

**Beyond the critique of carbon markets:
The real utopia of a democratic Climate Protection Agency**

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Preprint version.

Please refer to the published Manuscript as R.,Felli, "Beyond the critique of carbon markets: The real utopia of a democratic Climate Protection Agency", **Geoforum** (2018), <https://doi.org/10.1016/j.geoforum.2018.02.031>

Abstract

This paper discusses the possibility to go beyond the critique of carbon markets by offering an alternative, democratic, model for allocating greenhouse gas emissions rights, rather than one based on the ability to pay. Taking stock of the substantial critique that have been made of markets for allocating such rights, it seeks to offer a non-market based, yet realist, mechanism. This non-market mechanism is grounded in the literature on democratic economic planning as applied to environmental questions. It delineates the proposition for a *Climate Protection Agency* through which competing interests and visions could be represented – and transformed – in the process of allocating limited rights. This alternative model is offered in the spirit of “real utopias”. Discussions of the desirability, viability, and achievability of the model are made by way of comparison with a similar – but actually existing – model, namely the distribution of land-use rights in Switzerland.

Keywords

- Economic democracy;
- Deliberative democracy;
- Economic planning;
- Urban planning;
- Carbon markets;
- Real utopias

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1. Introduction

The plateau in greenhouse gas emissions reached after the Paris Agreement (2015) was only temporary. It has now been superseded by a renewed growth in emissions, driving the Earth towards dangerous anthropogenic climate change, far above the official 2°C maximum warming negotiated in Paris (Global Carbon Budget 2017). That such runaway and dangerous climate change would take place in an era of continuing and ‘zombie’ neoliberalism is no surprise. Leading analysts of global environmental governance (Ciplet and Timmons Roberts 2017) do not hesitate to brand the Paris Agreement as the latest iteration of neoliberal environmentalism, based on voluntary actions and disclosures, rather than on binding targets and on ‘command-and-control’ mechanisms.

For Marxists and other radical authors capitalist relations of production underlie neoliberal environmental regulation. Because capitalism is predicated on continuous growth, and because current economic growth implies the extraction, use and consumption of enormous amount of matter, including fossil fuels, capitalism is held to be ecologically destructive and a threat to the climate (Ciplet et al. 2015; Lohmann 2011; Newell 2012; Malm 2016; Paterson 1996; Vlachou 2004; Wright 2010, pp. 69-70).

This threat has enormous political consequences, that may derail existing democratic polities if an authoritarian state appears as the only viable solution to the climatic question (Wainwright and Mann, 2013). However, while the relationship between capitalism and climate change is well established in the literature, propositions for alternative economic organizations that could reign in the current environmentally destructive pattern of economic development are just starting to be developed. Responding to calls for more utopian thinking in environmental governance (Sargisson 2013; Swyngedouw 2009), I want to sketch one possible institutional arrangement that offers an alternative way of organizing society-environment relations from a “radical democratic egalitarian” (Wright 2010, p.12) normative perspective.

This is important for an “emancipatory social science” (Wright 2010, pp. 10-29) because, in order to be truly emancipatory and not just negative, the critique of existing social arrangements must be supplemented by an account of the possibility of an alternative social organisation. In this paper, I thus try to put forward one institutional proposition for better management of greenhouse gases emissions in a democratic way. I offer some ideas on possible “non-reformist reforms” – to borrow from Gorz’s seminal concept (Gorz 1967). Non-reformist reforms are not just about offering an alternative management of capitalism but are about creating processes, movements and institutions that build confidence in the capacity of working people to gain autonomy and to organize larger-scale economic processes. In the spirit of “real utopias”, I will discuss this proposition’s “*desirability, viability and achievability*” (Wright 2010, p. 20).

My proposition is to create, at the national state level (but with a decentralized organization), a *Climate Protection Agency* through which rights regarding greenhouse gas emissions would be democratically distributed. This proposition thus runs counter to the dominant mechanism for allocating greenhouse gas emission rights, namely the market (emissions markets).

I will do this first by explaining what is wrong with emissions markets. Emissions markets have been criticized for commodifying nature, creating or entrenching inequalities and being inefficient. (Bond 2012; Lohmann 2006, 2012; Lane and Newell 2016; O’Neill, 1993, 2007; Spash, 2010). However, I also want to argue that emissions markets are especially harmful in so far as they *depoliticize* economic decision making, namely that they substitute investment decisions to political decisions (Felli 2015; Madra and Adaman 2014).

This will lead me then to argue that an alternative for allocating greenhouse gas emissions rights must build on the necessary multi-dimensional nature of environmental problems, which cannot be reduced to a single monetary unit. I want to argue for the possibility (“viability”) and benefits (“desirability”) of developing and extending democratic planning in the realm of environmental

management. This kind of democratic economic planning draws on the work of Pat Devine (1988; see also Adaman and Devine 2001; Cumbers 2012; O'Neill 2007): it is a model of participatory planning in which all affected individuals can take part “in proportion to the extent to which they are affected by it” (Devine p. 73). It relies on informed deliberation, rather than on market transaction, to allocate resources for economic production. It is a transformational model in that the very process of debating, negotiating, etc. helps transform the beliefs, attitudes and desires of the participants. My proposition in this paper has a much more sectorial content: it is limited to the question of the allocation of permits for greenhouse gas emissions.

While utopian in aspiration, my argument is also realist in outlook. To argue for the viability and even achievability of the model, I will argue that such a democratic mechanism could function similarly to an already existing mechanism for the allocation of land-use rights in Switzerland. I do that by offering a brief description of the mechanisms whereby private property in land is strongly socialized and subject to decentralised democratic institutions in Switzerland; and I then present a comparison between such existing institutions and the Climate Protection Agency model.

2. One reason why emissions markets are harmful

Markets for environmental governance are mechanisms that seek to institutionalize a fundamental idea of neoclassical environmental economics: the polluter-pays principle. In the context of various environmental crises, such as resource depletion and pollution, neoclassical economists have argued that the best way to “internalize” environmental constraints into the economic system is by putting a price on nature. The additional cost incurred to polluters, or to those who want to use a specific resource, is supposed to modify their expectations and thus their behaviours, leading to a decline in polluting activities and to the promotion of innovation in non-polluting (or less-polluting) alternatives.

These broad principles have been implemented through various mechanisms, notably the so-called “economic instruments” in environmental policy, such as eco-taxes and markets for pollution permits (Jordan et al. 2003). The money extracted by the state from firms through these mechanisms amounts to a form of rent. For instance, access to permits for emissions constitutes a necessary condition of production, one that is imposed by the state on production units. As such, these mechanisms are an impediment to production, and the money that companies have to pay to acquire them is a draw on surplus-value.¹ Environmental rents are a form of surplus-value distribution. Ecological conflicts (in the sense of Martinez Alier 2002) that emerge around these rents are distributional conflicts, not conflicts over direct production relations. (Andreucci et al. 2017; Bigger and Robertson 2017; Christophers 2016; Felli 2014; Huber 2017).

Some sections of capital actively support and promote such mechanisms for internalising environmental costs into market prices. This is because under capitalism there are constant contradictions between capital accumulation (making a profit) and social reproduction (ensuring that human beings can reproduce themselves, biologically and socially; and ensuring that the natural environment that sustains accumulation is reproduced too) (Bhattacharya 2017; Felli 2014; Fraser 2016; O’Connor 1998; Vlachou 2004). The state is the major nodal point of convergence and resolution (or displacement) of these contradictory demands (O’Connor 1998; Jessop 2016). A social and economic pressure thus exists to rein in the tendencies towards the destruction of the non-human world. But this pressure cannot arise, most of the time, from the decision of individual capitals. Rather, an authoritative structure is necessary to coerce them into a position that is detrimental to specific capitals in the short run but helps reproduce capitalist social relations in the long run. The strategic selectivity of the State (Jessop 2016) implies that under specific circumstances the interest of some capitals may be repressed in the

¹ Depending on market design, this rent may be passed free of charge to the polluters, as in the case of emissions rights “grandfathering” in cap-and-trade systems: in that case polluting industries will extract the rent from higher prices charged to consumers. Furthermore, some firms can collect part of this rent by producing additional reductions, for instance by means of clean energy production.

interest of an overall attempt at reproducing capital's ecological dominance. As E. O. Wright (2010, p.341) notes, such a capacity can be grounded in a dynamic class compromise in which labour's power and gains "can positively contribute to the realization of capitalists interests by helping to solve macroeconomic problems.": this was a defining feature of the Keynesian Welfare State, but is much more problematic under the Schumpeterian Competition State where labour has lost much of its organisational power.

In cases where individual capitals interests must be restricted, however, managers of the state must *politicize* production. For instance, in the 1970's in Switzerland, the number of foreign workers admitted in the country was limited (Piguet and Mahnig 2000). Which economic sectors and firms would be allowed to hire foreign workers was determined by a bargaining process between the state, employers and trade unions: ultimately the allocation of foreign workers was a political decision rather than one based on market decisions. In Hayek's words, politicization limits the freedom of capitalists "to determine what is produced, by whom, and for whom" (Hayek 1960, p. 200) by requiring a political decision about the allocation of the conditions of production between different sectors, regions and individual capitalists (rather than letting the law of value – or more simply, the power of investors – make these decisions).

Conversely, "depoliticization" points to the idea that something which could be (or has been) political is moved (or kept) out of the political debate and decision-making arenas (cf. Hay 2007; Felli 2015). The important point to bear in mind here is that movements of depoliticization (or politicization) are not neutral: they reshape and transform the ability of specific actors to act upon the entity considered: they create winners and losers. In environmental policies in particular, the movement of depoliticization by "economization" (Madra and Adaman 2014) ensures that the multiple values by which a particular policy towards the environment can be judged (multi-criteria perspective) are reduced to a single unit of valuation: money. Hence, actors endowed with relatively more money (owners of capital) acquire a relatively greater power over investment and production decisions.

Neoliberalism is the attempt by the owners of capital (and their whole array of helpers, managers, and organic intellectuals.) to depoliticize economic management, both intellectually (what is thought to be the legitimate boundaries of the “economic” and of the “political”) and materially (removing political institutions that interfere with the free allocation of capital) (Burnham 2001; Crouch 2004; Hay 2007; Wright 2010). In so doing, neoliberalism does not implement a free competitive market of decentralised petty producers but entrenches the structural power of the owners of capital (Peck 2010).

Environmental markets, such as greenhouse emissions markets, are institutional instruments designed to depoliticize environmental policy. By doing so, they hurt those in society with less money and who thus can exert relatively less power over important allocation decisions. Only the owner of capital has the responsibility and the right to make an evaluation of production (whether it is useful or not, for instance), and it is the ability of different capitals to pay the rent that allocates these conditions of production. An alternative way of distributing greenhouse gas emissions rights, based on democratic decision making – while not correcting other inequalities – would at least ensure equal participation in such decisions that have great consequences for the well-being of every human being (further reinforced by inequalities of vulnerability to climate change). From a radical democratic egalitarian perspective, it would thus be more desirable than the existing mechanisms.

3. Comparing the “forum” of land-use rights with the “market” of emissions rights

What would a “politicized” allocation of greenhouse gas emissions rights look like? Could we imagine an institutional mechanism to politicise the allocation of greenhouse gas emissions rights and distribute them in a way that does not simply reflect differential abilities to pay but would be based on democratically decided values (the usefulness of specific productions, for instance)?

There is, I argue, one strong analogy that could help us build our case, namely the distribution of land development rights in countries where such distribution is substantially socialized such as Switzerland. I have argued that an alternative institution for distributing greenhouse gas emissions rights is desirable. From a real utopian perspective, I need to show how such an institution could be viable. By examining in detail *existing* and *functioning* institutional arrangements that performs similar tasks, I give a reasonable account of how the alternative model I envision, while not actually existing, could function in practice.

This part should not be read as a detailed introduction to environmental or planning policies in Switzerland. Rather I am using a stylized understanding of Swiss climate and land planning institutions to generalize more broadly about the processes.² I use the case of Switzerland to build, as it were, two ideal types of the *forum* (distribution by debate and negotiation) and the *market* (distribution by the price mechanism).

Land development rights and greenhouse gas emissions rights are two cases of “use rights”. These use rights are regulatory decisions that entitle their holders to use a specific (or in some cases, an abstract) piece of the non-human world in a specific way. They are *different* from – although strongly related to – the ownership of that particular (or abstract) piece of the non-human world. They derive directly from *state* regulations and decisions, and they introduce a wedge between the ownership of an entity and the right to use it as one pleases.³

² The literature on so-called “institutional resource regimes” in Switzerland offers a more detailed approach than what I can discuss here (Gerber et al. 2009; Varone and Nahrath 2014).

³ Actually, a dispute exists, in the legal literature, between those who see land use rights merely as a state-imposed limitation on private property and those who argue that private property in land is an empty right that needs to be concretized and materialized through use-rights (Mahaim 2014, chap.9; Walter 1986). Also, it should be noted that while most discussions about the extension of democratic economic planning (Cumbers 2012) assume the necessity of some forms of public or common ownership of the means of production (including land), the example of land-use rights also demonstrates the possibility of extensive planning also in the absence of such property. This is also why the Climate Protection Agency model I defend below differs from Elinor Ostrom’s (1990) conception of the commons. The CPA does not rely on common ownership of a resource – rather it specifies the conditions under which private, common or public property may be used.

3.1. *The forum of land-use rights*

Land development is directly related to the practice of zoning. It allows the owner of a specific portion of land to develop it in a certain way, for instance, to build housing or offices rather than to produce carrots. Conversely, one may own a specific piece of land but not be allowed to develop it for the most lucrative uses but only for agricultural activities, for instance. These rights (that are also restrictions) constrain the use value and thus strongly determine the exchange value of specific pieces of land. In Switzerland, these development rights are attached to specific pieces of land and are thus automatically transferred with the sale of the land. They are not detachable from the piece of land to which they have been allocated.⁴

A constitutional reform of land planning legislation was accepted by a majority of the Swiss population in 1969, which enshrined in the Constitution private property in land *and* the necessity for the state to plan land use. It was the culmination of a half-century of attempts by agrarian interests (who wanted more protection for agricultural land from urban sprawl), on the one hand, and trade unions and the left, on the other (who wanted more state involvement in the production of housing and public transportation), to extend federal powers in land planning. However, it took more than ten years after the constitutional change before a first national land planning law was adopted and implemented (Walter 1986).

Beyond the federal (national) law, each federated entity (the 26 Cantons) has its own land planning legislation, and, generally, the communes are the political entities entitled to change land designation. This complex federalist organisation creates a variety of institutional arrangements and it means regional and local negotiation over the implementation of the federal law. Communes are democratic organisations that generally have an elected legislative assembly and an elected executive (their organisations, however, vary widely depending on their sizes and on the Canton of

⁴ In other polities, however, mechanisms exist to transfer and sometimes to commodify these development rights. One of the most famous case of such commodified development rights are “air rights” in New York City. For discussions of these “transferable development rights” and “tradable planning permits”, see Renard (2010).

which they are a territorial division). One of the most important decisions the communal legislative assembly can take concerns zoning: they can change the designation of a piece of land, transforming it from unbuildable (fit for agricultural purposes) into a buildable zone (with various degrees of construction allowed). This decision transforms the land-use rights belonging to the owner of the piece of land under consideration; and it therefore has very important economic consequences.

More progressive communal assemblies and executives (those of the largest cities) use their land planning power to restrict unwelcome development (for the purpose of maintaining green or recreational spaces or to restrict development projects). They can also use this power as a bargaining tool vis-à-vis land developers and large owners (Lambelet 2016), for instance to request changes in a development project (such as the inclusion of more green spaces, or cheaper housing). Of course, capital, landed property and real estate interests are not passive: they use their concentrated power in myriad ways to reshape the democratic process in their favour by means of lobbying, regulatory capture, threats of capital flight or corruption. But citizens, social movements and other organised groups can also intervene in the planning process, either through formal and institutional mechanisms or in a more disruptive way (for one extended case study, see Zuppinger 2012).

The important point here is that private property in land is strongly socialised through public, democratic, decision-making procedures: the attempts by landed interests to influence (or circumvent) public decisions is testimony to the importance of these decisions. This democratic power is not always used consciously, and when it is used it is generally not always for socialist or ecological goals (it strongly depends, of course, on the political composition of the elected assemblies), yet the institutional mechanism exists.

Land-use rights are therefore not just the expression of the ability of their owner to pay for them, but they result from (more or less) conscious democratic planning procedures: local legislators can block or strongly constrain development projects

even on privately owned land. These mechanisms could be seen as an illustration of an “institutional design [that] consists of rule formulation and reformulation through decentralized experiments governed by deliberative bodies consisting of empowered stakeholders” (Wright 2010, p. 262, summarising an argument made by Michael Dorf and Charles Sabel) – and these mechanisms help socialize actors with competing and even opposite interests to create a dynamic class compromise.

These mechanisms have recently been put under greater scrutiny in Switzerland, because a revised national law on land planning has now put an overall cap on the amount of land that can actually be developed (put in a “constructible” zone). The law does so essentially by freezing the existing cantonal land development plans (if Cantons want to create additional development zones, they have to compensate those by cancelling development rights that have been already given but have not yet been used; for a detailed exposition, see Mahaim 2014). The law was adopted by the federal parliament in 2012, but it was contested by means of a referendum in 2013: a strong majority of 62% of the voters nevertheless supported the law (and thus the cap). The implementation of the law is now under way but is contested by some of the losers of the new rules (land owner whose land are designated as not developable; and Communes that have to reduce their designated developable area). Interestingly enough for our discussion, the commodification of land use rights (as advocated, for instance, in Zollinger 2005, or in Menghini et al. 2015) has been explicitly ruled out in a parliamentary process that has led to the new land planning law of 2012 (Mahaim 2014, pp. 501-512).⁵ Land planning in Switzerland thus give us

⁵ Yet, there are now creeping attempts at creating more or less formal exchange mechanisms of land use rights between municipalities (cities with high demand for land development would buy unused development rights in more peripheral regions). Already, bilateral deals are being struck between land owners that possess land plots with development rights in rural areas and land owners in urban areas that do not (and these deals are being covered by both municipalities who agree to simultaneously cancel and create development rights; yet it is unclear whether such deals are constitutional Adank 2016). Therefore, a de facto creeping (but so far very limited) marketization of development rights is occurring. This “black market” of land use rights derives from the absence of a formal negotiating mechanisms between territories in the new land planning law: rather, the law has “frozen” (or “grandfathered”) the existing distribution of land-

an example of functioning democratic mechanism for allocating land use rights, to which we will compare the allocation of emissions rights.

3.2. The market for emissions rights

Emissions rights are permits that allow their holders to emit a specified amount of greenhouse gases into the atmosphere. In some polities, such as Switzerland or the EU, for some activities (energy production,...) and above a certain size, it is compulsory for producers to hold these rights to be allowed to produce. They can be labelled as regulatory “conditions of production”, but they do not amount to ownership of the atmosphere. Swiss climate policy on emissions reduction is a mix of voluntary measures (such as industry-set standards), a carbon tax and an emissions trading system (ETS). The Swiss ETS is a typical example of a cap-and-trade system. The initial allocation of permits for greenhouse gas emissions to regulated economic units was based on past emissions (grandfathering) and on various measures of environmental efficiency (such as a heat or fuel benchmark). Some minimal allocations were given free of charge, and the supplementary quotas were auctioned. Participating units could then trade their unused permits with other regulated entities. The national Parliament was involved in designing the federal laws governing Swiss climate policy, but beyond that, the allocation of permits for greenhouse gas emissions is essentially a technocratic and market-based process. The largest polluting firms and public utilities are compelled to take part in the national ETS (under certain conditions, other firms can join voluntarily), whereas other emitters are subject to a carbon tax. Under the ETS, emissions rights are auctioned regularly and then traded.⁶ Unlike the allocation of land-use rights, the

use rights between Cantons. However, more profoundly the existence of this market expresses the will of more powerful actors (land owners) to “depoliticize” land-use rights allocation and to bypass democratic mechanisms for land planning.

⁶ Although my point here is not to assess the efficiency and effectiveness of this scheme, I would note that the Swiss Federal Audit Office has recently released a damning statement noting that the “Swiss emissions trading scheme generates hardly any incentives for reductions” (EFK 2017, p.9).

allocation of greenhouse gas emissions rights is thus not subject to further democratic debates.

Comparing the stylised procedures for attributing land-use rights to those for greenhouse gas emissions rights, one could qualify them respectively as models of the “forum” and the “market”. I draw this distinction from Jon Elster’s classical analysis of political theories (Elster 1986), although I am making a more limited use of this distinction here. I take the “forum” to represent a form of allocation of “use rights” based on deliberation, whereas the “market” represents a form of allocation based on the ability to pay. In Elster’s analysis, these stylised models of political theory imply, in the case of the market, that preferences are fixed, whereas, in the case of the forum, they imply that deliberation creates the possibility to transform, reshape or create new preferences. The forum model is similar, in this regard, to Devine’s understanding of democratic economic planning as a transformative exercise (Devine, 1988, pp.270-273). The distinction is not a case of the *state* vs the *market* but rather about the way in which the decision to allocate “use rights” is made. This is an important point to bear in mind in relation to our objective of “non-reformist reforms”.

In the following table I summarize the ideal-types of the forum and the market applied to the respective allocation mechanisms of land-use rights and greenhouse gas emissions rights in Switzerland.

	Land-use rights	Greenhouse gas emissions rights
Ownership of the resource	Private, public (sometimes common)	Common
Use rights	Concrete (tied to a specific piece of land)	Abstract (right to emit in general)
Cap at the national level	Yes, but it is still being implemented	Yes

Transferable	No: tied to a piece of land	Yes
Marketable	Not alone – yet, they affect the exchange value of the land to which they are attached, and which may be marketed	Yes
Allocation	Deliberative, democratic planning (through elected representatives, and based on legal constraints)	Grandfathering, auctions (reproducing existing inequalities; ability to pay)
Stylized model	<i>The Forum</i>	<i>The Market</i>

4. Creating a forum for allocating greenhouse gas emissions rights: the Climate Protection Agency

Emissions markets are harmful because they give much more power to the owners of the means of production than to anyone else in the decision-making process over an environmental good (climate protection) which affects everybody. Yet, in order to implement a reduction in greenhouse gas emissions, it is necessary to devise a mechanism for the allocation of a limited amount of permits. My proposition is that greenhouse gas emissions rights could, and indeed should, be allocated through an institutional mechanism – similar to that for allocating land use rights – which would allow for substantial democratic economic planning. It would be a desirable mechanism because it would re-politicize this allocation and rebalance the decision-making power between social forces. The obstacles are numerous, but they are not insurmountable. Let me sketch a basic description of how such a mechanism would work. By drawing a comparison with the allocation of land-use rights, I will argue that such a planning mechanism would be viable in climate policy and that it is achievable in Switzerland (and in similar polities) because such a proposition could be supported by social forces beyond trade unions, environmental movements and

the left and would include cities and regions which are high emitters of greenhouse gases because of their energy and waste management utilities.

Similarly, to the land-use rights forum, the carbon forum model starts by putting an overall cap on greenhouse gas emissions for a given economic period (let's say one year) in the country. This overall cap would then be divided into emissions rights that production units (firms, public administration, etc.) need to hold to be allowed to produce. Greenhouse gas emissions rights are thus a "good" whose supply is limited. As is the case for the overall cap that has been put on development rights in Switzerland in 2014, the scarcity of greenhouse gas emissions rights is politically created. However, it should depend on features of the natural environment such as the ability of the earth's system to process greenhouse gas emissions without dangerous changes for human beings.

Setting the cap is a highly contentious issue and not one I can address in detail in this proposition, as I am focusing on the distribution of greenhouse gas emissions rights. Essentially, the forum model is a mechanism for distributing emissions rights within a national polity once a cap has been set – as is the case for a market mechanism.⁷ The current practice derives from the international climate negotiations in which most countries, including Switzerland, have been involved since 1992. National commitments to reducing the emission of greenhouse gases amount *de facto* to putting a cap on the maximal amount of greenhouse gas emissions per country. The cap is therefore the result of a political decision and negotiation, albeit one taken at the international level.

Once the national cap has been set, one central entity – let's call it the *Climate Protection Agency* – is in charge of the allocation process for emissions rights. It

⁷ On the question of the cap, the major difference between the forum model and an ETS, is that with the forum model we would expect citizens to become more involved in the debates around the allocation of emissions rights, thereby raising their environmental awareness and developing a deeper involvement in climate issues. This deeper involvement and consciousness would probably reinforce public support for stronger climatic objectives (and thus for lowering the cap).

receives requests for permits for greenhouse gas emissions from economic units, weighs their relative merits (more on that below) and then allocates the permits to these economic units within the capped amount.

The permits are not sold or auctioned by the Agency (although an administrative fee may be levied to cover the functioning of the system, as for land use rights). Once they have been attributed to one economic unit, they cannot be sold, given or exchanged. In the carbon forum model, greenhouse gas emissions rights are non-tradable: they are meant to be used only by the unit that has received them. As noted, this is an important principle of allocating land use rights in Switzerland. In the carbon forum model, the annual negotiation over the regional and sectorial allocation of permits for greenhouse gas emissions (on which more below) would lessen the need to create “flexibility” on the side.

If firms – at the end of the given economic period – have gone over their allocation of greenhouse gas emissions rights, they are fined. The fine is not intended as a mechanism that would allow economic units to access more greenhouse gas emissions rights than their initial allocation by means of payment. It is intended as a sanction and should therefore not be understood as a pseudo market price of carbon. Thus greenhouse gases emissions would be more stringently monitored than is currently the case under an ETS. Conversely, if, during a production period, a firm needs an additional allocation of greenhouse gas emissions rights, it is entitled to request it from the Climate Protection Agency, which has set aside, at the beginning of the economic period, a certain amount of excess greenhouse gas emissions rights for that purpose. This also applies to new firms that want to enter the market. The formula for these additional allocations would have to be negotiated within the Climate Protection Agency at the beginning of each new legislation – according to the mandate of its members (on which more below).⁸

⁸ There are trade-offs between flexibility, environmental protection and innovation here. One could imagine for instance that firms entering the market would have to demonstrate that their production process is more efficient (in terms of emissions) than existing standards in the industry.

Practically, this Climate Protection Agency could be regionalised: the allocation of emissions permits between the different regions would have to be negotiated (essentially by means of the same mechanisms that would be used for allocation between competing economic sectors and units but with a greater input from elected political authorities to maintain a balance of regional development). However, as in the case of permits for land-use rights delivered by bodies at the lower political scale (such as the communal councils), the decentralised entities would have to respect the higher level planning quotas and principles. Compared to land-use rights – that are always context specific (and therefore concrete – tied to a particular piece of land in a particular region), there is a lesser need for a highly decentralized institutional organisation for greenhouse gas emissions rights because the permission to emit is more abstract (it is not tied to a specific location within the country). However, especially in a federalist country such as Switzerland, decentralized institutional organizations may provide more legitimacy with regard to the whole process – and therefore more public interest and participation. It would also create an environment in which a better circulation of knowledge would be possible between firms and climate regulators, which would be embedded in local/regional contexts.

The Climate Protection Agency thus functions as a planning agency which allocates only one “good” (permits for greenhouse gas emissions) between competing users. Unlike the carbon market model which depoliticises these allocations (essentially, it is the ability to pay – to buy emissions rights – that determines the allocation of these rights), the carbon forum model seeks to *politicize* this allocation. Rather than the law of value, it would be deliberation and political decisions that preside over this allocation: only through such a mechanism may alternative valuations (such as social equality, climate integrity, etc.) be debated and applied. This requires the political representation of interests and publicity. Of course, as is the case in land planning, one would expect capital to intervene in the process in order to influence its outcome (through lobbying and other means), but fundamentally the mechanism would allow for democratic decision-making.

One possibility would be to use the existing democratic institutions and locate the decentralised powers of the Climate Protection Agency entities within the elected communal authorities. Decisions about land-use rights are formally taken at the communal level by the elected political (legislative) authorities: they are generally prepared by a public administration under the guidance of the executive branch, and with very wide consultation processes that include not just the parties directly affected (buyer and seller of land, land developers, inhabitants and neighbours, etc.) but also a provision to include more abstract interests, such as the protection of the environment (represented through environmental NGOs). Decisions can be contested through referenda and judicial means.

It would be impractical, however, to have carbon allocation decisions made at the communal level – because it would not reflect the full extent of alternative economic production that needs to be balanced by the Climate Protection Agency (such as competing claims between mobility and energy production that generally spill over communal boundaries).⁹ Furthermore, the time necessary for preparatory work, enquiries and negotiations would exceed the existing timescale of these institutions.

Another possibility would be to create a new institutional mechanism, which could either follow the existing political boundaries – the Cantons in Switzerland – or be based on functional territories – for instance territories matching the metropolitan processes mapped in Diener et al. (2001). These regional Climate Protection Agencies could be elected through universal proportional suffrage or through a corporatist mechanism for representing interests.

In a model based on universal suffrage, candidates, grouped in political parties, would compete for the seats in the Agency through different manifestos, reflecting their visions of what kinds of economic production and development should be encouraged. Green and social democratic parties would offer to protect the

⁹ To some degree, the same problem arises in relation to land-use rights, and it is precisely the role of cantonal strategies for land development to coordinate between the different communal land-use plans and to ensure overall respect of the legislative framework.

interests of public administration and public transport, etc., and would refrain from granting greenhouse gas emissions rights to more polluting industries. Conservative parties would put forward the competitiveness of regional businesses and would promise to allocate as much greenhouse gas emissions rights to them they consider as necessary. At this institutional level, however, the maximum amount of greenhouse gas emissions would already have been set, so the debates would be over allocation, not expansion. Regional agencies would be able to transfer over time (from one period to another) some unused greenhouse gas rights or even negotiate with other regions (trading unused rights for political support on other political projects) – as long as these transferred greenhouse gas rights are not monetised.¹⁰ It would also be possible for some parties to put forward a proposition to allocate fewer quotas for greenhouse gas emissions than the maximum amount available¹¹.

In a corporatist model, various sorts of interests could be represented – as is common in the Swiss model of economic organisation. Representatives of the elected political authorities, owners and managers of capital, trade unions, environmental non-governmental organisations, consumers' organisations (especially those active in the protection of tenants), etc., could have formal representation – and voting power – in these agencies. This would create a more efficient discussion and bargaining between parties that are more directly affected by the allocation decisions – at the risk, however, of specialising and technicising the planning process too much. It would be an appropriate model for institutionalising the dynamic of class compromise and could be supported by some fractions of capital and firms.

¹⁰ Because of the uneven economic development of regions, such inter-regional bargaining would be subject to considerable pressure. The central Agency would have to frequently revise the allocation between regions to avoid creeping marketisation of emissions rights – as appears to be the case in land-use rights.

¹¹ This was actually an argument that was made when the first carbon markets were imagined: Environmental non-governmental organisations and other defenders of the climate should have been able to buy rights for greenhouse gas emissions in order to subtract them from the market. Here the same possibility would exist, but through a political decision, not through a market transaction.

However, the Climate Protection Agency would likely be opposed by owners of capital (and their political representatives) in highly polluting industries. They would have to argue their case against other uses of these permits that are more publicly useful, such as public transportation, waste incineration or energy production. Some could threaten to relocate to a country with less strict environmental regulations – or use the federalist system to pit one Canton against another (as is currently the case in Switzerland’s fiscal federalism). These risks are inherent in a democratic planning proposition and the continuous existence of the capitalist world economy sets limits on political reforms that can be achieved within one country. These reforms ultimately rely on the balance of force – the class mobilization and alliances – that sustain them.

Some trade unions and workers active in industry may oppose this proposal because of fear of lost competitiveness and industrial relocalisation, and thus create alliances with capital in these sectors. However, they could also use this mechanism to leverage their power in the direction of a “just transition”, a transition away from fossil fuel energy that would be socially sustainable by investing in worker’s skills, retraining and green industrial policies (Evans and Phelan 2016; Stevis and Felli 2015). It is precisely the sort of policies that UNIA – the main industrial trade union in Switzerland – has been advocating for years. Support from trade unions for the allocation of emissions quotas in polluting industries (cement production, pharmaceutical industry, etc.) could be tied – in a dynamic class compromise – to the exchange of support and funding by capital for a just transition.¹²

Furthermore, amongst the largest emitters of greenhouse gases in Switzerland are municipally or regionally owned (and managed but often indirectly) utilities, mainly in electricity production. These utilities, backed by local/regional governments, might

¹² In the context of worldwide uneven and combined development, such a class compromise could serve as a progressive nationalist “green” or “energy efficient” competitiveness strategy (in turn reinforcing unevenness in the global political economy). In this regard, the Climate Protection Agency proposal does not differ from other nationally based climate protection propositions – but because of its deliberative and transformative dimension (see below), it is more likely to foster international cooperation rather than a race to the bottom.

support the planned mechanism, considering the fact that these cities are precisely engaged in energy transitions at the local level and that the Climate Protection Agency could allow them to showcase and strengthen their energy policies.

Whatever the institutional model chosen to implement the Climate Protection Agency, the important point is that it cannot be simply a board of expert technocrats or all-encompassing central planners, replete with “near perfect information”, especially because no such information is readily available. In line with Devine’s democratic planning model, the institution of carbon planning should not just be a place to take decisions based on set information and supposedly fixed subjective individual valuations of nature. Rather, the very process of sharing and comparing information, of socialising tacit knowledge, of debate between representatives of different types of interests and of political projects and of negotiations between alternative users would have the effect of producing new attitudes. These would not be entirely new – nor would they be unanimous. But every participant – and by extension the constituency they represent – would need to publicly justify the positions taken¹³ and would likely change their positions over time as a result of the negotiating process. This would not make the underlying contradictions go away (they are grounded in capitalist social relations, private property, the world market, etc.) but it would create an institutional space for staging disagreements and justifying alternative political options and choices. In John O’Neill’s words: “the virtue of deliberative democracy may lie not in claims that it resolves conflicts but that it reveals them. [...] there is a need for places where hidden conflicts are made explicit and marginal voices are articulated and heard.” (O’Neill, 2007, pp.183-184).

¹³ A balance would have to be struck between the public interest in the transparency of the process (which would also be some sort of guarantee against regulatory capture by the most powerful economic interests) and the economic interests of private firms competing in a capitalist economy and a world market. Firms in a competitive economy may not want, for instance, to share their plans for expansion by submitting demands for additional permits, thereby signalling their intention to their competitors. Therefore, there should be full transparency on the allocation decisions – and their justification – between economic sectors and regions, and for public utilities, but a more restricted publicity for individual firms allocation (by making public the allocations only once they have been made, or even with a small delay). Again, this is quite similar to what happens with land-use rights: public authorities grant a degree of confidentiality to real estate developers when they submit plans, and these plans are examined – but they are made public at a later stage in the deliberative process.

The model is transformative in the sense that – unlike neoclassical economic theories – it does not take preferences as given. Rather, the model argues that economic preferences are revealed, but also shaped and transformed, by the very process of deliberation. Deliberation is not simply a heuristic tool to reveal pre-existing preferences but actively and collectively shapes collective preferences. It does so neither by imposition nor simply by “group-think” and conformity, but rather by making concrete and material the existence, desires and needs of others – as well as the effects of economic production and consumption on the environment (“internalizing” the neoclassical “externalities”).

5. Conclusions

Only through a conscious planning mechanism can human beings actually consider the dilemma they are facing with regard to the conflict between economic goals and environmental protections. Furthermore, it is only through this mechanism that they can articulate their concerns and change their beliefs, values and demands through mutual interaction with other parties involved. The Climate Protection Agency would ensure that global limits, such as a cap on greenhouse gas emissions, are not experienced as external impositions but as part of the economic development one wants to create. It would help to materialize and concretize the abstract question of global warming, not just through its catastrophic consequences but as one element of a broader process of production and democracy – one that could be judged not purely on economic costs or gains.¹⁴ Furthermore, generally, decisions reached by negotiations and deliberation tend to be more robust and legitimate in the long run.

An additional benefit of the carbon forum model is that it would bring the discussion forward on issues of economic production, consumption and the global ecological

¹⁴ Unlike the neoclassical perspective that understands internalisation of externalities (in this case, global warming) through the price mechanism – and thus purely as a cost – the deliberative planning model would ensure, in a dialectical process, that the external constraints of climate change are integrated into the debates and negotiations through a variety of dimensions (ethical, aesthetic and social, etc.). See O’Neill (2007, pp.193-195).

crisis. Because of thirty years of neoliberalism, much of that discussion, taken from a critical perspective (on the left especially), has been dominated by individualistic solutions, localism or small-scale “alternatives” and, overall, a critique of growth (Albo 2007; Philipps 2015). One consumer-based solution that has been put forward in the last decade is individual rationing of greenhouse gas emissions, controlled through individual carbon ration cards. Such propositions obscure the political economy of capitalism by positing the prime responsibility of the consumer in creating greenhouse gas pollution – whereas investment decisions by capital owners are actually significantly shaping patterns of consumption and environmental destruction.

On the other hand, the very real – and sometimes apocalyptic – effects that unmanaged economic growth under capitalism has had, and continues to have, on working people and their environments has led many critical commentators and social movements to argue for “degrowth”, reduced consumption and alternative production and consumptions lifestyles (from an individual transformation perspective or on a more collective basis). If we want to move beyond a consumerist-based critique of growth (such as the “zero waste” or “ethical consumption” movements), we need to engage in an explicit and democratic debate about production. This debate needs to be conducted not just over what we should not produce (let’s ban cars or fight against “planned obsolescence”) – but first about *what should be produced*, in what *quantities* and *how*. The carbon forum would be a first step in that discussion, and hence it is a non-reformist reform that could create an impetus for broader demands for socialisation and democratization of economic decisions.

The carbon forum model starts from the basic human necessity to produce goods and services. But it does so by acknowledging, at the same time, the necessity of putting an overall cap on greenhouse gas emissions released in the process of producing and consuming these goods and on allocating this cap *through democratic means*. The question is therefore not any more about the dualisms of growth or degrowth, consumerism or its refusal, limits or freedom, etc. It is

transformed into a politically more interesting debate about what kind of goods and services do we need? How many? How do we produce them? And which ecological constraints do we accept to satisfy social needs? Unlike the liberal market solutions to this problem, which recognize the need to put some limits on consumption but implements these limits through the price mechanism or through individual allocation – thereby reinforcing the inequalities and waste produced by the market – the carbon forum proposition, which I have shown to be desirable, viable and potentially achievable, insists on democratic, deliberative and transformative means of implementation.

Acknowledgment

This work was supported by the Swiss National Science Foundation under grant n° 148071.

I would like to thank the organizers of the Geoforum workshop on “Rights to Nature”, on 23–24 June 2016 in Cambridge, Elia Apostolopoulou and Jose A. Cortes-Vazquez for a wonderful opportunity to discuss and exchange views. For comments on the paper and discussion, I would like to thank Erik Swyngedouw, Larry Lohmann, Noel Castree, Morgan Robertson, Emanuelle Leonardi, Greg Albo and Bengi Akbulut. I am extremely grateful to the two (patient) anonymous reviewers, as well as to Pdraig Carmody, that have greatly helped to improve the manuscript.

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