# FROM SUPPLY TO DEMAND: REVIEWING ARGENTINA'S LPG SOCIAL PROGRAM

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#### **Overview**

Argentina's liquefied petroleum gas (LPG) market has different social and economic players involved, such as LPG producers, LPG bottling companies (which subdivide the product and placed it in tanks), distribution companies, traders and end users.

LPG production (liquefied propane and/or butane gas) has characteristics of an oligopolistic market, concentrated in a few companies, being the main one Yacimientos Petrolíferos Fiscales SA (YPF) -the Argentine national oil company-, and goes to those tanks approximately 65% of the total butane production and 2% of the total propane production. Also, the division sector has an oligopolistic conformation type, where about 30 companies participate on it. Different is the distribution sector and final sales conditions there it is very fragmented.

LPG production and trading supply the domestic market; LPG is also exported. The fraction that is destined to local consumption is sold through pipelines and tanks. They are regulated in different manners by the Argentine National Government, being particularly monitored the selling of tanks because they are consumed mainly by areas that do not have access to natural gas, and more specifically by low-income sectors.

In this sense, the National Government launched in 2008, under the No. 26,020 Act, the Program '*Garrafa para Todos*' –Tanks For All- (PGPT), with the aim of providing low-income residential consumers LPG tanks(10kg, 12kg and 15kg), which can be purchased at a set differential price. This program subsidized to LPG suppliers, namely producers, bottlers and distributors, so in this way the government could secure the supply at an affordable price.

But PGPT began to have problems in its implementation and effectiveness in achieving its goal, since it benefited all kind of users, regardless of their socio-economical conditions or accessibility to the pipelines. Besides, the subsidies that the offering players should have received were not updated regularly, and they started selling the tanks at a higher price as the one agreed between the National State and the companies, distorting the plan's social goal that was to settle the energy needs of most vulnerable sectors.

That is why the Argentine National Government decided to end the PGPT Program and implement a new one instead since April 2015 called '*Hogares con Garrafa*' – Houses with Tanks – (HoGar), whose purpose is to subsidize or compensate directly low-income homeowners, social or communitarian housing in all the territory of the Republic of Argentina that consume 10kg, 12kg and 15kg LPG tanks, who are located in areas that do not have pipelines service or are not connected to any gas distribution network in their area. The identified household estimation showed that more than 50% of people who use tanks (2.5 million households) would be (and are being) subsidized.

In sum, the spirit of this article arises from the debate on the allocation of public resources and their results: in the case of the LPG in tanks social program (PGPT) implemented by the National Government, its evaluation showed that the social energy policy applied was inappropriate and had distortions in the distribution of the expected benefits, so it was decided to replace PGPT by the HoGar Program. However, this social energy policy is necessary because it is possible that in certain areas the gas pipeline network would never be developed for being economically and financially unprofitable; that is why it is necessary that the National Government ensure adequate supply of energy sources to low-income sectors.

## Methods

The purpose of the evaluation of public policies is to value the usefulness and goodness of public intervention in society, which one should be the role of the public sector. Among policy analysts' criteria, we highlight the one from Laswell (1962) and Dye (1995) who consider that the design is made in identifiable stages that can be examined in isolation. These are: (1) detection of problems and needs; (2) making the diagnosis: conceptualization and definition of the problems and needs, (3) include them in the Administration's agenda; (4) design of an action plan (formulate the public intervention's goals, choice of instruments and defining actions); (5) perform or implementation; and finally, (6) evaluation of the policies and programs implemented, including its monitoring and control.

In addition to the public polices' cycle with a traditional conception of evaluation as the last stage of the planning process, we considered outstanding Cirera and Velez's (2000) point of view, who argue the need for a 'comprehensive evaluation' where the review is carried out at all stages of the programs' design, analyzing the relevance and coherence of the problems, objectives and instruments raised, the process of the program implementation and its results.

In this regard, it should be noted that public transfers are characterized by the granting of benefits in the form of monetary benefits and the provision of goods and services to citizens, who are the result of a political decision process (World Bank, 2014). But it is necessary that such transfers are actually performing the desired beneficiary because the point here is to socially assist people living in poverty or indigence (Stiglitz, 2000). In case it is not granted efficiently and correctly, it should be reviewed and evaluated for a possible modification.

In sum, since both tanks' programs, PGPT and HoGar, are part of the National Government public spending because those are social energy public policies, it is crucial to evaluate them regularly to ensure that resources are allocated correctly to the desire population without reaching the evaluation only in the final stage of the public policy cycle.

### Results

The GPT Program was the result of a wise and necessary political decision which sought to meet the energy needs of vulnerable populations throughout Argentina, particularly the North-eastern region that has no natural gas pipelines; this implied an important effort from the National Government in budget-transfer matters.

While the program proved to be effective to meet the proposed need, it presented problems during its implementation and could not meet the proposed objective, presenting target-population inclusion errors, by subsidizing houses that did not need the differentiated price of the tanks.

This situation arose because of the universal character that the program initially had, which distributed the benefit independently of the socio-economic households conditions or access to the gas network.

Likewise, the fact that fixed selling prices were established to compensate supply (all segments of the LPG's chain) and that these were not be updated, caused price distortions to the point that the final sale prices agreed between the National State and companies were not respected. Since the policy's objective could not be accomplished, the population that actually needed access to more economical energy sources could not be benefited.

The launch of the '*HoGar*' Program replacing '*Garrafas para Todos*' allowed through a focused social and energy policy to define the target population: identifying legitimate beneficiaries of the program in study and redirecting subsidies.

## Conclusions

The research allows us to infer that the PGPT Program represented an appropriate political decision but had contradictions between its formulation and its implementation as a social program and as an energy public policy, generating allocation problems and inclusion errors, benefiting users who did not need subsidies and transferring resources inefficiently.

Redefining the plan as 'HoGar' Program allowed correcting it from the formulation (targeted policy) and its implementation, assuring a better distribution of the granting resources from the State to the desired population, properly identifying it.

Finally, it is observed that despite the large amount of natural gas reserves (conventional and unconventional) available in Argentina, this does not necessarily guarantee access to gas pipelines in areas which today are supplied with LPG tanks and receive subsidies as well, because it is not always economically feasible to do it. Therefore, it is imperative to supply these areas and vulnerable populations with energy sources, either LPG or other substitutes present in abundance in North-eastern Argentina, such as biomass or hydroelectric power, allowing the use of cleaner and renewable energies.

## References

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