

# SPURRING INNOVATION-LED GROWTH IN LAC THROUGH PUBLIC PROCUREMENT



Taller sobre Innovación en las contrataciones públicas

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# The context is given in LAC countries for the interest in demand side policies to emerge but initial attempts for PPI-PCP remain frail

1. LAC countries' innovation policy has an ongoing and lively debate, which is **welcoming more effective policies**, due to a combination of:
  - Need for economic growth based on added value, higher productivity and innovation (i.e. growth path that is resilient to changes of prices in traditional commodities)
  - Disappointment over the performance of supply side policies in fostering R+D+i (both capabilities and demand) in local companies.
2. Growing consensus in OECD countries about the need to achieve an **appropriate balance between supply and demand side policies**: 75% of EU member states have demand-side policies on their policy agendas

Widespread interest in demand side policies

- Price-based: Demand subsidies, demand tax incentives
- Awareness measures, labels, information campaigns
- Regulation
- Public procurement

But few countries are taking concrete action because barriers are particularly high:

In STI leading countries...



- Regulatory complexity
- Limited ability to manage risk (both in the suppliers' and the buyers' side)
- Potential conflict between policy objectives and a lack of capacity
- Resource constraints in contracting authorities

Which can be aggravated in LAC countries



- Level of deinstitutionalization
- Higher risk of corruption in most LAC countries (regulatory issues and coordination mechanisms between buyer and supplier should be treated even more carefully)
- Lower local capabilities for innovation

# But there are 5 reasons why LAC countries should go for a PPI-PCP policy despite these difficulties

1

## ➤ Allows LAC governments to pursue beneficial objectives and in a more effective manner

- ✓ Effectiveness: Vertical interventions for innovation coincide with the innovation process being non-linear and highly sector-specific
- ✓ Assertiveness: PPI as industrial policy escapes the limitations of traditional R&D blanket policies (horizontal and non-market oriented), allowing the government to pursue the objectives that are most socially desirable. The use of PPI has been correlated with the accomplishment of other social objectives, such as sustainability and social inclusion.

2

## ➤ Allows the pursuit of many other objectives that may seem contradictory

- ✓ Global trend of transparency, accountability and fiscal pressures forces LAC governments to “do better with less”
- ✓ They are also pressured to increase the share of public budgets directed to areas of high social and economic impact such as STI activities.

3

## ➤ Reduces the mismatch between producers of innovative products and end-users and lessens market uncertainty

- ✓ This is in fact the cornerstone of most Latin American countries when it comes to STI policy: in its reviews of STI policy in Latin America the OECD points out that putting the companies at the centre of STI policy is vital and that measures should be taken in order to guarantee private innovation as the number one priority.

4

## ➤ Enables technology diffusion

- ✓ PPI-PCP can help to incorporate processes and products adopted at the national level that had been previously developed abroad and that are identified as a priority for assimilation and adoption in the country.
- ✓ The introduction of innovations in public sector areas immediately generates the diffusion of innovation in future providers of such goods or services.

5

## ➤ Finds echo and support in key stakeholders in LAC countries

- ✓ Emergence of central acquisition agencies, with the possibility of rethinking PP as a tool with different objectives.
- ✓ Consolidation of public-private enterprises keen to implement public policies as long as don't jeopardise profit.
- ✓ Consolidation and emergence of STI-specific regional funds (that have come mainly as a response to the deep STI regional disparities) in many LAC countries pushes forward the need to foster innovation policy design and implementation in local governments (which are interested in visible benefits from STI investment).

## 2. Country cases from Report 2: Chile, Colombia and Brazil



## 2.1. Trends in Public Procurement

The three countries examined in Report 2 have several common features which might represent advantages for future PPI-PCP implementation if approached properly:

- ✓ **Central Purchasing Bodies (CPB):** *Chilecompra* (2003) and *Colombia Compra Eficiente* (2012). These agencies have the mission of improving value-for-money and increasing efficiency in PP. They have a wide variety of tools that include help desks and training programs that could be adapted for PPI-PCP implementation. In **Brazil** there is only a centralized mechanism (**ComprasNet**) which enables potential bidders to search and download tender documents, access online training materials, electronic catalogues, statistics and databases related to past procurement and electronic reverse auctions.
- ✓ **Inclusion of wider societal and economic objectives in PP.** All have made efforts in the inclusion of wider economic and societal objectives in PP: **Chile** leads in SPP, Compliance with human rights, etc. **Colombia and Brazil** have made efforts in SPP and SME respectively. This creates valuable precedents for PPI-PCP.
- ✓ **Special contracting figures for R&D+I in Colombia and Brazil** which allow for several mechanisms needed for PPI-PCP such as risk management and technical dialogue. All have legislation in place for PPP which allow for multi-year projects and require full life cycle analysis.
- ✓ **State-Owned Enterprises (SOEs)** are subject to flexible procedures in procurement, have closer interactions with suppliers so that leading-edge prototypes can be developed through co-learning.
- ✓ **Electronic Procurement is** currently under development: momentum is given to include specific areas/tools for future PPI-PCP implementation and evaluation.

### A note on concerns over corruption:

Although Chile and Brazil have traditionally had relatively good positions in LAC, recently corruption scandals are changing this situation. In Colombia specially powerful oversight agencies embody the country's fight over corruption. This situation can affect PPI-PCP implementation in many ways:

- In **Brazil** and **Colombia** emphasis on anti-corruption and the current institutional settings **hinder the willingness of procurement practitioners to take risks** and exercise procurement for innovation.
- In these two countries **interaction between private provider and public procurer is found to be suspicious** which might deter the successful establishment of communication mechanism for supply and demand matching.
- In all three countries **reducing the number of direct contracts is a key objective** in PP as this contracting figure is usually associated with low on no-competition. However, this figure can be a suitable figure for PPI-PCP.

## 2.2. Background in demand side policies and identification, specification & signalling of needs

Private

### Tax benefits

- All **three countries** have **R&D tax benefits** to foster private demand for researchers, R&D services as well as high tech equipment.
- Colombia and Chile have made recent modification to this program in order to increase SME participation (which has been traditionally low in both cases).

Public

### Incentivizing innovative solutions in PP

- Preferential price margin as high as 25% for innovative solutions in Brazil
- In terms of public demand, the **incorporation of innovation criteria in tenders seems to remain frail** in Chile: 65% of procurers stated\* that no evaluation criteria to favor innovative solutions is taken into account in the evaluation process

## 2 Open innovation

Due to the concern over excessive focus on horizontal with an emphasis on research and which have yet failed to foster local demand for innovation and to channel private investments towards later stages of innovative product development, mechanisms to generate demand-oriented R&D+I have been established in all three countries (in different areas):

- **Innpulsa's open innovation platform** for oil and mining sector
- **Minería de Alta Ley in Chile**, already released an early demand map with matching/required technologies
- **National Knowledge Platform Program** identifying leading-edge areas and debating technological development proposals

## 1 Strategic sectors

Identification of strategic areas and development of tools to foster synergies between academia, entrepreneurs and public sector in such areas have been a common feature of STI and industrial policies in these countries:

- **CORFO's Strategic Programs Initiative** in Chile (which has identified 9 strategic areas)
- **Colombia's *Rutas Competitivas***, a key project of **Programa de Transformación Productiva**
- **Brazil's 'Innovation Enterprise Program'** which systematically identifies strategic areas of national interest or with demand potential and support the development of those areas in a systemic way

However, lack of long term commitment and support has been identified in Colombia and Chile as a weakness that hinders better results in these areas (thus, many examples of changes in priorities can be cited).

## 3 Social Innovation

Concerns in these aspects have wide political support and are increasingly addressed through programs both at the national and at the local level:

- **Colciencias and Antioquia** with programs aiming at solving key problems faced by communities citizens
- **LABGOB** with AULAB and ImpactaSalud also intending to identify innovative solutions to problems and limitations in the government's service provision

Regardless of their relatively small scale these initiatives can be valuable to identify preparedness level of PP to formulate their needs in functional terms and to examine suitability of current contracting figures to acquire the solutions that are developed, among others (as has already happened in Colombia)

\*In a survey conducted by Chilecompra 7

## 2.3. First attempts is PPI-PCP

### CHILE

- ✓ **CPCDC\*** recommends implementing, in the long run, coherent and strategic demand side policies through an “innovation procurement strategy” and a legal framework that fosters regulation and the establishment of standards and norms
- ✓ **PPI-PCP policy is currently under construction under the leadership of MINECO’s** innovation division with support of an inter-ministerial committee and has the participation of Chilecompra
- ✓ **Laboratorio de Gobierno has launched two open innovation pilots** for the government’ services: Impacta Salud y AULAB serve as a basis for establishing capabilities in the identification of challenges at the public level and the selection of best projects based on a specific need. They also open a very valuable space for the government to become a first user of innovative technologies.
- ✓ **Innovation in public procurement** is simultaneously underway with the leadership of **Chilecompra**

### BRAZIL

- ✓ There has been no notable leader for PPI-PCP but rather a **series of initiatives in several sectors**. Each with their own approach on PPI-PCP
- National Champions (two examples):
- **Petrobras** procurement of a leading-edge stationary product unit ‘P-51’ which might have focused too much on local content instead of innovation.
  - **National Institute for Space Research (INPE)** China–Brazil Earth Resources Satellite (CBERS) program. INPE exercised its functions of driving innovation from both supply and demand sides, with a clear need to be addressed, and hence improved significantly in its capabilities of understanding the nature of the innovation process and perform as a lead user. a successful example illustrating how developing countries could work together to catch up with technological frontiers in strategic sectors
- ✓ Most PPI processes that have taken place in Brazil are related to innovation with an incremental nature, i.e. ‘adaptive PPI’ rather than ‘developmental PPI’.

### COLOMBIA

- ✓ **Leadership** of PPI-PCP has been centralized in *Colombia Compra Eficiente (CCE)*.
- ✓ CCE has already **designed a PPI policy** which includes interventions in the areas of long term vision and political commitment, legal frameworks, governance and planning and execution support.
- ✓ The official launching and implementation of this policy has been determined to be subject the lessons drawn from a **series of workshops as a well as a set of pilots** of PPI-PCP whose implementation is still in a very early phase and, given the difficulties they have already encountered it even makes it difficult to be sure that they might make it to further stages.

\*Comisión Presidencial “Ciencia para el desarrollo de Chile”

## 2.3. First attempts is PPI-PCP CCE in Colombia (1/2): Policy



### Conceptual framework and areas of policy instruments designed by CCE:



**01. Planning and Managing** the national PPI program

**02. Financing** PPI processes through instruments that Foster supply and demand

**03. Raising awareness** in private providers and public procurers on the opportunities that PPI offers

**04. Training** public officers and companies' technicians in order to professionalize PPI processes

**05. Catalysing** future PPI processes through preparation and planning activities

**06. Providing legal and technical support**, and providing updated information, to public officer incharge of executing and supervising tenders.

- Official launching and implementation of this policy has been determined to be subject the lessons drawn from a series of workshops as a well as a set of pilots of PPI-PCP
- The pilots' implementation is still in a very early phase and, given the difficulties they have already encountered it even makes it difficult to be sure that they might move to the next one

# First advances in PPI-PCP in Colombia: Pilots



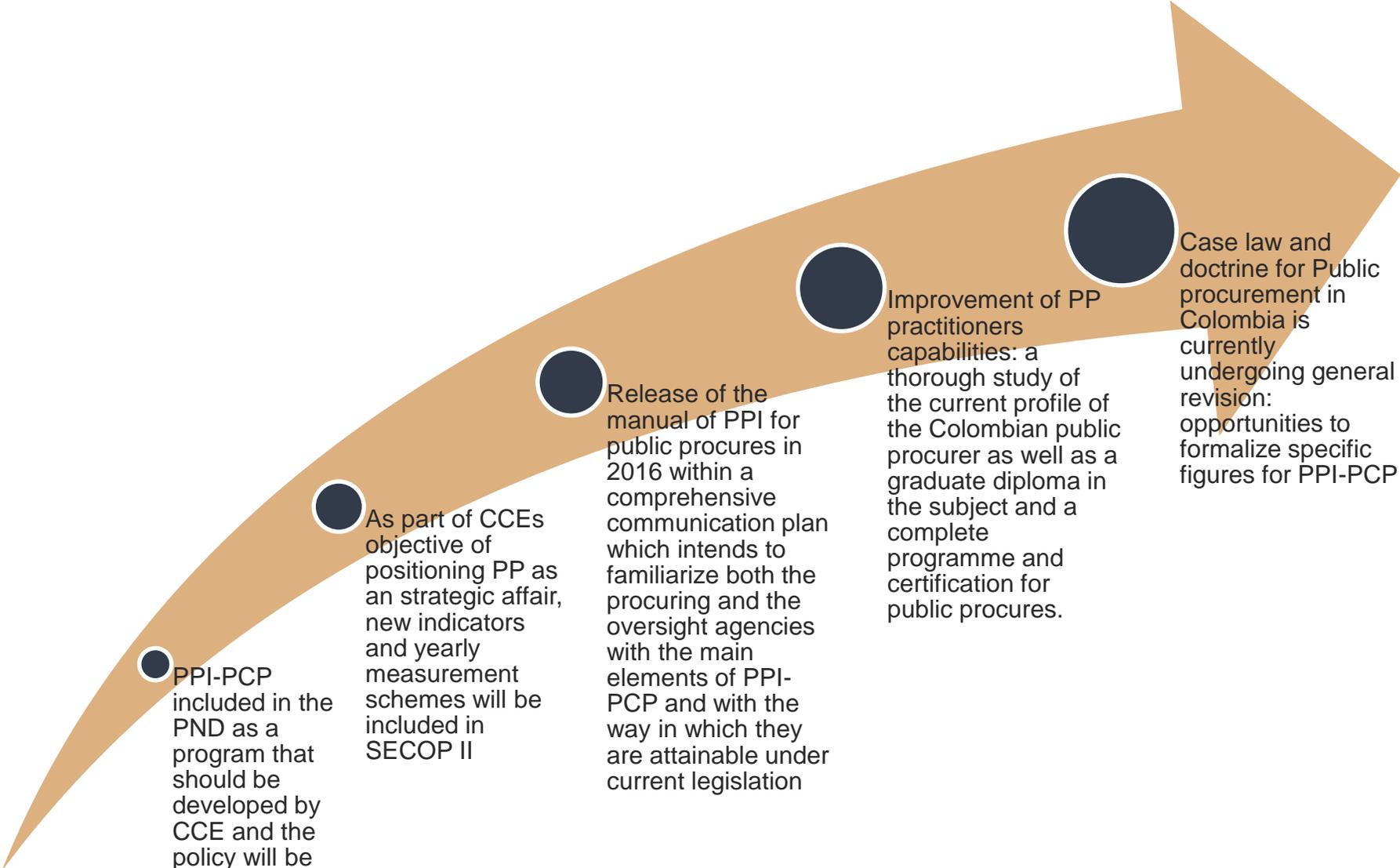
The selection process of these pilots was quite long (averaging 2-3 months) mostly due to insufficient involvement of procurement entities, although in the beginning of the policy design some participated and identified needs that could potentially be solved in their own areas. Finally four pilots were chosen by CCE in a variety of sectors, as listed below:



- DNP: system of public consultation to improve citizens' participation in the processes of regulation issuance.
- MINTIC: laboratorios with simulation scenarios (foresight)
- ANSPE: online educational system for isolated rural areas
- COLCIENCIAS: biosimilar drugs for Colombian health system
- EPM: remote detection in real time the location of the points of the system that were generating water losses

- Change of management
- Change of priorities in the high-executive level
- Budgetary issues
- Lack of an appropriate contracting and selection figure as one of the obstacles to achieve later stages of the process (perception of the execution agencies)

# Expected further developments



PPI-PCP included in the PND as a program that should be developed by CCE and the policy will be one of the milestones

As part of CCEs objective of positioning PP as an strategic affair, new indicators and yearly measurement schemes will be included in SECOP II

Release of the manual of PPI for public procures in 2016 within a comprehensive communication plan which intends to familiarize both the procuring and the oversight agencies with the main elements of PPI-PCP and with the way in which they are attainable under current legislation

Improvement of PP practitioners capabilities: a thorough study of the current profile of the Colombian public procurer as well as a graduate diploma in the subject and a complete programme and certification for public procures.

Case law and doctrine for Public procurement in Colombia is currently undergoing general revision: opportunities to formalize specific figures for PPI-PCP

## Recommendations for LAC countries

Although there is no single road to success, there are some common features in the successful implementation of PPI-PCP...

Where to start? LAC countries have tough decisions to make based on their own specific context.



# Five recommendation areas



# 1. Shared vision of PPI-PCP value and suitability



Report 1



- PPI-PCP implementation is **tough even in countries with exceptional capabilities for STI** and/or highly developed PP systems: sustained political commitment has been a common feature in successful implementation of PPI-PCP
- Inclusion of wider societal objectives in PP (innovation or any other) might require countries to **have gone over earlier stages of compliance with regular PP procedures**

Report 2



- **Concerns over corruption** were critical in limiting advances in PPI-PCP (even with a CPB on board): high corruption indexes can be a full deterrent for PPI-PCP
- Both a **vision of what PPI is and why it is promising is still lacking**: this undermines the capability of leaders to engage key stakeholders

1

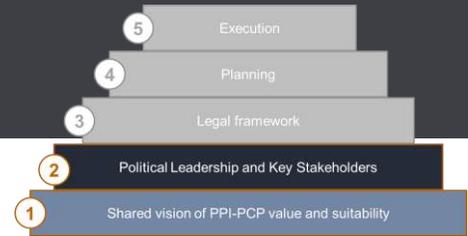
**Why go for it and how suited is the country to do so: Start with a realistic assessment of objectives and capabilities:**

- 1) A shared vision of what PPI-PCP is and the reasons that make it worthwhile.
- 2) A systematic analysis of the country's initial capabilities and the specific roadmap that must be designed ad hoc for each country.

2

**Sustained political commitment and long-term vision.** The institutionalization of PPI-PCP policies require long cycles that **overcome one political term**. PPI-PCP needs continuity in the political commitment which can be **embodied in laws, parliament mandates, government plans or multi-annual commitments** to PPI-PCP investment -regardless of the political leaders that are in power.

## 2. Political Leadership and Key Stakeholders



Report 1



Leader-ship	Pros	Cons
Centralized/ CPB	+ security for procurers + influence over legislative framework Stablished communication channels with providers and procurers + Likelihood of having received a high level mandate to promote PPI-PCP	Horizontal approach - Commitment to fostering innovation or conflicting objectives - purchasing power (except through framework agreements)
Scattered/ Sectorial	Inner motivation given: - need for sectorial-specific incentives + purchasing power and better knowledge promising pilots + projects follow closely the sector's logic: better chance of being rapidly developed	Lack of centralized policy might blur the final objectives of PPI-PCP - resilient in the process as other PP policies might serve their missional purposes better.

Report 2



### Key stakeholders:

- In LAC countries, SOEs pose several advantages such as a wider perception efficiency and value-for-money as well as better understanding and closeness with the productive sector.
- Industry federations and branch organizations can play in overcoming the distrust of the private sector in the public market: strong political standing, representing interests of several companies simultaneously (fair competition), strong players in R&D activities

3

**Build a strong leadership based on inter-institutional alliances:** leadership that overcomes political cycles is more likely to occur if programs and policies around PPI-PCP (rather than just projects and pilots) are shared between different agencies of the government (+ expertise centers and helpdesks for PP)

4

**Build over existing capabilities and institutional strengths:** Choosing the right path and the right partners to begin with can determine the overall success of a PPI-PCP strategy.

- Prescribers: CPBs pose significant advantages (experience in value-for-money in PP and might reduce uncertainty for procurers)
- Potential procurers: evidence points to the SOEs

# 3. Legal framework



Report 1



Although PPI-PCP is not a specific type of contract the truth is that **specially designed legal frameworks have had a positive impact over PPI-PCP uptake**: for instance, EU directives and their consequent transposition have had a considerable impact over uptake of PPI-PCP

Report 2



- There are specific elements within many LAC countries' legal framework that allow for PPI-PCP
- Positive nature of legal framework in LAC countries and concerns over corruption have contributed to the **perception that a PPI-PCP-specific legal framework is required.**
- There is an atmosphere of change in PP legal frameworks in LAC countries but restrictions to introduce a specific PP framework for PPI-PCP might be restricted for the policy leader

5

**Advance with the current legal framework but consider transformation in the long run:**

1. **Exhaust the possibilities offered by the current framework** rather than wait to have a specific one: invest in improving PP practitioners' knowledge of these figures and them more user-friendly.
2. The development of a specific framework (either to explicitly allow for traditional PPI-PCP key elements or to design more effective but increasingly complex partnerships to develop such projects) has been a determinant in the dissemination of PPI-PCP in leading countries. **LAC countries should aim at this in the long run**

# 4. Planning



Report 1



Good international practice points to **choosing sectors** that have strategic value for the country in question as well as high technological content. Also to **identify sectors with public buyers that can be engaged** or are already committed to PPI-CPC and managers capable of leading these first efforts.

Areas	Pros	Cons
Sectors with traditionally higher R&D demand	More likely to foster "new to the world" innovation Better knowledge of sector-specific STI processes and agents	May be ineffective in fostering innovation from a broader spectrum of suppliers in areas that require secrecy (e.g. defense) Legal issues and resistance to technologies that change status quo (for instance in health) More likely to have high costs + only long run impacts
Strategic Sectors	Available instruments for coordination Hub for policy discussion and redesign Other complementary capabilities established or under development	Failed experiences in the past Innovation might not be a central objective: other policies might be more adequate
Social innovation	Wide political validation Has areas that require "new to the world" innovation with both high and low R&D content	Might contravene traditional conceptions of Innovation, posing challenges for definitions and measurement (innovative component)
National Initiaves	Usually the hobbyhorse of the high political level Instruments for coordination already under development Hub for policy discussion and redesign and government agencies compete to gain visibility	Innovation might not be a central objective and thus other policies might have more notoriety Political commitment for the projects might be very dependent on political cycles

Report 2



**Kick starting PPI-PCP:** When deciding to **go for the pilots first**, the obstacles and successes that the executing agencies undergo can provide feedback to the agency that leads the policy design. This **trial and error** has proven to be beneficial in some countries, but there's the **risk of labelling PPI-PCP as a "difficult practice"** by some agents. This might hinder future PPI-PCP initiatives.

6

**Consider the cost of launching pilots before framing the conditions for success:** Piloting different PPI-PCP approaches yet at a very *small* scale could be a good starting point for LAC countries to explore the relative appropriateness and effectiveness of various possibilities. It can thus help establish which routes could be the most suitable given their capabilities.

7

**Sectorial choice – between strategy and opportunism:** sector choice should be shared by key agents of the new PPI-PCP policy and should move between strategy and opportunism.

8

**Do not set the bar too high:** "new to the country" instead of "new to the world" (hard to develop domestically in short run). But always tackling important problems (=political validation)

9

**Develop a suitable evaluation system:** the evaluation system should allow for the monitoring of intermediate steps and milestones (encouraging stakeholders)

# 5. Execution (1/2): networking mechanisms



Report 1



- **Agent articulation instruments and enabling anticipation of demand are essential conditions** for the success of PPI-PCP projects. This is enabled by **tools** that include **training, workshops** -for both entrepreneurs and for procurers-, **official guides** for public procurers, forums for public-private dialogue, technological supply development and **forward commitment procurement**.
- **Innovative companies are discouraged** to pursue the public market when there is **distrust** of the private sector with respect to public procurers as intelligent buyers. Also, when they perceive PP as a very slow and complicated procedure

Report 2



- Flow of **information between procurer and provider is not only insufficient** but structural conditions provide incentives for this to **persist**. Despite the fact that LAC countries have advanced considerably in the digitalization of information for public auctions, information still has a strong “audit-oversight” stigma for procurers.
- **Low capabilities for early demand planning and lack of adequate mechanisms for demand articulation:** fostering of these this capabilities in initial stages might help in generating endogenous interest of procurers in projects that they identify as necessary. It could also help providers in identifying technologies that have potential for the public sector.

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**Strengthen the role of the private sector:**  
The private sector is key in raising government awareness and in proactively delivering proposals for PPI-PCP projects. LAC countries lack trust between the public and private sectors in the procurement area and networks of R&D intensive business. Cluster support tools, innovation networks and public-private partnerships for technology development are recommended. Initially focus these instruments in sectors that are natural providers of the government and include in their agenda the PPI-PCP.

11

**Kick start tools to provide training and to help articulating and anticipating demand:**  
All of these can be promoted by the public sector through incentives. However, it is also advisable to find ways to enable their promotion by private organizations as this contributes to capacity building in key enterprises (those that are potentially interested in PPI-PCP) while inducing interest among potential public procurers.

# 5. Execution (2/2): financing schemes

Report 1



• **Financing schemes for PPI-PCP have emerged** to: encourage providers and procurers to develop new capabilities that are needed, to reduce the risk in which both suppliers and procurers incur and, in general, to induce public demand for R&D and innovation (mandatory expenditure hasn't been successful).

1. Funds for activities that are meant to consolidate the capabilities for PPI-PCP, such as those that provide interaction spaces for public procurers and private providers, specific training for this purpose, etc.
2. Funds for PCP that are executed both for demand induction (in the form of matching grants) and for supplier's support in early stages of the tender
3. Funds also available for PPI both for the demand and the supply side but these cover a lower percentage

Report 2



Some LAC countries have a **lingering perception that the solutions found through this process are "more expensive"** (this is in turn related to the lack of analysis over the whole life cycle of public procurement). **It is even more imperative to develop financial incentives** in the three areas mentioned above but finding available resources to do so is a challenging.

1. **Supporting activities:** CBPs have experience in managing platforms, helpdesks and training.
2. **PCP:** in most LAC there are STI-agencies that have had the traditional mission of funding R&D in early stages. However, this funding has not necessarily been directed towards particular needs of the public sector.
3. **PPI:** programs in place for catalytic PPI and increased availability of funds in the regional level.



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**Bet on "plug and play" financing schemes:** additional financing is necessary at least for early stages of PPI-PCP implementation. Financing sources:

- **Government R&D agencies can contribute to kick-start PCP** and might be more inclined to do so if they get financial incentives from multilateral banks.
- A promising option for fostering PPI is to **redirect sectorial and regional STI funds** towards these projects.

It is also important to go for **financing schemes that are easier to implement** and that are more attractive to the private provider. SBIR/SBRI schemes are unquestionably promising for PCP implementation while Spain's INNODEMANDA-style programs can be a fast-track to support PPI.

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