 reaching pre-pandemic levels in the. The CBP has stressed that although the Dutch economy is recovering quickly, COVID-19 will continue to affect certain sectors of the Dutch economy in the short-term and perhaps even permanently (International Trade Administration).

The centre-right *People's Party for Freedom and Democracy* took office again last December, enabling its leader, Mark Rutte, to serve a fourth term as prime minister. Plans to focus the policy agenda on green initiatives, reforms to the tax and welfare system, and measures to address surging house prices have been interrupted by Russia's invasion of Ukraine. Attention will turn to shielding the economy from the potential impact, particularly higher energy prices. The government has supported a tightening of sanctions on Russia and EU measures to deal with a surge in refugees (<u>The</u> <u>Economist</u>).

A modern, industrialized nation, the Netherlands is also a large exporter of agricultural products. In terms of bilateral cooperation with Latin America there is a promising opportunity between the regions of Michoacan, Mexico, and Northern Netherlands. This cooperation is defined by a common interest in the agriculture and food industry, and in a wide range of renewable energies, specially geothermic, hydraulic, biomass and solar energy (EU LAC Foundation).

#### Science Technology and Innovation (STI) Landscape in the Netherlands

According to the OECD, the main agencies involved in STI policy design and implementation are the following (<u>Inter-American Development Bank</u>):

- Ministry of Economic Affairs, which governs innovation policy and is the central access point for government information and services in this area;
- Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland), a part of the Ministry of Economic Affairs, which encourages entrepreneurs in, among others, innovative and international business and serves as a central contact point for public and private actors on issues ranging from information to regulatory matters;

 Entities responsible for implementing and managing policies as research and innovation funding agencies:

<u>Dutch Research Council</u> (NWO), an independent directive body under the responsibility of the *Ministry of Education, Culture and Science,* is the main research funding agency for the universities and national research institutes.

<u>Royal Dutch Academy of Arts and Sciences</u> (KNAW), an advisory body to the Dutch Government, promotes innovation and knowledge valorisation within a group of outstanding national research institutes, and encourages them to cooperate with university research groups.

Dutch Bureau for Economic Policy Analysis (CPB), a part of the Ministry of Economic Affairs, does scientific research aimed at contributing to the economic decision - making process of politicians and policymakers.

About 25% of the research in the Netherlands takes place at universities, about 15% at research institutes and most - about 60% - within commercial enterprises. There are 14 research universities in the Netherlands. Universities have three tasks: providing education, conducting fundamental and applied research and stimulating knowledge transfer (EURAXESS Netherlands).

When it comes to applied research, the Netherlands has five institutes for applied research. The largest one is TNO, the Netherlands Organisation for Applied Scientific Research. Key TNO research fields are: quality of life, the defence and security of society, advanced products, processes and systems, sustainable use of space and the environment, and ICT and services. An important actor in the field is the TO2 Open Innovation Network. It is a flexible network structure aimed at cooperation in undertaking cross sectoral research projects (EURAXESS Netherlands).

Companies carry out the majority of research in the Netherlands. The research is conducted mainly in larger companies and within the industry sector. The five multinationals: *Philips, Shell, AkzoNobel, ASML and DSM* carry out a large part of the research, and they have recently been joined by *Canon* and *ALE International* (EURAXESS)

#### <u>Netherlands</u>).

### National Science Technology and Innovation priorities

The Dutch government believes that innovative businesses can help develop solutions to major social issues like global food security, ageing populations or life-threatening diseases. By developing innovative products, one can also gain access to new markets, boosting economic growth and creating jobs. That is why the government provides financial support for <u>innovative enterprise</u> through tax benefits, innovation credit and grants. There are also a number of EU grant schemes for innovation.

The Netherlands' innovative top sectors are among the world's best and the government wants to further strengthen their international position. Government, private sector, universities and research centres are working together in the *Top Sector Alliance for Knowledge and Innovation* (TKI) to get innovative products or services onto the market. The top sectors in the Netherlands are the following (Enterprise and Innovation|Dutch Government):

- Horticulture and propagation materials
- Agri-food
- Water
- Life sciences and health
- Chemicals
- High tech
- Energy
- Logistics
- Creative industries.

The *Ministry of Education, Culture and Science* assists the government in encouraging innovation in top sectors. Below are some of the supporting tools for innovation:

#### National Science Agenda

The Ministry of Economic Affairs and Climate Policy's National Science Agenda identifies focus themes for scientific research in the years ahead. It looks at questions like: What areas hold promise for the Dutch science sector? How can science help find solutions to social issues and create economic opportunities for innovation? In its new science policy, the



ministry is investing up to  $\notin$ 250 million in science and applied research as well as  $\notin$ 100 million in scientific infrastructure (<u>Curious and committed –</u> <u>The value of science</u>).

#### Innovation Attaché Network

Innovation attachés are based at Dutch embassies and consulates. They assist Dutch companies doing business abroad. For instance, by introducing them to potential partners, like research institutions or other companies. *Netherlands Innovation Network* (NIN) Brazil is located in Sao Paulo and the two countries have been conducting joint research and innovation activities in many areas of societal relevance for more than 10 years.

#### Innovation Expo

Innovation Expo is an event that takes place every two years to solve major social challenges in the fields of the circular economy, energy, water, mobility, the built-up environment, health, food and technologies. The ambition is to take innovations further, realising breakthroughs, and thus contributing to the social challenges in the Netherlands and in the world. Tax credit scheme for research and development (R&D)

The WBSO (R&D tax credit) of the Ministry of Economic Affairs and Climate Policy is intended to provide entrepreneurs an incentive to invest in research.

#### Previous contribution in Horizon 2020

In total 11.040 Dutch organisations were involved in *Horizon 2020* projects with a total of 5,38B Euro funding received by the project's participants. Structured by thematic priority, projects were conducted mainly within the frame of <u>Horizon 2020</u> Dashboards (state of April 2022):

- Marie Sklodowska-Curie Actions (2.120 participations)
- Health, demographic change and wellbeing (1.220 participations)
- Information and Communication on Technologies (1.110 participations)

- Smart, green and integrated transport (914 participations)
- Secure, clean and efficient energy (864 participations)
- European Research Council (850 participation)
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research (821 participations)
- Climate action, environment, resource efficiency and raw materials (619 participations)
- Research Infrastructure (544 participations)
- Future and Emerging Technologies (290 participations)
- Secure societies protecting freedom and security of Europe and its citizens (232 participations)
- Advanced manufacturing and processing (225 participations)
- Europe in a changing world-inclusive, innovative and reflective societies (211 participations)
- Innovation in SMEs (205 participations)
- Advanced materials (155 participations)
- Space (127 participations)
- Cross-theme (92 participations)
- Nanotechnologies (82 participations)
- Biotechnology (76 participations)
- Euratom (60 participations)
- Twinning of research institutions (48 participations)
- · Nanotechnologies, Advanced Materials and

Production (43 participations)

- Develop the governance for the advancement of responsible research and innovation (42 participations)
- Integrate society in science and innovation (32 participations)
- Others

#### Funding opportunities in Horizon Europe

Horizon Europe is the biggest EU research and innovation programme ever with €95.5 billion of funding available over 7 years (2021 to 2027). It is open to the world. This means that participants from all over the world can participate in most calls. In many cases, the EU will fund at least partly the participation of the international partners. As a member state of the EU, participants from the Netherlands are automatically eligible for EU funding, unless specific limitations or conditions are laid down in the work programme and/or call/topic text. Most LAC countries are also eligible for EU funding as per the Horizon Europe participation rules. The <u>list of eligible countries</u> can be consulted in the Funding and Tenders Portal.

