



Scoping Paper

Innovation cooperation between the EU & LAC

Challenges & opportunities

As of: 13/11/2019





Reasons for the EU-LAC Innovation Cooperation Conference

The conference is organised in the context of long-standing cooperation between the EU and the LAC region in the area of research and innovation. The recently published EU-LAC communication¹ i.a. calls for collaboration on the transition towards a green and circular economy and advancing the digital economy, boosting innovation through Association, Trade and Economic Partnership Agreements; through the European research and innovation framework programmes and by safeguarding Intellectual Property Rights (IPR).

The conference provides the opportunity to:

- **Exchange knowledge and ideas** on how to create the right framework conditions.
- **Present the innovation dimension** of Horizon 2020 and Horizon Europe.
- **Review the opportunities** offered by Horizon 2020 and in future by Horizon Europe and discuss how EU-LAC innovation cooperation could be embedded in both programmes.
- **Strengthen EU-LAC relations** with concrete measures supporting the exchange of knowledge, technologies and good practices between representatives from both regions.

The EU-CELAC innovation conference is aimed at enhancing the innovation dimension of the current bi-regional dialogue on research and innovation as a first step in developing longer term cooperation activities, including the following opportunities:

- The LAC region represents a sizeable market for European innovations in products and services, and vice versa. For individual LAC countries, the EU ranges from being the 1st to the 3rd most important trading partner. Furthermore, the EU is already the primary foreign direct investor in the region.
- The LAC region boasts a largely well-educated population that European researchers and innovators could tap into.
- R&I cooperation between the EU and LAC partners is indispensable when it comes to addressing many of the societal challenges defined by Horizon 2020 and the UN Sustainable Development Goals (SDGs).
- Developing the innovation dimension of EU-LAC cooperation has the potential to underpin high-level political dialogue with tangible action in areas of mutual strategic interest.

In order to address these opportunities, the conference shall:

1. Promote the exchange of knowledge and ideas among key innovation stakeholders from both regions on how innovation is best supported. This should lead to conclusions about future actions.
2. Define the basis for a bilateral innovation cooperation agenda and action plan setting out concrete proposals for improving framework conditions for innovation in both regions and joint projects in the area of marketable innovation and technology entrepreneurship.

The conference attendees include decision-makers in innovation policy (national and regional-level ministries), innovation agencies and funding bodies. Representatives from the networking organisations and other existing cooperation structures will also share their experience in fostering EU-LAC innovation cooperation.



Key dimensions of EU-LAC innovation collaboration

EU-LAC cooperation within the JIRI framework revolves around the three pillars of Mobility of Researchers; Research Infrastructure; and Global Challenges. Figure 1 (next page) provides a systematic overview of thematic focal areas, challenges and barriers faced.

The intra-European cooperation has played a substantial role in supporting countries in overcoming these challenges. Enhancing cooperation between the EU and LAC can lead the way to further developing the innovation systems of both regions, mutually learning and grasping the many opportunities that both regions have to offer to each other.

Research activities in LAC often lack specific market-oriented targets. Even though many LAC actors acknowledge the importance of innovation there is less applied research. The underlying assumption is that only basic science needs to be strengthened, and practical applications will emerge on their own. However, it is precisely this intermediate part where support is missing in the LAC region.²

The number of applications and patent grants in LAC is comparatively low. Contrary to global trends, the LAC region is not increasing its patenting productivity at the same pace as its scientific productivity. This demonstrates that firms lack a business strategy of international competitiveness based on technological innovation.³

A major obstacle to innovation in the LAC region concerns the **level of R&D investment**, as many innovators face challenges related to a lack of **access to finance**.

Evidence shows that LAC companies mostly rely on purchasing and incorporating existing technologies **rather than promoting the domestic development of new technologies**. In addition, there is a **lack of capability to carry out technology transfer**, in the sense that universities are seen as a place for human resources training, rather than places for the generation of innovations and knowledge transfer.

Finally, the **coordination between the different stakeholders in the Regional Innovation Systems is weak in the LAC region**.

Challenges hindering innovation cooperation between the EU and LAC

Innovation systems are at different stages of development in each LAC country.

There is a **lack of market integration** (at least outside MERCOSUR). Businesses are confined to domestic markets, which are small.

There is a **lack of intraregional cooperation**. A policy framework covering R&I in the LAC region is not in place and is not expected any time soon.

There are **barriers to mobility of entrepreneurs and innovators**. The mobility of entrepreneurs could be improved by tackling the issue of visas. There is no coherent or harmonised regime in Europe for LAC nationals to come to the EU and innovate.

In the LAC region, there is a **lack of continuity and predictability of the regulatory and institutional framework** in which innovators can operate. New governments often change institutions comprehensively, affecting the long-term sustainability of cooperation frameworks that are linked to national strategies. Corresponding to this is the **lack of reliability and comparability of innovation indicators** in many LAC countries.



Figure 1: EU-LAC innovation collaboration key aspects

EU-LAC Innovation cooperation - Key aspects

Sectors/areas of common interest

Environment & Sustainability	ICT and digital economy	Advanced technologies & services
<ul style="list-style-type: none"> • Climate change • Sustainable urbanisation • Sustainable agriculture • Clean urban transport • Bioeconomy • Biodiversity • Energy 	<ul style="list-style-type: none"> • Open data: open access technologies • Interoperability of ICT systems 	<ul style="list-style-type: none"> • Key Enabling Technologies (KETs) and new technologies (robotics, 3D printing, nanotechnologies...) • Knowledge intensive business services (KIBS) - services and business operations heavily reliant on professional knowledge

Challenges

Pertaining to innovation in LAC



- LAC companies mostly rely on purchasing and incorporating existing technologies from abroad rather than developing their own innovative solutions
- Lack of capability to carry out technology transfer
- Research activities lack of specific market-oriented targets
- Small number of applications and patent grants
- Lack of coordination between stakeholders of the Regional Innovation Systems (RIS)
- Innovation deficit in many LAC countries (e.g. low investments in R&I, low number of researchers, unbalanced research activities among LAC countries)
- Difficulties in access to risk finance for entrepreneurs and innovators

Avenues

for enhancing collaboration



- Opportunity to match existing technologies with applications
- Support business representatives from both regions for developing joint projects in areas of common interest with market potential
- Coaching innovators on how to take their ideas to the market
- Increase links between universities/ research centres and industry
- Foster joint collaboration in specific research activities of common interest (win-win) via cooperation frameworks/programmes
- Support regional coordination mechanisms (e.g. CT-CAP)
- Existence of many researchers and entrepreneurs willing to explore options within the region once mobility has been eased.
- Increase capacity building
- Exchange of lessons learned (policy-making)
- Expanding EIB/EIF activities in LAC to innovation support in cooperation with the Inter-American Development Bank

Factors that hinder innovation cooperation between the EU and LAC

- Innovation systems are at different stages of development in each LAC country
- Lack of market integration: lack of harmonisation of IPR and firm related regulations
- Lack of intraregional cooperation
- Barriers to inter-regional mobility for entrepreneurs and innovators
- Lack of continuity and predictability of the regulatory and institutional frameworks
- Lack of reliability and comparability of innovation indicators

Main opportunities for collaboration

Innovation ecosystems in place	Sizeable market for both regions	Jointly addressing societal challenges and SDGs
Built on the CRA cooperation and beyond to foster innovation cooperation		Strengthen overall EU-LAC cooperation by adding innovation dimension

Source: Technopolis Group



Conclusions

The ICC can pave the way for the next level of EU-LAC R&I cooperation considering that:

- EU-LAC cooperation initiatives tackle the whole spectrum of R&I, from research infrastructure over technology transfer to researcher mobility, IPR, entrepreneurship support and policy coordination.
- Most bi-regional initiatives are driven by existing EU programmes, especially Horizon 2020. Specific agreements exist to stimulate Horizon 2020 participation by individual LAC countries, namely Mexico, and some regions of Brazil.
- Intraregional cooperation in LAC often revolves around existing trade, political, and economic bodies such as MERCOSUR, the Pacific Alliance, or the Development Bank of Latin America.
- A range of bi-regional partnerships exist between the EU and individual LAC countries, mostly enshrined in free trade agreements, often focusing on innovation or technology transfer in the context of (sustainable) development. As the focus of these agreements lies on trade, there is a risk that innovation cooperation-related aspects are not prioritised.
- R&I policy coordination in the LAC region is complicated by overlapping regional structures.
- Local R&I policy has been developed throughout the LAC region, but there is great variance in terms of the level of innovation policy development.
- Some countries - most notably Chile - have initiated their own international innovation programmes, in which EU partners have profited by establishing local subsidiaries or by receiving funding for novel initiatives.

Recommendations

Recommendation 1: Discuss which good practice examples of individual countries on how to build a strong innovation system can be replicated in other countries in both regions.

Recommendation 2: Discuss how existing policy instruments for R&I could be simplified and how LAC participation in Horizon Europe could be boosted by building on good practice examples of Horizon 2020 funded initiatives.

Recommendation 3: Discuss how IPR could be harmonised between both regions.

Recommendation 4: There is an opportunity to build on the existing Common Research Area (CRA) cooperation framework and extend the scope of the activities and priorities to elements that are more directly related to support innovation in firms.

- The pillar 'Mobility of researchers' could be expanded to include entrepreneurs and facilitate access to goods and services from each region.
- The pillar 'Research Infrastructures' could be extended to also cover organisations with close ties to the business world, such as start-up accelerators and incubators.
- EU-LAC R&I cooperation could be enhanced by linking it to trade and investment policy.
- A new pillar could focus on entrepreneurship and marketization, bringing innovation to society through entrepreneurs and taking innovation to the market.



- To unlock more funding for inter-regional innovation cooperation, European Investment Bank activities could work with the Inter-American Development Bank on joint innovation support projects.

Recommendation 5: Looking beyond the CRA, MERCOSUR and other Free Trade Agreements between the EU and LAC countries can provide a framework for enhanced innovation cooperation by tackling issues such as IPR and market access for innovative firms which would facilitate investment in both regions. The discussion should also focus on how market and regulatory fragmentation within the LAC region can be reduced in order to pave the way for more inter-regional cooperation.

Recommendation 6: Identify sectors of mutual interest for smart specialisation such as biotech and medicines, the digital economy, advanced manufacturing and knowledge-intensive services, and discuss how technology transfer and concrete cooperation projects (potentially to be funded under Horizon Europe) between scientists and entrepreneurs from both regions could increase the competitiveness of both regions in such sectors of strategic interest. Discuss also how ‘home-grown’ technology in the LAC region can be promoted through cooperation, e.g. through joint ventures of EU-LAC firms.

Recommendation 7: Link discussions about EU-LAC R&I cooperation to wider policy goals from a geopolitical perspective and to SDG-related topics in sectors of mutual interest such as mitigating climate change, renewable energy transition and sustainable agriculture.

Note

¹ European Commission (2019). JOINT COMMUNICATION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL.

https://eeas.europa.eu/sites/eeas/files/joint_communication_to_the_european_parliament_and_the_council_-_european_union_latin_america_and_the_caribbean_-_joining_forces_for_a_common_future.pdf

² Navarro, J. C., Benavente, J. M., Crespi, G. (2016), The new imperative of innovation – Policy perspectives for Latin America and the Caribbean. Inter-American Development Bank. <https://publications.iadb.org/en/new-imperative-innovation-policy-perspectives-latin-america-and-caribbean>

³ Navarro, J. C., Benavente, J. M., Crespi, G. (2016), The new imperative of innovation – Policy perspectives for Latin America and the Caribbean. Inter-American Development Bank. <https://publications.iadb.org/en/new-imperative-innovation-policy-perspectives-latin-america-and-caribbean>



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