# DECARBONIZATION OF THE ENERGY SECTOR AND CARBON PRICING: SOME CONSIDERATIONS FOR ARGENTINA

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### Overview

This paper seeks to contribute to the discussion on the relevance and usefulness of carbon pricing instruments to achieve GHG emissions reductions in the Argentine energy sector. It seeks to answer the following questions: What would be the impacts of implementing a carbon tax or an emission trading scheme in Argentina given the current configuration of the energy supply, the price elasticity of demand, the technical and economic possibilities of substituting fuels and technologies, the existing energy subsidies and the (des?)alignment of climate policy with certain pillars of energy policy, such as the exploitation of unconventional gas in Vaca Muerta? How should carbon price instruments in Argentina be designed so that they do not have serious inflationary and distributive impacts, either through increased tariffs or pressure on energy subsidies? To incentivize the GHG emissions reductions needed to comply with the National Determined Contribution (NDC) that the country presented in 2016 under the Paris Agreement while promoting economic growth, is it enough to introduce a carbon price? What does the international experience tell us?

#### **Methods**

The paper first analyzes the recommendations of economic theory regarding selection of policy instruments to foster decarbonization. Then it reviews the experience of countries that have implemented carbon pricing instruments in the last 25 years. Afterwards, it performs an analysis applied to Argentina's energy reality. Finally, it analyzes the salient aspects of the carbon dioxide tax included in the tax reform project that is currently under parliamentary discussion at the country level.

#### Results

The introduction of carbon price instruments in a national economy goes far beyond the purely technical issues related to the selection and implementation of a carbon tax or an emission trading scheme. In order to make sense, and not be reduced to the mere creation of a new collection instrument, it must be preceded by a comprehensive review process of the complete framework of energy, macroeconomic, sectorial, infrastructure, financial, social, environmental and international insertion public policies.

Carbon pricing instruments should not be seen as isolated tools that can be implemented in a vacuum and, magically, will generate the market incentives necessary to modify behavior and attract private investment in order to radically transform the way we produce and consume. On the contrary, it is necessary to conceive them as the last link within a long chain of strategic decisions that involve the generation of consensus and a careful planning of where a country wants to go in energy, macroeconomic, productive, commercial and socio-environmental matters.

The review of international experiences reinforces the idea that carbon pricing instruments must pass a "policy consistency test" before it makes any sense to move forward towards their effective implementation. Otherwise, confusing and contradictory signals will be send to actors and no transformational changes towards a low-carbon economy will be achieved.

#### Conclusions

Deep down, the decision to introduce carbon price instruments challenges societies regarding what kind of country they want to build, collectively, in the long term.

In the case of Argentina, do we want to be a 100% renewable country by 2050? Or either a gas power? Or maybe a nuclear country? Who should make these decisions? And how? To what extent should certain sensitive strategic decisions -such as the expansion of nuclear generation capacity or fracking- be socialized and put to the consideration of civil society through binding consultation mechanisms? If the decision is to achive a diversified energy matrix, what implications does this have regarding incentives? Should we encourage the exploitation of

unconventional gas subsidizing supply or rather discourage the use of fossil fuels by taxing even natural gas? What are the consequences in terms of policy credibility of doing both things at the same time? What happens if we penalize the use of hydrocarbons but do not give technical options for consumption substitution? What is the limit of energy saving that can be induced by tariff increases? What would be the 'collateral' impacts on production and competitiveness in Argentina of having even more expensive energy by introducing a carbon price? In short, Argentina wants to introduce carbon price instruments in order to foster the transition towards a decarbonized country, but is this really the political decision that has been taken or is it just part of a politically correct discourse with underlying objectives that are incompatible with decarbonisation?

Carbon pricing is not, in itself, the solution to the global climate problem because it can not generate sufficient incentives to induce the needed changes at the pace and scale necessary to achieve the goal established in the Paris Accord. Carbon pricing instruments should therefore be conceived as a complement to other policies designed appropriately to address the various deficiencies and imperfections of the different sectors and markets.

Argentina's deciding to introduce carbon price instruments can be good news and can mean a first good step to foster, afterwards, deeper transformations. However, there is still a long analytic way to go in order to determine if this is the right time to introduce them and, if so, to define what kind of instruments would be more appropriate to achieve national priority policy objectives. And for that, first we have to define, as a society, which are those priority objectives.

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