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The quandaries of transformation.

On the socio-ecological dilemma of simultaneity

Abstract

This paper provides a specific sociological explanation of the failing in effective climate protection, analysing the unique societal constellations in which a socio-ecological transformation is embedded. Starting with the urgent calls by the IPCC for rapid and far-reaching transitions across all sectors and systems of society in the current decade, the paper explains why such disruptive change is rather unlikely. Since a fundamental ecological turnaround has to change economics, politics, cultural lifestyles and technical infrastructure at the very same time, socio-ecological transformation is confronted with the dilemma of simultaneity. This precarious figuration of an ecological change gives rise to certain quandaries of transformation as capitalism, climate protection, sustainable life conducts and democracy cannot be smoothly reconciled and coordinated. Therefore, realistic transformation strategies should tackle this dilemma from the outset and strive to avoid getting completely entangled in its quandaries. As outlined in the final section of the paper, sustainable infrastructure and strengthening the common good could be viable ways to navigate the dilemmas of socio-ecological change more effectively.

Keywords: Socio-ecological transformation, transformation research, climate change, theories of social change, infrastructure

Effective climate protection has apparently been a largely unsuccessful endeavour which all too often fails to fulfil its own aspirations. In their *2024 State of the Climate Report*, leading climate scientists have once again summarised the dramatic situation that our failures in climate protection have got us into:

> *"We are on the brink of an irreversible climate disaster. This is a global emergency beyond any doubt. Much of the very fabric of life on Earth is imperiled. We are stepping into a critical and unpredictable new phase of the climate crisis (…) Fossil fuel emissions have increased to an all-time high, the 3 hottest days ever occurred in July of 2024, and current policies have us on track for approximately 2.7 degrees Celsius peak warming by 2100. Tragically, we are failing to avoid serious impacts, and we can now only hope to limit the extent of the damage (…) We find ourselves amid an abrupt climate upheaval, a dire situation never before encountered in the annals of human existence"* (Ripple et al., 2024, 1).

The reasons for this kind of an existential failure are widely discussed in academia and the public alike, whether it is about the economic interests of fossil fuel industries and the states that support them, the incompatibility of the economic system of capitalism with nature and climate protection, or the cultural hegemony of a way of life based on constantly increasing amounts of goods and growing consumer options.

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There is nothing wrong with these explanations. However, from a sociological perspective, they are not specific enough to identify the obstacles that purposeful climate policy faces. Sociology generally attempts to explain the structural conditions of human action, characterised by the specific constellations in which social actions are intertwined. Norbert Elias (2006a) refers to this connectiveness of human actions as "figuration" – as specific orders of interdependence, which usually arises from long-term processes of social change.

A characteristic feature of the specific figuration of an ecological turnaround in modern societies is – and this will be the main topic of my paper – that radical changes in very different areas of human action must occur simultaneously within a very short period of time. This unique challenge gives rise to certain quandaries of transformations that are a major reason for the failures in climate policy – quandaries that neither climate research nor sociology or the general public are hardly aware of.

In the following, first I will describe in greater detail the extremely complex point of departure of the urgent ecological change (1.), then I will draw on sociological theories of social change to highlight the extraordinary and unprecedented challenges that characterise an ecological transformation (2.). A comparison with the findings of previous transformation research shows that attempts at radical change in climate and environmental policy lead to a specific socio-ecological dilemma of simultaneity (3.). The numerous impasses and quandaries arising from this dilemma (4.) are analysed using the example of the failure of "green capitalism," which ultimately leaves behind only inadequate piecemeal in climate policy (5.). However, the dilemmas of socio-ecological transformation do not mean, that essential progress in securing our planetary livelihoods is impossible. Therefore, the conclusion describes some realistic steps towards an ecological turnaround (6.).

1. The urgency of combating climate change

The starting point of my analysis is a well-known statement made by the IPCC in its last *Synthesis Report* of March 2023 (IPCC, 2023) namely that the key to socio-ecological transformation today lies solely with societies themselves, but that they are incapable of creating the necessary preconditions for effective climate change mitigation. According to the IPCC, combating climate change no longer poses intractable problems from the perspective of the natural sciences, even if prognoses about the impacts of climate change do fall along a certain range. Technologically speaking, there are sufficient ways to decarbonise energy supply, manufacturing facilities, and infrastructures. In terms of finance, immense amounts of capital worldwide are available for investments in sustainability – although the IPCC deplores that financial flows with an ecological orientation have been entirely insufficient thus far. Above all, however, the political will is lacking to use

the existing climate change mitigation tools effectively and to actually tackle the socio-ecological transformation.

These preconditions would be met if there were broad consensus within societies that climate change mitigation and a sustainable lifestyle and economic system were a priority. However, as we all know, this is not the case. Instead, climate change mitigation and sustainability are highly controversial – not only in the political sphere between parties, electorates, institutions, interest groups, and the climate movement, but also in society itself, between different social milieus, various economic interests, cultural needs and normative values.

The fact that all actions for climate change mitigation must be taken simultaneously if the most serious impacts of global warming are to be prevented complicates the situation even more. So once again, the IPCC has called for "rapid and far-reaching transitions across all sectors and systems" of society in the current decade "to achieve deep and sustained emissions reductions and secure a liveable and sustainable future for all" (IPCC, 2023, C.3). Any increase in global warming, be it ever so small, would drastically boost the risks of climate change, trigger cascades of probably unmanageable states of emergency, and shut the window of opportunity during which it would still be possible to prevent the most serious ecological crises and catastrophes. Moreover, the decisions taken in this decade would not only affect the present and the near future, but also determine the condition of the Earth system "for thousands of years".

The IPCC statement is followed by an extensive list of measures calling for sweeping and, in most cases, immediate steps to curb global warming and comprising practically all areas of economy, society, and policy (cf. ibid., C.3.1.). They include, among others, rapid decarbonisation of industry; restructuring the financial sector towards sustainable investments; low-emission energy supply, mobility systems, and infrastructures; biodiverse agriculture and global protection of water bodies; ecological restructuring of cities; strict climate governance in all political institutions; social actions to enhance resilience; and, finally, reductions of consumption as well as "behavioural and lifestyle changes".

That the IPCC is calling for such rapid and far-reaching change is not only evident from its latest synthesis report. In its previous assessments, it also called for simultaneous action in all societal sectors, as this would be the only way to bring the multiple causes of the climate crisis under control. Other voices in the climate discourse argue in a similar way as well. For example, in its 2021 decision on climate change mitigation, the German Federal Constitutional Court said that in the interest of respecting future freedom "in all areas of life – production, services, infrastructure, administration, culture, consumption –" developments of purposeful climate change mitigation need to be set in motion to initiate the transition to climate neutrality in good time (cf. BVerfG, 2021).

2. An unlikely transformation

What governments, civil society, and the private sector are being asked to do here goes far beyond everything that modern societies have experienced in terms of social change, and this in multiple ways: First, changes are not to be made incrementally, that is, gradually and step by step, but disruptively, that is, directly and discontinuing previous development paths; second, not as a self-directed process that defies overall planning, but as one that is intentional and governed; and third, not as a series of societal changes in individual areas at different times, but as necessary transformations in all areas of society at the same time.

From the perspective of Norbert Elias's sociology, this kind of a planned social change in such a short period of time can only be described as an illusion. According to his theory, social developments are certainly structured, but unplanned overall (Elias, 1977). Even planned human action is always directed anew into completely unplanned tracks, since action in figurations has a certain autonomy and is therefore confronted with countless unintended consequences. Moreover, Elias understands social change as a long-term development, at least over three generations, as he has emphasised at various points (see for example Elias, 2006b, 109). However, three generations from now would be far too late for the urgent turnaround in climate policy.

Another complicating factor is the global dimension of this rapid transformation fundamentally affecting all societies worldwide and in particular countries of Europe, North America, East Asia, and other major emitters. However, the conditions for initiating this transformation are completely different in each of these countries. Moreover, every implementation of transformation steps in one country is dependent on developments in other countries or regions of the world, just as the success of climate protection can ultimately only be measured in global terms, which individual countries can influence only to a limited extent. This is a hyper-complex type of interdependence to which a sociology without globalisation such as Elias's approach has hardly an answer.

The Paris Climate Agreement addresses this global dimension of the ecological challenges by means of a system of temporal stages of emission reductions. Joint responsibility for the climate is to be executed through different speeds of reduction, whereby the countries that industrialised early on and those with the highest emissions are assigned a pioneering role. Nevertheless, the heterogeneity of global spaces introduces a completely new level of complexity to the ecological turnaround never seen before. The unlikeliness that ecological change can take place simultaneously all over the world within just one decade does not become a realistic expectation if it is staggered over time.

Taking a glimpse into the history of modern societies shows how low the probability of such a socio-ecological transition is, even in individual countries. Social

change has mostly occurred as processes driven by internal dynamics whose complex consequences hardly anyone was able to predict and which were often unintentional and even undesired. Few people could have imagined what the World Wide Web would mean, for example. Even in 2001, some futurologists predicted that the Internet boom would soon come to an end (Der Standard, 2021). What is more, social change has often taken place slowly and bit by bit, and was often noticed only when it had actually already occurred long before. Thus, historical research has shown that the cultural upheaval in the West associated with the year 1968 had already begun in the second half of the 1950s (Kraushaar, 2008). Wars and revolutions are exceptions to such slow transitions, but it is true of them too that their consequences have rarely matched the respected expectations. Finally, many areas of life have remained stable even in phases of accelerated social change, whereas others have radical changed within a short time. The globalisation of markets that started after 1990 still has not reached every corner of local life-worlds.

The socio-ecological transformation, by contrast, intends to achieve a planned transition across the board in a short time because incremental changes are too slow and too uncertain to be able to limit global warming at least to less than 2 degrees. Furthermore, it demands simultaneous transitions across all sectors since there is practically not a single area of society that does not contribute to the climate crisis in its own way. In the age of the Anthropocene, the causes of global warming are intertwined with human activities to such a profound and complex extent that hardly any sphere of action can be excluded from the pressure to achieve rapid change. These simultaneous causes of climate change are matched by its catastrophic consequences, which are described in climate research as the simultaneous mega-crises of a "climate endgame" (Kemp et al., 2022), accompanied by a social collapse that could be the last in the long human history of societal breakdowns (cf. Kemp, 2025, 303 ff.).

The socio-ecological transformation is therefore situated in a circle of simultaneities, and we do not know whether it might prove to be a vicious circle: through their emissions, practically all social systems are inducing climate change which in turn can take the form of simultaneous extreme climate events. Climate policy can react only by attempting to change all these systems at the same time. Since a fundamental ecological change of society means that absolutely everything is interconnected, it inevitably leads to conflict with many strongly articulated interests in society and provokes resistance on all sides. The enormous scope of a socio-ecological transformation gives rise to countless conflicts that cause heated debates about every single measure in every conceivable area of life. When have modern societies ever been in a comparable situation, where literally everything, from the rules of economic activity to technical infrastructure to cultural lifestyles have been called into question? When have modern societies – to use a term from Elias – ever been entangled in such a "double bind", in which ecological dangers create tremendous pressure for change, to which societies in turn can only react with immense levels

of stress, leading to a probably uncontrollable cycle of escalation? When have actors ever been in such a precarious figuration?

3. Transformation research

Societal figurations that would even be roughly comparable to the challenges of the socio-ecological transformation are extremely rare. If we seek examples in more recent history, we find certain areas of political science in the 1970s that already used the term "transformation research" (for an overview: Merkel, 2010). This research addressed the changes of political system in countries such as Greece, Spain, Argentina, and Portugal following the overthrow of longstanding dictatorships. However, the sudden transformation concerned only the political system and the introduction of democracy, whereas the economy and cultural lifestyles remained largely untouched.

This was somewhat different after the collapse of the Soviet Union and during the system change in former state-socialist countries, which initiated a second wave of transformation research. The post-socialist societies found themselves confronted with having to change the political and the economic system at once. This meant establishing capitalism and democracy simultaneously, although capitalism had never been established by democratic means and always preceded democratisation.

In 1991, following a central idea of the Norwegian sociologist Jon Elster, Claus Offe described this quandary in a seminal essay:

> *"A market economy is set in motion only under predemocratic conditions. In order to promote it, democratic rights must be held back in order to allow for a healthy dose of original accumulation. Only a developed market economy produces the social structural conditions for stable democracy and makes it possible to form compromises within the framework of what is perceived a positive-sum game. But the introduction of a market economy in the postsocialist societies is a "political" project, which has prospects of success only if it rests on a strong democratic legitimation. And it is possible that the majority of the population finds neither democracy nor a market economy a desirable perspective. If all of those propositions hold true at the same time, then we are faced with a Pandora's box full of paradoxes, in the face of which every "theory" – or, for that matter, rational strategy – of the transition must fail"* (Offe, 1991, 881).

According to Offe, particularly during the phase of its establishment, capitalism gives rise to serious social upheaval. That is why it is hardly possible to introduce it through democratic processes: if capitalism depends on public support in places where it does not yet exist, then most people will decide against it. Yet after 1990, the establishment of capitalist markets was politically wanted. For this reason, the new economic order required a certain legitimation – but democracy stands precisely in the way of obtaining it. Offe called this complex situation where various goals block each other the "dilemma of simultaneity" (ibid., 872): if capitalism and democracy do not develop one after the other, but at the same time, they impede each other.

The extent to which this dilemma of simultaneity hampered the further development of post-socialist countries became apparent in the following decades. Under Putin's rule, Russia saw the emergence of a mafia-like form of plunder capitalism with neo-imperial goals. Other Eastern European countries sacrificed the principles of liberal democracy to nationalism and combined neoliberal economics with autocratic governance. In many countries and regions of the former socialist bloc, right-wing extremists have won relative majorities in elections.

4. The uncertainties of socio-ecological transformation

In comparison, the turbulences that makes the socio-ecological transformation necessary in the age of the climate crisis seems less fundamental at a first glance. The simultaneous transition "across all sectors and systems" of society, which the IPCC is calling for, concerns neither introducing an entirely new economic order (which in this case would amount to abolishing capitalism) nor replacing the democratic political system with a different one. Neither capitalism nor democracy are to be superseded by other systems. However, what is not the aim of an intended societal change may well be its unintended side effect – desired by some, but not by others.

Whether capitalism is even capable of surviving a shift away from an economic system based on unconditional growth and to achieve sustainability is an open question. Parts of the climate movement and supporters of degrowth or eco-socialism advocate a sustainable economy beyond capitalism, but ultimately hold a minority position in the climate debate (cf. for example Schmelzer et al., 2022; Brownhill et al., 2021). Others expect capitalism to collapse under the weight of environmental destruction and be replaced by a state-directed ecological war economy (cf. Moore, 2015; Saito, 2024).

Just as uncertain is the fate of democracy. Some critics of growth economy view democracy as nothing less than the very cause of the climate crisis, as it is unable to prevent citizens raising their ambitions to ever higher levels of prosperity. Some of these critics argue in favour of a kind of an ecological rule by elites that is intended to restrict people's needs and desires (cf. Blühdorn, 2022). This corresponds to numerous views in the public that democratic politics, due to its dependence on elections and its timing in legislative periods, is hardly in a position to sustain a basic ecological orientation in the long term and to grasp the enormous time horizons of climate change at all (for a critique, see Battistoni & Britton-Purdy, 2020). Views of an "ecological ungovernability" could allow authoritarian forces to dismiss the rules of modern democracy as incapable for crisis management. Dictatorships and autocracies thrive on states of emergency: they give them the opportunity to use a distress situation to readjust the rules of governance and secure largely unlimited powers for themselves.

In light of the climate crisis, capitalism, the protection of ecological livelihoods and democracy could come into conflict with one another, with one being sacrificed

for the other. The dilemma of simultaneity has now returned in the form of a trilemma, as the repugnance of no less than three factors that cannot be reconciled. If, within a decade, the economy is to be committed to sustainability and political institutions to climate protection, if infrastructure must become emission-free and cultural lifestyles as sufficient as possible, then disruptive changes will occur in a variety, profoundness and urgency that cannot be coordinated smoothly. Politics and economy are joined by technology and culture – such a programme of radical change has never been on the agenda before!

5. The supremacy of the piecemeal approach

Even today, the socio-ecological dilemma of simultaneity is to be seen in more than a few episodes of current climate policy. Take, for example, the concept of 'green capitalism', which most Western governments are pursuing when it comes to ecological matters. The assumption is that further economic growth and the ongoing expansion of markets, production and consume can be harmonised with climate protection by means of ecological modernisation, that is technical innovations and market instruments. These ideas have dominated the Western world in particular for more than twenty years.

What this concept has achieved so far, however, is more than disappointing. In 2023, global greenhouse gas emissions hit a new record high, oil consumption continues to increase every year, in 2022 more coal was burned than ever before in human history (CLICCS, 2023; Friedlingstein et al., 2022). Not even green capitalism has been able to change these trends. In the US and the European Union, emissions have decreased slightly, but far too little to achieve the climate goals that these countries have set themselves (Statista, 2025a; EEA, 2023). According to recent climate research findings there is a 50 percent probability that the global CO_2 budget remaining to achieve the 1.5-degree target will be exhausted in just five years if no significant changes are made (CLICCS, 2023). As it stands today, in order to stick to 1.5 degrees, the global economy would have to be completely climate neutral by 2030 – which is a completely unrealistic assumption.

Where sustainable technologies are actually applied, they often do not contribute to climate change mitigation. Resource efficiency comes to nothing if it is eaten up by increasing amounts of goods. Even green capitalism's flagship project of emissions trading has proved to be a failure in many cases, or at least has not really been able to actually halt climate change. Since emission certificates can be sold at a profit, it is not surprising that emissions trading has not yet achieved sufficient carbon reductions and in practice serves at least as much to enable emissions as to prevent them. In this respect, experts speak of the so-called "waterbed effect": if emissions are depressed in one place, they rise in others because there is still an oversupply of emission certificates as not to harm business interests.

Since climate damages due to greenhouse gases are so enormous, carbon prices would have to rise very sharply, which could wreck down entire industrial sectors and also large population groups that cannot afford such an increase. Carbon pricing could only work in a just way if it goes hand in hand with far-reaching economic redistribution – but this is exactly the opposite of what the liberal proponents of emissions trading want.

Thus, if the economy were restructured to pursue green growth, then emissions and environmental damage would not be reduced sufficiently to slow down the climate crisis. But if climate protection were given top priority and energy prices were increased significantly to remove fossil fuels from the market, there would be immediate resistance from large population groups who would lose a significant amount of income because of high carbon prices. Climate policy would be the driver of increasing inequality and a further alienation from democracy. If, on the other hand, the goal were to achieve an economic redistribution at the expense of the rich in order to finance effective climate protection, the economically strongest interests would use their political veto power precisely to prevent this. Decarbonisation would thus be pushed further into distance, just as ecological emergency regimes could approach under the sign of an impending climate catastrophe. Thus, there are many reasons to believe that, from a sociological perspective, 'green capitalism' is similar to the theoretical model of 'Schrödinger's cat' in physics: a state in which it is both alive and dead at the same time.

Very similar problems arise with regard to civil society and its diverse forms of life conducts. Raising the prices of environmentally harmful practices such as air travel or meat consumption and setting ecological limits on mass consumption and emission-intensive mobility would have little impact on the wealthy, who can afford high prices for climate-damaging activities. In lower classes, on the other hand, renunciation is seen as an attack on social participation and calls for sustainability are viewed as an attempt to undermine the respectability of their way of life. Conversely, despite their high consumption of resources, green middle classes regard mass consumption as complicit in environmental destruction and discredit it as irresponsible. Thus, disputes over life conducts leads to divisions in the efforts to preserve the ecosystem as long as these efforts cannot be transformed into a social project for a better life of all.

All of this teaches us that the socio-ecological dilemma of simultaneity will not be resolved by attempting to take all conflicting interests into account or even to fulfil them alike. After all, the dilemma consists precisely in the fact that this will hardly be possible if we do not pursue illusions or pipe dreams. Using the example of poorer countries, Albert O. Hirschman (1973) once demonstrated that realising multiple major development goals at the same time turned on a far-reaching precondition. According to Hirschman, societies seeking to achieve both economic growth and a just distribution of income could do so only sequentially:

first economic development, later growth in prosperity. This required, however, that large population groups would accept serious inequality for a long time and understand that prioritising economic growth would support their hope for a better life in the future.

Hirschman's insights into the problems of achieving multiple goals simultaneously also apply to processes of social change that are not geared toward economic growth but, conversely, toward preserving natural resources. Even a socio-ecological transformation seeking to achieve climate protection without a severe economic decline and massive social upheaval must also rely on hopes for a better world leading to the acceptance of crises and stressful cultural change. However, the yellow vest protests years ago in France or the most recent resistance in Germany against the first attempts of a decided climate policy demonstrated that such hopes must not be taken for granted. Unless it dissolves into pure ecological ignorance, the dilemma of simultaneity in the climate decade will most likely transform into a patchwork of individual piecemeal, not directed by intentional plans but the most powerful interests. This will certainly not be enough to really prevent the climate crisis.

6. Is there a way out?

Is there a way out of the socio-ecological dilemma of simultaneity, this very precarious figuration? Probably not. Trapped in this dilemma, capitalism, the protection of natural livelihoods, and democracy seem widely incompatible and mutually obstructive. So far, effective climate protection has largely failed to overcome these blockades, being crushed by the social conflicts and opposing interests arising from most attempts at ecological change. There is no comprehensive solution in sight, no collective actor or global institution that could remove these barriers and successfully set a "great transformation" in motion. Other analyses share this realistic view. Jens Beckert considers climate change to be a "wicked problem" that the institutional and cultural structures of capitalist modernity are almost inevitably doomed to fail (Beckert, 2025). If the incentive structures of social action are politically geared toward votes, economically toward profits from growth, and culturally toward increased consumption, we will probably continue to endure half-hearted climate protection and rising temperatures.

Therefore, a completely planned ecological turnaround in all "sectors and systems" of modern society, as the IPCC propounds out of sheer desperation, is unrealistic. However, that does not mean that certain important advances cannot be planned and achieved. Even these important advances, which cannot be anything other than intended and planned, will certainly lead us into some unplanned tracks. But this cannot be a reason to omit them. Accordingly, one should strive to devise transformation strategies that are aware of the dilemma of simultaneity from the outset and aim to avoid getting completely entangled in its quandaries. What matters here is organising steps towards change, the implementation of which will equally

strengthen a green economy, democracy, and sustainable life conducts. Neither market-driven green capitalism nor ecological emergency regimes, and certainly not the countless appeals to individuals' ecological responsibility, are able to accomplish this.

What is more promising is to rely on the transformative leverage of sustainable and inclusive infrastructures which should be available as commons. In a situation like today, in which the many conflicting demands and interests threaten to obstruct an ecological turnaround, the most reasonable approach is to start with the most important issue in climate protection, which also has the broadest support among various population groups. This can only mean a determined reorganisation of society's infrastructure, i.e. the basic material supply of energy, heat, water, transport, buildings, natural goods and social care based on compliance with planetary boundaries, ecological precaution and the common good for all**.**

Publicly owned sustainable infrastructure, ranging from power supply, mobility systems, digital networks, and housing to natural resources and social services, can align politics, economics, and life conducts with the common good and the protection of the planet's livelihood. The most urgent climate goal of decarbonisation would benefit best from this. In Germany, energy supply, industry, transport, agriculture and housing account for 70 percent of all greenhouse gas emissions (Statista, 2025b). Decarbonising these infrastructures would do the most for climate protection. This can only be enforced through government policies that provide sustainable infrastructure as a public good when private-sector interests conflict with climate protection.

This is particularly true of energy companies. The failures of green capitalism and the ongoing investment in fossil fuels by rich investor groups have shown that effective decarbonisation cannot be expected from the private sector. It is therefore time for the public sector to become much more involved in energy supply. Economist and human geographer Brett Christophers (2022) has made compelling arguments in support of this: only the state possesses the planning and coordination capabilities necessary for an energy transition across the entire supply chain – from power generation and transmission to distribution and end-customer delivery; only the public sector is capable of this kind of networked and coordinated thinking and planning at the necessary speed.

Fossil fuel companies seem all-powerful, capable of resisting the energy transition at every turn. But even here, there are opportunities for real change that can be pursued. In Germany, the Federal Constitutional Court's ruling on climate protection sets the stage for effective decarbonisation. It calls for political control of greenhouse gas emissions in order to limit global warming to at least 2 degrees. It is up to governments to take advantage of such rulings and incorporate them into legislation and policies. Private property rights should end where their exercise deliberately damages the common good of the ecosystem, on which all people are

equally dependent. Exclusive disposal rights to fossil fuels encourage the selfish destruction of natural goods such as air, water, and the atmosphere, while collectively agreed-upon rules on the use of natural goods provide better protection for these global commons (cf. Ostrom, 2015). In the case of fossil fuels, this has become a matter of planetary survival. Therefore, socialising the energy sector is imperative if private companies continue to destroy the climate and persistently exceed climate policy guidelines.

None of this is revolutionary romanticism or an exaggerated hope for the state – the public sector is much more than just state government. Property rights are currently under debate for many goods that are part of basic needs. In urban areas, housing corporations are confronted with citizens' initiatives demanding socialisation if they fail to demonstrate any public benefit. In turn, some European cities and municipalities have taken away energy supply from private companies. Municipalities are buying back their electricity or setting up their own communal utilities. The municipalisation of electricity and heating has taken a visible upturn, primarily due to renewables. This also benefits citizen cooperatives that organise their energy needs locally in a sustainable way. A faster energy transition will be facilitated by this, paving the way for effective decarbonisation. First successful results of municipalising sustainable infrastructure are already visible. Copenhagen, for example, will achieve climate neutrality in the coming years, against all odds, thanks to a corresponding policy (Republik, 2025). Since sustainable infrastructures as common goods contribute to overcoming fundamental ecological problems that cannot be solved by markets, the state, or individuals alone, they enable social alliances across conflicting interests and values. The "new municipalism" (cf. Forman et al., 2020) is one example of this.

Sustainable infrastructure as a common good is also an important prerequisite for large population groups to support ecological change. If we are serious about protecting the planet, socio-ecological transformation will, at best, allow for further growth in private wealth for those in the lower income classes. The well-being of households should primarily be strengthened through public welfare so that good living conditions are not dependent on continuous increases in private goods, which the Earth's system is increasingly unable to sustain. This decoupling of societal wealth and increased volumes of commodities is served by sustainable infrastructure as commons, without being associated with deterrent demands such as renunciation. Instead, they promote general prosperity, making climate protection acceptable to the majority. Infrastructure as commons contributes to social justice in the distribution of fundamental goods; it strengthens welfare, sustainability, and, not least, democracy without requiring a complete "system change" of capitalism that is simply unrealistic. The socio-ecological dilemma of simultaneity would be considered without being able to avoid it completely, but also without being entirely at its mercy. Compared to the current standstill in climate protection and sustainability, this would represent real ecological and societal progress.

Of course, sustainable infrastructures and the strengthening of the common good would not resolve all the problems and dilemmas of socio-ecological change. As Max Weber once put it, capitalism is the "most fateful power in our modern life" (1988 [1920], 4) which has long since taken control of the climate and the environment. But our modern lives are not shaped by capitalism alone. Social security and public health are just as little a matter of a capitalist mindset as voluntary fire brigades, municipal waterworks, cooperative wind farms, the German football team of FC St. Pauli or the study of sociology. Since the middle of the 20th century, the capitalist market economy has been restricted in many ways by social policy, which has led to improvements in the lives of poorer classes and reduced social inequality for several decades. If we could achieve a comparable ecological containment of capitalism in the struggle against climate change, this would certainly not win everything, but at least some of the battle.

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