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Economizing justice: Turning equity claims into lower energy tariffs in Chile

Carla Alvial-Palavicino*, Sebastián Ureta

Núcleo Milenio de Investigación sobre Energía y Sociedad, Departamento de Sociología, Universidad Alberto Hurtado, Santiago, Chile

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ABSTRACT

This paper considers the issue of how energy justice is economized; how political and ethical claims about particular energy (in)justices are turned into economic valuations. Drawing on science and technology studies, we present a conceptual framework that understands economization as emerging from three interrelated processes: problematization, framing and overflowing. Applying this framework to the drafting of new energy legislation in Chile, we trace how perceived shortcomings in equity and distributional justice were turned into "market failures," able to be resolved by market-based mechanisms. This case highlights the dangers implicit in the uncritical economization of energy justice claims, in which ethical considerations regarding the distribution of risks and benefits of energy production and provision are reduced to a redistribution of payments among consumers – something that limits the possibilities for structural reform.

1. Introduction

Emerging from the encounters between energy research and environmental justice, the concept of energy justice (EJ) has, in recent years, gained momentum. Concerned with "how negative environmental and social impacts related to energy are distributed across space and time, including human rights abuses and the access that disenfranchised communities do or should have to remedies" (Sovacool and Dworkin, 2015, p.441), this area of research studies the particular arrangements that produce these negative consequences, developing strategies that can remedy or overcome such.

This paper contributes to the development of this area of research by exploring one issue that has not been analyzed: how are energy justice claims enacted into regulation and policy? This question derives from the recognition that energy policy and regulation "has to-date been in part unsuccessful in relation to delivering an overall positive societal contribution or impact" (Heffron and Talus, 2016, p.4). As such, there is a clear need to better understand the processes by which justice claims are mobilized into regulation, focusing in particular on the failures and unanticipated developments that diminish the capacity of policy and legislation to enact more just energy systems.

Seeking to answer this question, we present a case study of the development of a particular regulation called "Ley de equidad tarifaria en servicios eléctricos" ("Law for tariff equity in electrical services"). Enacted in Chile in June 2015, this law introduced a standard of justice on the prices paid for electricity, reducing the difference between urban and rural end-users. However, the intended outcome of this regulation went far beyond price correction. As explained by President of Chile Michele Bachelet during its launch on 15 June 2016, this regulation looked "*to install a new view about the country that we want to be and should be: a solidary community, where costs and benefits are distributed in a more equitable way*". The law proposed a new version of Chile, a more egalitarian community, with a more even distribution of energy costs – also a central concern of EJ literature.

In analyzing the development and discussion of this regulation, and given its intent to correct energy price imbalances, we focus on how equity claims are enacted as economic issues in a policy context. In this, we use an analytical framework based on conceptual developments made in science and technology studies (STS), particularly the social studies of finance and markets. As with STS research on other scientific disciplines and forms of knowledge, this approaches economics as a form of "politics by other means" (Latour, 1983). Economic knowledge and economic practitioners do "not simply represent the economy, but [are] constitutive of economic institutions, including the economy, markets, and economic agents" (Breslau, 2013). Economic knowledge, in other words, is "performative" (MacKenzie, 2007), enacting particular "economic" states of the world. Following this, we introduce an element key to understanding the policy implications of justice claims: specifically, how particular forms of economics behind justice claims are mobilized into policy.

This paper is structured as follows: in the next section, we introduce the concept of 'economization' and explore its relation to energy justice in a policy context. We then present our methods and case study, before analyzing the "tariff equity law" as an economization of (energy)

* Corresponding author.
E-mail address: carla.alvial@gmail.com (C. Alvial-Palavicino).

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justice demands, the result of processes of problematization, framing and overflowing. Finally, we discuss wider applications of the economization perspective on energy justice, in both academic and policy contexts.

2. Energy, equity and economizations

Equity is at the heart of energy justice. One of the main issues when analyzing this concept is the way in which, in everyday conversation, "equity is often confused with, or used synonymously with, a variety of other concepts such as fairness, justice and equality" (Le Grand, 1991, p.7). In more theoretical and technical work, however, equity is clearly delineated both from equality and justice. Lacking the descriptive element of the former (Le Grand, 1991, 11) and the general inclusivity of the latter (Ikeme 2003), equity is understood as a distributive issue, referring to the allocation of benefits and costs of particular arrangements among those involved.

This is the approach taken in the EJ literature, which defines equity "in terms both of access to affordable, safe and reliable energy and of the distribution of the risks and benefits of new technologies" (Hall et al., 2013, p.415). Specifically, equity has been framed in terms of distributive justice, focusing on "how energy harms and energy services are distributed, whether the energy system is equitable or not and whether it is fair to future generations or not" (Sovacool and Dworkin, 2015). Issues of equity "often relate to the politics of energy production, particularly in relation to the siting of existing energy facilities and the development of new energy infrastructures" (Fuller and McCauley, 2016, p.2), along with concerns about "access to energy services" (Jenkins et al., 2016). In this, equity is paired with issues of procedural and recognition justice, with the understanding that inequities "are not matters only of prices and income, but of structural differences that are produced and reinforced over time and through space" (Hall et al., 2013).

However, this extended notion has not seen significant uptake in policy contexts, where equity is still "commonly limited in its conceptualisation to accessibility and affordability of energy supply" (Tomei and Gent, 2015, p.72). This framing is derived from the traditional aim of socially-minded policy interventions, which have focused "on access to affordable electricity as a means of enabling broad participation in markets and civil society" (Welton, 2016, p.30). Beyond concerns of procedural or recognition justice – and even extended notions of distributional justice – the role of equity claims in energy policy have been limited to the safeguarding of "markets, security of supply and efficiency. It is about government policies aimed at securing energy sources at the least possible cost, including social cost" (Heffron and Talus, 2016).

This particular understanding of equity is a result of the fact that, for most countries, "energy policy remains a largely techno-economic problem" (Miller et al., 2015, p.29). In practice, this approach usually entails a division in which all material issues are treated as purely technical, while the social dimensions are reduced to economics. Even if intervention is motivated by political or cultural concerns, "economic frameworks allow that intervention to be formulated and justified in terms of the efficient functioning of a system – the economy – rather than as resource transfers on behalf of one or another social group" (Breslau, 2013). In this, we can see how economics and energy policy reinforce each other: although economics has been able to simultaneously identify and correct for some of the weaknesses of existing energy systems, the regulation of "electricity … has become a vehicle for the expansion of the economic grid into previously non- or semieconomic domains" (Özden-Schilling, 2015).

Consequently, in order to be treated as valid policy issue, equity demands must be "*economized*". Calıskan and Callon, (2009, 2010) understand economization as the process by which "the behaviours, organizations, institutions and, more generally, the objects in a particular society which are tentatively and often controversially qualified … as 'economic'" (Calıskan and Callon, 2009). Building on previous work by Callon and others (Callon, 1998; Callon et al., 2007; MacKenzie, 2007), economization comprises three interrelated processes: problematizing, framing and overflowing.

Following Latour (2004), *problematizing* denotes the processes by which stable matters of fact are turned into matters of concern – "those things and situations that – for better or worse – are related to us, can affect us and worry us in the current context of liberal market democracies" (Geiger et al., 2014, p.2). The process through which matters of concern are then economized involves *framing*, establishing economic "frames" (Callon, 1998)[1] that surround and contain those entities under consideration, cutting existing ties with other entities. These frames forge new relations between the entities inside the frame, often through quantification. Through these processes of problematization and framing, a particular market is enacted, a "space of calculability" (Ibid.) in which relations are qualified in price terms. However, these processes are never straightforward or automatic. Attempts at framing are beset with multiple *overflowings*, from entities who resist the severing of relations and emerging agencies with unexpected behavior. An important part of the work of economization rests on dealing with the multiple frictions emerging from framing processes and the overflowings of heterogeneous matters of concern.

In deploying this model, we can see how the economization of equity within the energy sector follows this triple movement. First, through processes of problematization by which justice claims linked to energy production, distribution and consumption are turned into matters of concern, as "inequities" needing to be addressed. These processes are undertaken by a heterogeneous group of actors, from NGOs to the media, deploying a range of practices and devices, from protest and demonstrations to policy proposals.

Secondly, and following the economic usage of the concept (Le Grand, 1991), the inequities of the energy system are framed as different kinds of "externalities". Inequity is enacted as an imbalance between "the distribution of 'goods' and 'bads' … and the principles by which these benefits and burdens are, or should be, distributed" (McDermott et al., 2013, p.418). The solution to these issues appears as a matter of devising a relocation of costs and benefits to correct – or mitigate – the externalities. To govern this relocation, the draft bill introduces several "market devices" (Callon et al., 2007) ranging from taxes to subsidies. Their introduction is expected to correct the externality and, in doing so, alleviate the underlying inequity.

Such a neat outcome, however, rarely happens. To begin with, we discard the notion of markets as merely rational arrangements, and instead consider them as "explicitly moral projects, saturated with normativity" (Fourcade and Healy, 2007, p.299). This is because "market exchange … involves more or less conscious efforts to categorize, normalize, and naturalize behaviors and rules that are not natural in any way, whether in the name of economic principles (e.g., efficiency, productivity) or more social ones (e.g., justice, social responsibility)" (p. 300). This is particularly true of the energy sector, where "framing is fundamentally intertwined with … normative claims" (Fuller and McCauley, 2016); claims that are multiple and, often, contradictory. As a consequence, attempts to frame justice claims in the energy sector as conventional market failures are crosscut by multiple overflowings in the form of entities that resist being framed in a purely rational fashion.

As a result of these various framings and overflowings, economization processes produce multiple results. In some cases, they might maintain – or even exacerbate – the justice claims motivating the intervention. In others, they can transform the situation for the better, enacting "civilized" energy markets (Callon, 2009) that consider and

[1] It is important to note, however, that to establish an economic framing out of a problematization is only one of the many ways in which we could deal with a matter of concern (see for example Schaeffer and Smits, 2015).