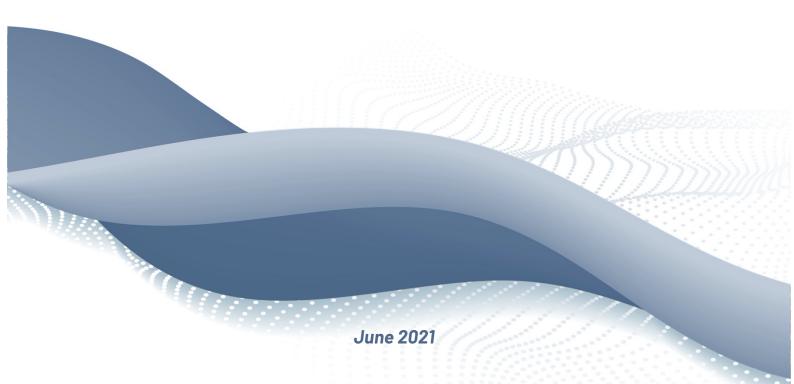




Report

Deep Decarbonization Latin America Project -Argentina -







Analysis of instruments, policies and measures

Activity I AR 2 and Activity I AR 3

Literature review and initial guidelines - Executive Summary



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Executive Summary

This is an executive summary of the report "Análisis de instrumentos, políticas y medidas - Revisión de literatura y lineamientos iniciales (Actividad I AR 2 y Actividad I AR 3)" that presents a compilation and review of instruments and policies and measures options to address existing barriers, identified in previous phases of the project, to low-carbon investment opportunities in Argentina.

The objective of the analysis is to contribute to addressing barriers by reviewing the extensive literature on policies, measures, actions and instruments used internationally to overcome identified barriers or mitigate their effects, examining the body of economic and political theory on the relevant issues through an international comparative analysis.

The analysis was carried out within the framework of Activity I AR 2 and I AR 3 and is closely related to the other activities of the ongoing project, especially Activities I AR 4 and II AR 2.

I. Methodological approach

The review and analysis of possible policy and financial measures and instruments is carried out with the aim of addressing the barriers identified in Activity I AR 1 (*Identification of barriers to NDC implementation*) and Activity III AR 2 (*Stakeholder dialogues*) based on the mitigation measures reviewed (Activity II AR 1).

For this purpose, firstly, a review of the theoretical literature on mitigation instruments in the Energy, Transport and AFOLU sectors was carried out.

Secondly, primary and secondary sources of information on the implementation of climate policy instruments at the global level were analyzed. A systematic review of international literature was conducted and specific documents from countries with a considerable experience in the design of policy instruments aimed at fostering decarbonization were analyzed.

In addition, the "green financial instruments" that are increasingly spreading within the framework of the so-called "sustainable finance" concept were reviewed, as well as the documents that have been published during 2020 at the global level, containing proposals and strategies for promoting a "green recovery" post-COVID-19 pandemic.

Thirdly, the mitigation options that had been previously analyzed and also new ones, not initially included in national plans, were identified within the framework of this Project (*"Review*"

of proposed mitigation actions"- Activity II AR 1) and were clustered into broader categories, in order to analyze the options according to the proposed mitigation objectives, regardless of the specific technology and sector in which they are undertaken, and thus facilitate the development of in-depth techno-economic analyses as the instruments to be proposed.

In line with the conclusions and recommendations previously made regarding the analysis of mitigation options in the Energy and Transport sectors, mitigation options in both sectors were considered together, given the profound interrelationships and interactions that exist between possible decarbonization strategies in both areas.

In the Energy and Transport Sector, individual mitigation options were grouped into the following broader categories:

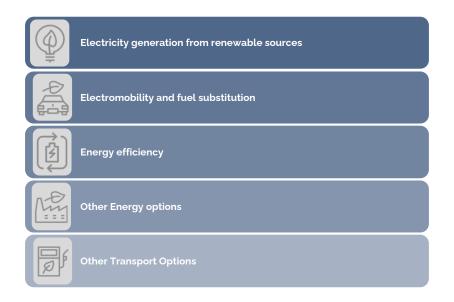


Figure 1: Mitigation options packages – Energy and Transport

With regards to the AFOLU sector, mitigation options were grouped according to the main productive activity into the following broader categories:

Figure 2: Mitigation options packages – AFOLU

Agricultural crops
Livestock systems
Cultivated forests

Finally, based on the previously submitted Report *"Identification of regulatory, financial, economic, and technical barriers to implementation of NDC mitigation actions" - Activity I AR 1*, a summary of the previously analyzed mitigation options, as well as new mitigation options proposed by this study, together with the previously identified barriers was made, to identify types of instruments to be proposed.

With regards to the barriers that had been previously analyzed in Activity I AR 1, they were classified according to the following types:

Types of barriers				
Economic				
Financial	م م م م م			
Technical	0°			
Political and cultural				
Institutional and legal				

Figure 3: Barriers classification

On this basis, and taking into consideration the previously conducted international and national literature review, as well as the multi-stakeholder dialogues held during 2020, an initial identification of policy and financial instruments that would be suitable to overcome the barriers faced by each of mitigation option is carried out.

Policy and financial instruments were classified under the following categories:

⊃ Economic-financial instruments, such as taxes, subsidies, financing instruments.

- ❑ Legal/institutional changes, including modifications of existing regulatory frameworks, new regulatory frameworks, changes in inter-jurisdictional issues.
- Information/Education, that aims to develop dissemination campaigns, specific trainings, changes in university curricula.
- Productive development, containing instruments aimed at promoting the development of domestic industry in specific niches.

II. Main findings

1. Energy and Transport Sector

- The mitigation options previously analyzed are so diverse in scale and complexity that specific analysis need to be conducted for each package of them. The type of solutions will be also different, according to the barriers to overcome. However, despite these particularities, it is possible to draw some general conclusions regarding the type of policy instruments that would be applicable.
- While some instruments may operate independently to address some specific barriers, other barriers require more than one type of instrument in order to be removed or alleviated.
- Given the centrality of the economic-financial barriers previously identified, the availability of concessional financing emerges as a key cross-cutting instrument to enable the implementation of most of the Energy and Transport sector mitigation options.
- The creation of Energy Services Companies (ESCOs) emerges as one of the main instruments to boost energy efficiency, independently of the sector or technology to incentivize. These companies would design, develop and implement energy efficiency improvement projects in users' facilities and users, who, in turn, would pay ESCOs based on the energy savings obtained.
- ⊃ With regards to regulatory changes, they are mitigation option-specific.
- It also emerges as a key action to complement economic, financial and regulatory policy instruments, information and education instruments, with focus on specific technical-professional training, dissemination campaigns to the general population, regulatory agencies and public sector (fundamentally at the provincial level) and industry-tailored programs.
- In parallel, opportunities can be identified for the development of equipment and spare parts national suppliers. This opportunity, however, needs to be further explored.

2. AFOLU Sector

In the AFOLU sector, economic-financial barriers are also central. Therefore, tax incentives and concessional loans are decisive for the successful implementation of the evaluated options.

- There are infrastructure needs related to the transport of agricultural and livestock goods produced in different areas in the country that need to be addressed aligned with the pathway to decarbonization.
- Support for R&D also emerges as a key instrument, along with dissemination and training on the benefits of currently relatively scarcely-known technologies and practices.
- Technicians' and professionals' training together with the inclusion of certain topics in agricultural sciences degree university curricula are also of considerable importance.

The analysis undertaken in this Report serves as a basis for further in depth examination of the specific policy instruments that would allow to overcome the specific barriers of a set of mitigation options prioritized in order to then develop a sectoral investment plan.

III. References

- Aldy, J. y R. Stavins (2008): "Economic incentives in a new climate agreement", Paper, Belfer Center for Science and International Affairs, May 7, 2008
- Allan, J., Donovan, C., Ekins, P., Gambhir, A., Hepburn, C., Robins, N., Reay, D., Shuckburgh E., y Zenghelis, D. (2020): "A net-zero emissions economic recovery from COVID-19". Smith School Working Paper 20-01
- Azqueta, D. (2007): Introducción a la Economía Ambiental, Ed. Mc Graw Hill, Madrid
- Banco Mundial (2020): State and Trends of Carbon Pricing 2020. Washington, DC: World Bank
- Bohm, P. y C. Rusell (1985): "Comparative analysis of alternative policy instruments", en A. Kneese y J. Sweeney (eds) (1985): Handbook of Natural Resource and Energy Economics, North-Holland, Amsterdam
- Bolsas y Mercados Argentinos S.A. (2019): Guía de bonos sociales verdes y sustentables. Disponible en: https://www.byma.com.ar/wpcontent/uploads/dlm_uploads/2019/08/BYMA-BonosSVS-Guia.pdf
- Casas, A. (2008): Marcos legales para el pago por servicios ambientales en América Latina y el Caribe: análisis de ocho países. Secretaría General de la Organización de los Estados Americanos (OEA). Publicado por el Departamento de Desarrollo Sostenible. Washington DC
- CBI (2021): Sovereign Green, Social, and Sustainability Bond Survey. Climate Bonds Initiative, HSBC
- Chidiak, M. (2001): A positive analysis of voluntary agreements to reduce industrial greenhouse-gas emissions, Tesis de DoctoradoenEconomía Industrial, defendida el 23/10/2001, Ecole NationaleSupérieure des Mines de Paris
- CNV (2019): Lineamientos para la emisión de valores negociables sociales, verdes y sustentables. Comisión Nacional de Valores.
- DeBoe, G. (2020): "Impacts of agricultural policies on productivity and sustainability performance in agriculture: A literature review", OECD Food, Agriculture and Fisheries Papers, No. 141, OECD Publishing, Paris
- Duval, R. (2008): "A taxonomy of instruments to reduce greenhouse gas emissions and their interactions", OECD, Economics Department Working Paper N° 636, ECO/WKP(2008)44s
- Fullerton, D. y G. Metcalf (1997): "Environment taxes and the double-dividend hypothesis: did you really expect something for nothing?", National Bureau of Economic Research, NBER Working Paper Series, Working Paper No. 6199
- Fundación Vida Silvestre; Bid-Invest (2019): Protocolo de Finanzas Sostenibles de la Industria Bancaria Argentina. Disponible en https://www.bna.com.ar/Downloads/ProtocoloDeFinanzasSostenibles.pdf

- Gobierno de Jujuy (2017): Bono para el desarrollo de Cauchari. Disponible enhttp://prensa.jujuy.gob.ar/tag/bono-verde/, 18 de septiembre de 2017
- Goulder, L. y I. W. H. Parry (2008): "Instrument Choice in Environmental Policy", Review of Environmental Economics and Policy, 2(2): 152-174, doi: 10.1093/reep/ren005
- Hussain, F. I. (2020):"Green loans: Financing the transition to a low-carbon economy". World Bank Blogs. Development and a Changing Climate
- IEA/OECD (1997): Energy and Climate Change: An IEA Source-Book for Kyoto and beyond, International Energy Agency & Organisation for Economic Co-operation and Development, IEA/OECD, Paris
- IEA (2020a):"Sustainable Recovery". International Energy Agency. World Energy Outlook Special Report
- IEA (2020b): "Clean energy innovation in the Covid-19 crisis". International Energy Agency
- IEA (2018): Energy Service Companies (ESCOs). At the heart of innovative financing models for efficiency. International Energy Agency
- IRENA (2020): "Post-COVID recovery: An agenda for resilience, development and equality". International Renewable Energy Agency
- ^o Keohane, N. O.; Revesz, R. L. y R. Stavins (1998): "The Choice of Regulatory Instruments in Environmental Policy", Harvard Environmental Law Review, 22(2):313-67
- ^o Kneese, A. V. y B. T. Bower (1968): Managing Water Quality: Economics, Technology, Institutions, Johns Hopkins Press
- Lankoski, J., A. Ignaciuk y F. Jésus (2018): "Synergies and trade-offs between adaptation, mitigation and agricultural productivity: A synthesis report", OECD Food, Agriculture and Fisheries Papers, No. 110, OECD Publishing, Paris.
- Matos, P. (2020): ESG and Responsible Institucional Investing Around the World: A Critical Review. Research foundation Literature Reviews. CFA Institute Reaserch Fundation.
- Migliorelli, M., & Dessertine, P. (2019): The Rise of Green Finance in Europe Opportunities and Challenges for Issuers, Investors and Marketplaces. Palgrave Macmillan.
- Milliman, S. y R. Prince (1989): "Firm incentives to promote technological change in pollution control", Journal of Environmental Economics and Management, Vol. 17, 247-265
- Newell, R. G. y W. A. Pizer (2008): "Indexed regulation," Journal of Environmental Economics and Management, 56(3): 221-233, doi: 10.1016/j.jeem.2008.07.001
- OECD (1991): Environmental Policy: How to Apply Economic Instruments, OECD, Paris
- OECD (1997): Evaluating Economic Instruments for Environmental Policy, Organisation for Economic Co-operation and Development, Paris
- OECD (1997a): Economic/Fiscal Instruments: Competitiveness issues related to Carbon/EnergyTaxation, Annex Expert Group on the United Nations Framework Convention on Climate Change, Working Paper no. 14, OECD, Paris

- Pagiola, S y G. Platais (2002): Pagos por Servicios Ambientales. World Bank, Washington DC.
- OECD (2017): Policy instruments for the environment, Database 2017. Documento y base de datos disponible en: http://www.oecd.org/environment/indicators-modellingoutlooks/policy-instrument-database/
- Pizer, W. A. (2002): "Combining price and quantity controls to mitigate global climate change," Journal of Public Economics, 85(3): 409-434, doi: 10.1016/S0047-2727(01)00118-9
- SSN (2017): La SSN adhiere a los Principios para la Sostenibilidad en Seguros. Superintendencia de Seguros de la Nación. Disponible en:https://www.argentina.gob.ar/noticias/la-ssn-adhiere-los-principios-para-lasostenibilidad-en-seguros
- Sustainable Stock Exchanges Initiative (2017): ¿Cómo pueden las bolsas de valores hacer crecer las finanzas verdes? UNCTAD, UN Global Compact, UNEP Finance Initiative, Principles for Responsible Investment
- Tietenberg, T. (1998): "Disclosure strategies for pollution control", Environmental and Resource Economics 11 (3-4, 1998): 587-602
- Tietenberg, T. (2006): "Tradable Permits in Principle and Practice", en Freeman, J. y C. Kolstad (2006): Moving to Markets in Environmental Regulation: Lessons from twenty years of experience, Oxford University Press
- Turner, L. y Delasalle, F. (2020): 7 Priorities to help the global economy recover while building a healthier, more resilient, net-zero economy. The Oxford Institute for Energy Studies, University of Oxford. July 2020
- Webster, M.; Sue Wing, I. y L. Jakobovits (2010): "Second-Best Instruments for Near-Term Climate Policy: Intensity Targets vs. the Safety Valve," Journal of Environmental Economics and Management 59: 250-259, doi: 10.1016/j.jeem.2010.01.002
- Weitzman, M. (1974): "Prices vs quantities", Review of Economic Studies 41, 477-491