Challenging the European Climate Debate: Can Universal Climate Justice and Economics be Reconciled with Particularistic Politics?

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Abstract

Researchers from various disciplines have built impressive but distinct compendia on climate change; the defining challenge for humanity. In the spirit of Lord Dahrendorf, this paper represents the output of interdisciplinary collaboration and integrates state-of-the-art academic expertise from the fields of philosophy, economics and governance. Our focus is on Europe, which is widely perceived as a leader in climate change mitigation and adaptation. However, leadership weakness on climate over recent years, largely due to recession and political vacillation, is eroding this perception. What is needed is a firm justification for strong climate action, acknowledgement of the available tools, awareness of the reasons for our failures to date, and a realistic, but goal-oriented strategy for an integrated climate policy. We therefore present current normative insights from climate justice research highlighting the need to make institutions responsive to those most vulnerable; we discuss the economics of the transition to a low-carbon economy, pointing to key policy instruments and post-2020 climate targets for the EU; we contrast the normative and quantitative synoptic principles with the particularistic implementation schemes and politics of (not) implementing measures on the ground; and we suggest a careful coordination of European climate policies with acute challenges that could increase both climate justice and political feasibility.

Policy Implications

- Climate justice demonstrates that action on climate change is a moral imperative.
- Modern public economics provides a rich framework for examining the climate change problem through the lens
 of imperfect economies with policy for market failures.
- Politics remain inadequate, as specific implementation schemes follow rationales that are decoupled from synoptic moral and economic principles.
- Consideration of national and context-specific objectives when implementing climate policies could make their implementation more feasible.

The EU's role as a normative power and leader on climate change takes harsh blows. In international negotiations, such as the United Nations Framework Convention

on Climate Change (UNFCCC) summit in Warsaw, the EU struggled to offer a unified negotiating position and stronger emission reduction commitments for the



developed world. Even the cornerstone of the EU's policy leadership, the European Emission Trading System (EU ETS), is failing to send a strong signal that the EU is committed to the low-carbon transition. The economic crisis and deep European recession have reduced emissions. This in turn decreased the demand for emissions permits. which were already in oversupply due to over-allocation. As a result, the FU carbon price is too low to incentivize investment in low-carbon technologies. On the other hand, the recent decisions to backload some emission certificates (reduce supply over the short-term) and to implement more stringent emission standards for lightduty vehicles until 2020 demonstrates that progress is possible but difficult to attain. Further progress in implementing effective climate mitigation policies has to overcome considerable resistance across society: from the media to vested interests in high-carbon industry.

Different disciplines, literature and perspectives are engaged in investigating the European climate change debate. While there is a clear and common understanding of the importance of these different viewpoints, they are rarely integrated. For example, the philosophy of climate justice often identifies the nature of the moral imperative to action on climate change, leaving no doubt that failing to act despite sufficient knowledge wrongs others – future generations, and especially the most vulnerable - and would be morally inappropriate (Shue, 1999; Unger, 1996; Agarwal and Narain, 1991). Climate change economics, on the other hand, investigates the range of policies and investments necessary to avoid dangerous climate change and their costs and benefits. The Stern Review on the economics of climate change starts from a well-developed consideration of climate justice which explicitly considers the welfare of future generations, and demonstrates the potential of technology, especially of renewable energy sources (RES), to decarbonize the economy and provide 'co-benefits', i.e. benefits beyond climate mitigation such as improved energy security and public health (Stern, 2007; IPCC, 2011; Edenhofer et al., 2013). But the analytical focus of economic analyses (such as GDP level and CO₂ emissions) often leaves scarce space for other political considerations or (perceived) distributional concerns. In turn, then, the study of governance and politics provides important insights as to why certain political actors choose a certain stance on climate change mitigation. Importantly, in many cases climate concerns are muddled with other rationales. It follows that mitigation – as a goal that is costly in the short run with mostly long-term benefits – is often, and perhaps unsurprisingly, relegated as a policy priority. But, by this point, considerations of climate justice have usually been removed from any deliberations.

The Dahrendorf Symposium 2013, honouring Lord Ralf Dahrendorf, brought together researchers from climate justice, climate change economics and policy studies,

presenting various perspectives on 'Climate Change and Europe' on several panels. In this paper, we present key insights of each panel, consider their interrelation, and point to possibilities of reconciling universal principles with particularistic rationalities. We begin with an exposition of the climate justice argument and localize its universalist discourse in the European political space (referring always to the EU as political arena). We then identify crucial insights from climate change economics with a focus on the European power sector. The following section specifies why action remains stalled in the EU political arena. Last, we present a suggestion on how infrastructure investments could play a part in bridging the gap between political reality and climate justice in the European context.

Climate justice: inaction wrongs the most vulnerable

From an ethical perspective, climate change is perhaps the most vivid example that in today's causally interconnected world, traditional conceptions of justice will require a number of new and significant obligations — especially upon those in the developed world. While previous generations burned through massive quantities of fossil fuels in utter insouciance, it is now readily apparent that the status quo must change.

Such changes require more than a mere re-examination of prudence, because the agents most likely to exacerbate and perpetuate the problem of climate change are the least likely to suffer its most adverse effects (IPCC, 2013, WG 1, ch. 12). A geographical unevenness is found in the way climate change affects different parts of the world, with many developing countries most vulnerable to the most adverse consequences (Intergovernmental Panel on Climate Change, 2013, WG 1, ch. 12). Yet the disparity in climate change burdens will not be reducible to accidents of geography. It will not be merely an unfortunate coincidence that those most likely to suffer the worst effects of climate change (e.g., the marginalized, the young, the poor, future generations) are those who are least likely to perpetuate the problem. Ironically, the very same underlying social structures that lead to the privileged bearing a greater causal responsibility for climate change will also significantly exacerbates existing distributional injustices (Grear, 2014). This is where Europe's responsibility to act on climate change is arounded.

Of course, this trail of climate obligations has to end somewhere. In 2014, the mindset of many in Europe appears to be: 'We've done our part, at least for now.' Before the EU puts forward new, ambitious reductions targets, it should wait for the other major emitters, including developing countries, to take action. This mindset is easy to understand, but it is fundamentally flawed.



When accruing a benefit, such as the benefits one accrues when emitting green house gases (GHGs), it is unfair to shove the costs of achieving that benefit onto someone else, especially onto someone who has no opportunity to consent or someone who does not consent, does not stand to benefit, and will be harmed in such a way that their basic rights will be breached (Shue, 1999).

To say current governments and citizens of developed nations are complicit in this situation would be understating their role – they are not merely standing by and allowing injustice to continue when they could do otherwise, but instead are engaged in perpetrating injustice (Kutz, 2000, pp. 166–204). Current governments and citizens are, in a word, continuing to *participate* in injustice (Fruh and Hedahl, 2013, p. 278). In this, our morally interconnected world, one must be aware of alarming ways in which the merely aggregated effects of individual actions combine to violate people's basic rights, like the rights to physical safety and subsistence (Shue, 1996). This fact ought to change our assessment of what might have otherwise been a series of innocuous individual actions.

Unfortunately, the moral solution to the problems posed by considerations of climate justice is not a simple one. In more straightforward cases of injustice, a single action is causally sufficient to violate a moral claim right. The obligation correlated with that moral claim right thereby takes a particular form: a strict duty not to perform that action. This is the standard picture so familiar when moral claim rights correlate with directed obligations (Wenar, 2012). One agent's right to clean water, for example, creates in another a directed obligation to not pollute the water supply. Yet in the case of climate change, no single emitting activity is causally sufficient to produce a violation of rights – the violations only happen if many others also emit (Hiller, 2001, p. 21; Garvey, 2008, pp. 59-65). But there is also not yet any sense in which greenhouse gas emitters act irreducibly jointly, the way a nation does when it declares war (Fruh and Hedahl, 2013).

Yet the scale of action required is too large for any one nation or even blocs of nations to solve. Even if developed countries acted together and reduced their emissions to zero, developing countries would still need to make significant cuts in emissions before 2030 if there is any realistic chance of meeting global emissions targets (Romani, Rydge and Stern, 2012). In short, all countries must act if we are to tackle the climate change challenge. There are, nonetheless, numerous ways in which climate action could become collective; a collective agreement need not precede bold climate action. In fact, climate justice requires bold and immediate action on the part of developed and developing nations alike to ensure equitable access for both the present and future inhabitants of the planet.

The EU and European nations therefore have a moral obligation to help facilitate an effort on building these climate change coalitions and relationships for climate justice. Due to its social and economic capital as well as its unique institutional landscape, Europe is, in fact, perhaps best prepared to lead such an effort. Europe can and should take the lead in crafting a *global* rather than merely a *European* response to the climate crisis. The bottom line of this ethical analysis is quite powerful: there is an imperative to act and to act together; to not do so is not to merely do wrong; it is, in an important sense, to wrong others, to fail to regard their normative significance and the restrictions they place upon our normative freedoms.

Translating climate justice into European climate economics

We have established that climate justice points to the moral imperative of collective action on climate change (see also Stern, 2014). Given the scale of the problem, this collective action must involve all countries and sectors, but should be led by developed countries. Europe, in particular Germany, Denmark and the UK, has led by example with ambitious climate change policies and targets. These policies and targets are designed to foster a low-carbon transition, with progress to date most evident in the power sector. Many of Europe's climate policies and targets extend only to 2020. Ambitious policy commitment should continue beyond 2020, but there is disagreement on what those policies and targets and their level of ambition should be. This is leading to uncertainty around Europe's commitment to a low-carbon future. Principles from modern public economics can help guide decision-makers on the future of EU climate policy.

Clear and credible climate change policy designed to correct market failures, will start to trigger - there is already evidence of this across the EU - some or all of a range of dynamics, which are mutually reinforcing. These dynamics themselves cut emissions and incentivize further action. They include: learning-by-doing and induced innovation as a result of deployment of low-carbon technologies; a growing market size for green technologies; reduced competitiveness risks of early moving as others also act; green technology deployment leading to 'lockin' of new low-carbon networks and infrastructure and weakening of high-carbon networks; development of new institutions and skills; falling cost of capital as green technologies become mainstream and the political risk premium diminishes as policy becomes more stable, clear and credible. As these dynamic effects emerge they change the costs of and barriers to acting, e.g. innovation reduces the costs of technologies and reduces the need for policy support. And through this process people's expectations begin to shift towards a strong and

inevitable transition to a low-carbon economy. This shift in expectations is powerful; the expectation of some or all of these dynamics changes behaviour, which, in turn, reinforces and supports these dynamics, driving a market-led low-carbon transition forward. This is a brief outline of the economic story of transition to a low-carbon economy.

But such a transition is not without strong barriers that may prevent – perhaps even stop many of these dynamics and lead to expectations of a continued high-carbon path. Such barriers include strong political factors, such as powerful vested interests, and other economic factors, such as lock-in and path dependency associated with incumbent high-carbon networks and high marginal costs associated with early deployment of new low-carbon technologies.

Well-designed climate policy in the EU can help foster these dynamic effects and shift expectations, thereby helping to overcome these barriers. The main policy tool to foster the low-carbon transition is the EU ETS; the EU ETS addresses the main market failure, the emission of greenhouse gases, by placing a price on these emissions. However, the ETS carbon price has collapsed in recent years, reducing its effectiveness. This collapse is largely due to the over-allocation of permits and to the recent recession. Due to these limitations, many have called for ETS reform (see e.g. Taschini, 2013). A strong EU greenhouse gas target for 2030 of at least 40 per cent, with minimal international offsets, could help to restore confidence in and effectiveness of the EU ETS and shift expectations towards a stronger carbon price in the future.

Climate change policy must go beyond a price on emissions of GHGs as there are a number of additional market failures that the EU ETS does not address. Each market failure must be identified and policies carefully designed to tackle them in a cost-effective way. Important market failures include spillovers in research and development (R&D) and inability to capture patent benefits fully, infant industry-related market imperfections, network issues and barriers, imperfect competition, etc. (e.g. Kalkuhl et al., 2012). Policies for the market failures may include R&D tax breaks, public-private R&D partnerships, subsidies for deployment of new low-carbon technologies, green investment banks and so on. The combination of these policies to tackle the market failures – if designed well – will send clear and credible signals to the market, shift expectations and reduce the costs of acting.

Key emitting sectors include transport, power/energy and agriculture and policy is required in all three. There is a strong case for tilting the focus of policy to prioritize decarbonisation of the power sector. This sector, contributing most in terms of GHG emissions, has several unique attributes that in combination may provide justification for such a focus.

First, there is a range of market failures in this sector. Some may be unique (e.g. failure to provide adequate capacity) and others subject to asymmetric responses (e.g. failure of long-term finance; for a discussion see Fkins, 2004). Second, market failures in the power sector. may be easier to tackle than those in other sectors, in the sense that we know more about what we have to do (we have more experience) and where we need to go. Other sectors, like transport, involve myriads of endusers, which are less important in the case of the power sector. Nonetheless, addressing the market failures is also possible in the transport sector, and is already done successfully to some extent (see e.g. Creutzig et al., 2011; Flachsland et al., 2011). Third, this sector is systemically important to the decarbonisation of the broader economy, particularly transport and heating, via a switch to electricity use, so we must get its decarbonisation right. Fourth, there are other important political, economic and social objectives that can be achieved from decarbonisation of this sector, including energy security, reduced exposure to fossil fuel price volatility, reduced local air pollution, employment, access to new low-carbon markets. Fifth, energy capital assets are mostly large and stationary, long-lived and owned by relatively few firms, implying it may be easier to design and target policy for this more concentrated industry (even though a transformation would have to challenge its very foundations).

The most suitable policies for tackling the market failures in this sector will involve R&D public–private partnerships, feed-in-tariffs and other support mechanisms, renewable certificates, contracts-for-difference and capacity markets. As these policies may interact with the EU ETS, there is also a case for adjusting the EU ETS cap to ensure the carbon price does not fall below the assumed marginal damage caused by emissions in the covered nonpower sectors.

There is also a strong case for a decarbonisation target for the power sector (see Rydge, 2013). There are several key reasons why a target may be warranted: targets have proved to be resilient; they guide the design of low-carbon energy support policies; they provide long-term clarity and certainty to investors (it would signal the EU's investment priorities, which may help to reduce risk for investors); they help alleviate market short-termism/myopia and deflect any political vacillation; they reflect other power sector objectives, e.g. energy security; and, they signal the EU's commitment to strong international action on climate change. In other words, a power sector target for 2030 could reinforce the incentives from underlying policy. This target would help to align expectations that the EU is committed to a low-carbon energy transition, and, in turn, encourage more stable, clear and credible policy. This reinforcement is particularly valuable in the early stages of the transition where expectations may be stubbornly fixed on the existing high-carbon



path and where action to change those expectations faces powerful political economy barriers, including a lack of political will. During this period vacillation on policy is likely to lead to higher costs of acting and delay the transition. To reduce resistance, a decarbonisation target should take into account important differences between EU member states in terms of the way their power sectors are organized (energy mixes, ownership structure) and their capacity to afford the low-carbon investments required.

The politics of nonaction

If we accept and understand the pressing need to act – to protect the climate, to mitigate dangerous climate change and to adapt to the inevitable consequences the lack of action might seem surprising. But philosophically grounded and high-minded ethical considerations and abstract economic models often give way to much more mundane political issues when it comes time to implement climate policy or to agree on binding goals (Bulkeley and Newell, 2010). Calls to action (Speth, 2008; Hansen, 2009), depicting the tragic consequences of our inability to act, too often appear to fall on deaf ears. Likewise, framing climate change and extreme weather events as security issues seems to not mobilize action to a satisfactory degree. Climate change as a security issue is either not vet treated as a serious issue, or still too difficult to comprehend in terms of its impact on fundamental (geo)political premises (Dalby, 2014).

The global climate treaty negotiation process under the UNFCCC has seen growing criticism from both activists, NGOs, media, scholars and politicians, especially after Copenhagen in 2009 (Bierman et al, 2010; Falkner et al., 2010; Neuhof, 2011; Gupta, 2012; Harris, 2013). Analysts give different explanations for the slow down of the global negotiations (for a review see: Bernauer, 2013). Some explanations emphasize the peculiar nature of the atmosphere as a global common and collective action problem (Sandler, 2004, pp. 212-234), others highlight the complexity of multinational negotiations (Michaelowa and Michaelowa, 2012). Other analyses point to the capitalist/consumerist social order (Newell, 2012), while some theorists diagnose an intrinsic problem in an international system in which individual nation states are encouraged to pursue narrow self-interest rather than to cooperate (Harris, 2013, pp. 33-63 calls this the 'cancer of Westphalia').

The EU has long presented itself as a leader in climate policy – even when doing so implied undertaking unilateral commitments (Schreurs and Tiberghien, 2007; Oberthür, 2008). However, this historical presentation has recently been challenged. Some observers note that the EU is no longer *the* global leader because its hesitation has allowed other major players to outrace the 'old

continent' (Bals et al., 2013). Others point to internal differences within the EU, where climate considerations interact with domestic economic interests, country-specific energy provision goals and different interpretations of energy security – ranging from economic affordability to strategic autarchy.

Recently, European climate and energy policy have been increasingly criticized. As debates unfolded regarding reforming the EU ETS, developing a roadmap and targets for 2030, and hosting the UNFCCC's 19th Conference of the Parties (COP19) in Warsaw, the number of those who argued in favour of doing less increased due to concerns of affordability, competitiveness and efficiency. While some of these arguments originated from powerful industrial lobbies, we cannot dismiss them all as misguided self-interested responses of the rich and powerful. In the context of the eurozone crisis and the wider economic slow-down, arguments about the unfair burden sharing in EU's climate protection efforts are hard to ignore.

Although universal considerations of climate justice and fairness need to be considered, other, more local, ideas of fairness and justice need to be taken seriously as well (compare: Braun, 2014). The anti-Brussels (and often anti-Berlin) counternarratives that emerge from the European 'periphery' (e.g., Southern and Central-Eastern Europe) show that intra-European equity and development is also significant for considering realistic climate action. It is no coincidence that countries geographically and culturally as remote as Cyprus and Poland ally in efforts to block legislation their leaders perceive as harmful (in this case – the backloading of emission permits) (Deutsche Welle, 2013).

The framework of debate matters. In this case, economic wellbeing and development contrasted against strict austerity policies and supposedly constraining carbon-oriented energy regulation frames the ways in which politicians communicate with their growingly concerned constituencies (Skovgaard, 2014). In the policy arena, climate policies are always integrated with other concerns.

Comparing Germany and Poland in this regard can be quite telling, for doing so can explain many of the problems of European climate policy. Germany has long adopted a pro-active stance, both at home — with its ambitious project of energy transformation (so far based mostly on nuclear phase-out and rapid renewable energy expansion) — and abroad — in the EU and international bodies like the International Renewable Energy Agency (IRENA) (Roehrkasten and Westhpal, 2013). The justification for the transition has so far focused on a climate-centred rhetoric with industrial interests garnering only peripheral consideration. This strategy seems to be reaching its limits, however, given domestic hesitation and regional reluctance to follow Germany's lead. For some time, Poland has questioned if not the entire idea

of climate policy at least its current European manifestation. Two vetoes on common energy and climate strategy had made the government in Warsaw the object of transnational shaming, but Poland's communication is fairly consistent: climate policy induces costs. (Co)benefits are simply not an important part of this framing – they are either denied or not discussed at all.

The clash between those two visions of how climate and energy policy ought to influence the economy seems to be at the heart of the problem (Braun, 2014). While the general economic objection against climate action can be easily rejected (the Stern review shows that tremendous future harm can be avoided by low overall reductions in GDP), particular national and regional conflicts of interests are nonetheless substantial and need to be taken seriously.

A specific incarnation of this conflict takes place over German-Polish electricity interconnectors (Puka and Szulecki, 2014). A third connector between the two countries would be mutually beneficial, potentially reducing the cost of power provision and enabling better handling of renewable energies. Nonetheless, the installation proves to be politically challenging. The rapid expansion of renewables in the scarcely inhabited German regions close to the Polish border are seen as the source of large scale unplanned electricity flows causing coordination problems for the Polish (and other central-Eastern Europe) transmission system operators. This assessment adds to the perception of renewables – a tool of climate policy – as destabilizing and problematic (Ancygier and Szulecki, 2014). The issues are not, however, limited to concerns about narratives. In Germany, the energy transition had significant implications for the political economy of the energy sector. Large utilities, not long ago forming a quasi-oligopoly, are now seen as losers of changes in policy, as they watch much of their conventional capacity pushed out of the power market by renewables. The latter are largely owned by small investors, farmers, or private households, and on some days in the year they cover over a half of Germany's peak demand for electricity. In contrast, Poland's energy sector is dominated by four semi-public coal-based energy companies. Opening their market to other investors, farmers, and households is not in their economic self-interest and not in the interest of the state treasury either - because most of their profit is paid back to the national treasury as dividends. Even though infrastructural investments in the ageing system are badly needed, under the current economic conditions, maintaining existing coal plants and welltrodden governance paths thereby becomes a priority of the political elites.

Indeed, on a larger scale, the European economic crisis provides crucial contextualization that can help elucidate the lack of ambition in EU climate policies. After the financial meltdown of 2007/2008 led to a trans-Atlantic

nationalization of private bank debts, many European states, especially those in the geographical periphery, went into a deep and enduring recession with high unemployment and imposed austerity policies. Under these conditions, recession-hit countries feel that they simply do not have the funds to invest into low-carbon climate policies. Today's crises take precedent over tomorrow's.

Reconciling the universal principles with the particularistic politics

Our analysis reveals a discrepancy between synoptic views: universal justice principles and universal economic approaches (carbon prices), and particularistic conflicts. interests and perceptions. The synoptic views understand the wholeness of the situation and offer globally applicable remedies. But these remedies may not always be directly applicable to the specific situation as experienced by EU member states. It seems then that the justified principles of climate justice and the convincing approach of climate economists rely on contextualizing the particularistic political situations. The discrepancy and tension between the universal and particular has deep historical, religious and legal roots, shaping international law (Paz, 2012). Hence, the implications of the tension between universal principles and specific circumstances with contextualized regulation on governance cannot be underestimated. How then could reconciliation be achieved?

It is clear that particularity in political challenges demands particularity in political solutions. As such it would be misleading to provide a one-size-fits-all approach towards achieving sufficiently ambitious European climate change mitigation. Nonetheless, important instruments such as carbon price might be necessary ingredients towards a morally imposing goal - climate justice. One specific clue of how to integrate the European political and economic particularities in the power sector might come from recognizing that the dominant issue many European states have to worry about involves fundamental economic problems of high unemployment and deteriorating social security. Starting with this observation, we can develop the hypothesis that a sophisticated contextualization of low-carbon infrastructure with debt crisis policies could provide the political support for realizing high renewable penetration targets within the EU – while considering the impacts of climate justice and fairness across Europe, the EU and its periphery (Creutzig et al., 2013; cf. Coats, 2013). Modelling studies have revealed that - given the substantial uncertainties - an increased investment into photovoltaic energy in Southern Europe could be part of a cost-efficient European energy transition (Schmid and Knopf, 2013; Knopf et al., 2013). At the same time, economic analysis suggests that increased stimulus investments into European debt crises



ridden states could reduce unemployment and relieve the deep recession (Koo, 2011; Andersen et al., 2012). This argument of catching two European birds with one renewable stone (Creutzig et al., 2013) must be taken with care since, to this point, uncertainty on assumptions and model structure has made a systematic quantitative analysis infeasible. Nonetheless, fostering climate change mitigation within the context of relieving the European debt crisis appears to be a reasonable approach to overcome political barriers in the geographical and economic European periphery.

A co-benefit approach is even more attractive on smaller spatial scales, particularly in cities. Research consistently demonstrates that the local benefits of climate change mitigation action are likely to outweigh the global mitigation benefits. For example, albedo modifications in European cities could substantially reduce the heat stress of citizens while also marginally reducing global temperature (Susca and Creutzig, 2013). A systematic remodelling of urban transport systems in European cities – by relying on pricing, infrastructure investments and landuse policies - could achieve more than 60 per cent reduction in per capita transport emissions between 2010 and 2040, while delivering accessibility benefits, reducing the dependence of imported oil and substantially increasing public health within these cities (Roias-Rueda et al., 2011; Creutzig et al., 2012). The problem that still remains, as the German-Polish infrastructure development illustration has shown, is that these co-benefits need to be made part of the calculation, and this requires careful analysis of an integrated climate policy for Europe.

Conclusions

James Scott points out that certain schemes to improve the human condition have failed precisely because their universal ambition makes them blind to the particular (Scott, 1998). Development of any kind has failed to reach many of the most vulnerable, and in some cases when some forms of development have arrived, they have not improved the wellbeing of the society but instead have led to unsustainable changes in living practices, a loss of culture and irreversible environmental damage. To counter the unwelcome side-effect new concepts of sustainable, low-carbon and resource efficient growth paths designed to reduce emissions, increase resilience to climate change and overcome poverty have been developed. These themselves risk becoming too undifferentiated in their implementation, yet another universal approach to improve the human condition. To avoid a similar fate, therefore, those proposing and designing alternative development models must incorporate flexibility that is responsive to the idiosyncratic development and cultural needs of particular societies.

In this article, we attempt to allow for such flexibility by demonstrating that the universal ambition of global climate change mitigation is firmly rooted in climate justice, that overarching economic principles are well-suited, perhaps even necessary, to mitigate climate risks, and that an appropriate low-carbon transition can ensure we overcome poverty and protect our atmosphere and environment. By considering the example of the European power sector, however, we also recognize that particular political contexts can slow down mitigation efforts even bring them to a halt. We argue that the conflict of the particular political needs and the universal climate change mitigation goal must transition to a productive debate of how to synthesize local needs, national perspectives, and global ambitions. In other words, policies and measures to address climate change must start with but go beyond synoptic economic prescriptions based on 'first-best', ideal efficiency considerations, for such prescriptions will almost assuredly fail. Modern public economics has much to teach us here as it is framed in the context of imperfect 'second-best' economies. Beyond public economics, however, also the idiosyncratic character of region-specific politics and their multiple objectives (e.g. energy security, health) need to be analyzed. Crucially, the high dimensionality and idiosyncratic character of the challenges often require qualitative judgment, rendering quantitative formal analysis a supportive

We also hope that this short perspective initiates further discussions of how to integrate different disciplinary perspectives in academia – and how to co-align political goals across spatial scales. There is no problem more suited to such interdisciplinary perspectives than the current climate crises. We believe that without such integrations, our efforts to tackle the enormous challenges that climate change poses are much more likely to be in vain.

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