

Sustainability in the Czech Republic: From a Green Growth Laggard to a Degrowth Hotspot

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ABSTRACT

The Czech Republic is a notorious laggard in green transition policies. This begs the question of how stable the current socio-political setting is and whether it can resist deeper sustainability transitions in the long run. The paper combines institutional literature with sustainability transition research to describe the current situation and outline possible future developments in terms of the economic discourse. It shows that the reluctance towards the green transition may be caused not only by the strong position of incumbents but also by the limited relevance of the green competitiveness approach for the country's situation. Based on recent developments and existing vulnerabilities, the paper identifies the possible strengths of the more radical approach to sustainability entailed in degrowth. Rather than a pure hegemony of one of the niche paradigms, however, it proposes as likely a pluriversal pathway combining elements of both in a patchwork manner.

KEYWORDS

green growth, degrowth, sustainability transition research, pluriversal pathway, semi-periphery

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INTRODUCTION

Sustainability transitions are an understudied field in Central and Eastern Europe (CEE) (ČETKOVIĆ – BUZOGÁNY 2016). This has to do partly with a lack of relevant scholarship and partly with methodological difficulties. The existing frameworks cannot be used in regard to CEE without adjustments, and also, the available data on CEE does not fully fit into the models. Yet, CEE offers a very interesting comparison to the more thoroughly analysed Western countries. This is especially true for the Czech Republic, which finds itself in a unique position. On one hand, it is a member of the European Union (EU), sharing some of the most ambitious climate targets worldwide. On the other hand, however, the country is underperforming in sustainability regulations and transition policies, letting them come mostly through market equilibria and mandatory transpositions of European directives (EC 2023A).

This paper looks at the economic discourses framing the Czech (non-)transition. The question is whether the Czech Republic is on its way to embrace green growth, degrowth, or whether it will rather maintain the status quo in its sustainability policies. The analysis is based on the sustainability transition research (STR) framework, but here it is adjusted for social and discursive innovations. It combines insights from STR applications with institutional literature to describe the current situation and determine possible future developments.

The rest of the paper is structured as follows: section 2 provides the theoretical background of STR, section 3 adjusts the framework based on some recent suggestions to fit the needs of the present paper, section 4 offers a case study of the Czech energy sector, section 5 analyses the Czech situation with regard to sustainability transition, section 6 discusses the implications of the findings, and section 7 concludes the paper.

THEORETICAL BACKGROUND

STR was born from a combination of technology studies and evolutionary economics highlighting the path dependency of industrial sectors and whole economies (GEELS 2002). In this perspective, market equilibria are not necessarily

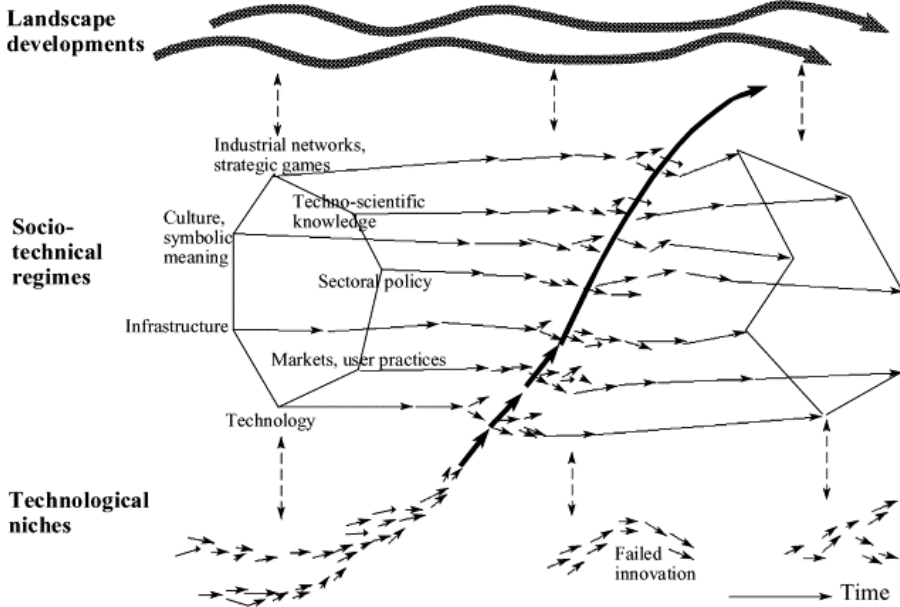
optimal but could be simply the result of a lock-in, a suboptimal market equilibrium that is difficult to leave without coordinated action (UNRUH 2000).

This paper uses the basic framework of the multi-level perspective (MLP), which divides reality into three idealised levels: regime, landscape and niches (GEEELS 2002). Know-how, physical capital, infrastructures, business practice, legal frameworks, and local markets then evolve together into an intertwined *sociotechnical regime*, a complex of dominant practices, incumbent firms, and policies. A regime is dynamically stable even as some of its parts are being replaced – it can last for decades without undergoing a major structural change.

STR is particularly interested in technological cycles and the potential of particular innovations to reshape the market and social practices around themselves. Focusing on the relationships between the given regime and niches, it differentiates between complementary and competitive innovations – the former can be incorporated within the existing regime while the latter require a new regime to evolve (SMITH – RAVEN 2012).

Apart from the struggle between the regime and its contenders from the niches, there is a *landscape* level above them. Along with the actual physical landscape, it consists of other slow-to-change factors that determine the conditions of success for any regime. But there can also be unforeseen events on the landscape level that trigger technological revolutions – e.g. extreme weather events or popular movements shifting behaviours or political support.

FIGURE 1: A STYLISED SCHEME OF THE MLP



Source: Geels 2002.

These three levels and the complementarity or competition between niche innovations already provide combinatorial material for several typological pathways of regime change. Geels and Schot (2007) support their typology with stylised case studies from the history of innovations. By looking at particular sectors in specific periods, they are able to track the regime transitions as new inventions cause a cascade of changes in the dominant industrial practice.

There is an inherent consideration for political economy in this view on transitions (GEELS 2014). Regime actors with vested interests naturally do everything in their power to resist innovations that threaten the value of their capital, while niche challengers can attract investors from other industries (HESS 2014). Hess (2018: 179) provides a typology of ideal-type coalitions based on their main focus: alternative industry development, industrial democratisation, industrial opposition, or industrial access. The former two are concerned with “sunrising” new technological and socio-economic elements, while the latter two focus on “sunsetting” incumbent technologies and existing socio-economic injustices, respectively. Note that political

demands or social innovations can enter the framework in a similar way as technological innovations here.

Geels et al. ⁽²⁰¹⁶⁾ extend the original pathway typology suggested by Geels and Schot ⁽²⁰⁰⁷⁾ to account for societal mobilisations, the institutional background, and actors' agency beyond the original proposal. Importantly for the present paper, they extend the market struggle to account for activist and social movement pressures, look into ways that incumbent firms can themselves undergo transformations rather than remain static, and map local background landscape characteristics that remain unchanged, which are especially relevant for comparative studies.

Strategic niche management and transition management are two branches of STR that look specifically for normative guidance to shape transitions towards certain results ^(KÖHLER ET AL. 2019). They require directionality and goals but also openness on the way toward reaching them and space for errors ^(KEMP – LOORBACH – RÖTMANS 2007). At the same time, regulators also need to be mindful not to create rents and lock-ins on the side of new entrants ^(NEVER – KEMP 2017). The whole process is conceived of as shaped by the active participation of and feedback by various stakeholders. Later, when distributional, justice, and political inclusion impacts of transition are better understood, public participation is better integrated into the transition governance schemes ^(UPHAM – SOVACOOŁ – GHOSH 2022).

STR built its understanding of sustainability on technological systems and innovations. There is a path dependency mechanism at work here too, and even though the topical focus has extended from case studies on technological sectors in Western European countries, the theoretical frameworks are hardwired for this particular context. Fortunately, the reflexive and decolonial nature of sustainability research has led to many critical contributions aiming to overcome these limitations. Below, the problems central for applying STR in the case of the Czech transition discourse are discussed: the focus on the Western institutional environment, national and sectoral framing, and the limited inclusion of degrowth and non-technological innovations.

Sociotechnical regimes in Western Europe are of a different nature than those elsewhere in the world. They developed in a formalised

institutional environment and rest on a highly competitive market. Technological developments in these places then shape sectors and value chains across the world. However, not all of the assumptions of Western European sociotechnical regimes are true for other countries.

Hansen et al. (2018) highlight some general points from the application of STR in developing countries: these countries have weaker states, more unequal social backgrounds, informal institutions and a dependency on foreign capital, knowledge and technologies. This leads to weaker regimes and paradoxically also to weaker niches because of fragmentation. Moreover, distrust and lack of cooperation prevent coordination across niches, and innovations are then confined to individual projects, which limits their potential to scale across innovative platforms (HANSEN ET AL. 2018: 201–202). Analogically, Wieczorek (2018: 208) stresses that the sources of stability of regimes in developing contexts, and therefore also strategies for their destabilisation, remain unclear.

Hansen et al. (2018: 201) warn that in developing countries, sustainability in the narrow environmental sense could be achieved without positive impacts on society and democracy. At the same time, they see the role of technological advancements in these contexts as overshadowed by frugal, grassroots, inclusive and shop-floor innovations.

The Czech Republic is a long way from being a global South country but a strong shared feature of both it and the global South is a dependence on external capital and technologies. Četković and Buzogány (2016) cluster it together with the rest of the CEE countries under the category of “dependent market economies” and show that transitions in such contexts are highly sensitive to external pressures. This is in line with findings on the geography of transitions because they do not happen in isolated countries but include the transnational transfer of knowledge and technologies that is essential for niche experimentation (WIECZOREK – RAVEN – BERKHOOR 2015).

An underlying question here is whether there is a global convergence on a sustainable configuration. This would imply, on one hand, seeing the structural paradigm shift happening worldwide in economic, ethical, political and social questions (SCHOT – KANGER 2018). On the other hand this

understanding may reproduce the imaginary of linear development and the distinction between places at the forefront and those catching up

(CF. WIECZOREK 2018).

Feola (2020) criticises STR for naturalising the economic system as an invisible background factor setting the rules of the game. The Schumpeterian understanding of competitive relationships and the ensuing process of creative destruction are taken for granted in its view. Vandeventer, Cattaneo and Zografos (2019) note that not all niches hold their own vision of a dominant regime eventually pushing its competitors out of relevance. They suggest that some understandings of sustainability do not fight for hegemony but rather engage in a discussion and a cross-fertilisation with other niches.

Analogically, Feola (2020: 231) differentiates between market-oriented technological innovations that are being *scaled-up*, while post-growth approaches aim for a horizontal expansion into *rhizomatic* links across communities. This connects to an older discussion in strategic niche management on the various directions in which a transition experiment can influence the wider societal practice: scaling up, scaling out, and scaling deep (VAN DEN BOSCH – ROTMANS 2008; MOORE – RIDDELL – VOCISANO 2015). Feola's rhizomatic links refer to *scaling out* here, highlighting that grassroots social innovations are more likely to be collaboratively shared across various communities. Such links might therefore directly address the problem of fragmentation and weak horizontal ties between niches described by Hansen et al. (2018). This underlines the role of social movements for transitions in developing countries in line with Wieczorek's (2018: 206) "*socially embedded model of innovation*."

Vandeventer, Cattaneo and Zografos (2019) conceptualise degrowth as a niche innovation vis-à-vis the capitalist growth regime. This implies that what was before seen as an invisible background (FEOLA 2020) or an automatic part of the landscape rules (E.G. GEELS – SCHOT 2007), BUT TO A CERTAIN EXTENT EVEN GEELS ET AL. (2016) now materialises as a contingent incumbent formation with its own lock-ins, interests, and defensive tactics. It also generates a set of complementary and competitive relationships between the regime and other niches. And not least, it allows for blending together various sectors into a synthesis of the sustainability logics behind the transition, stepping

up the focus from a sociotechnical to a wider societal change, which is convenient for the present paper.

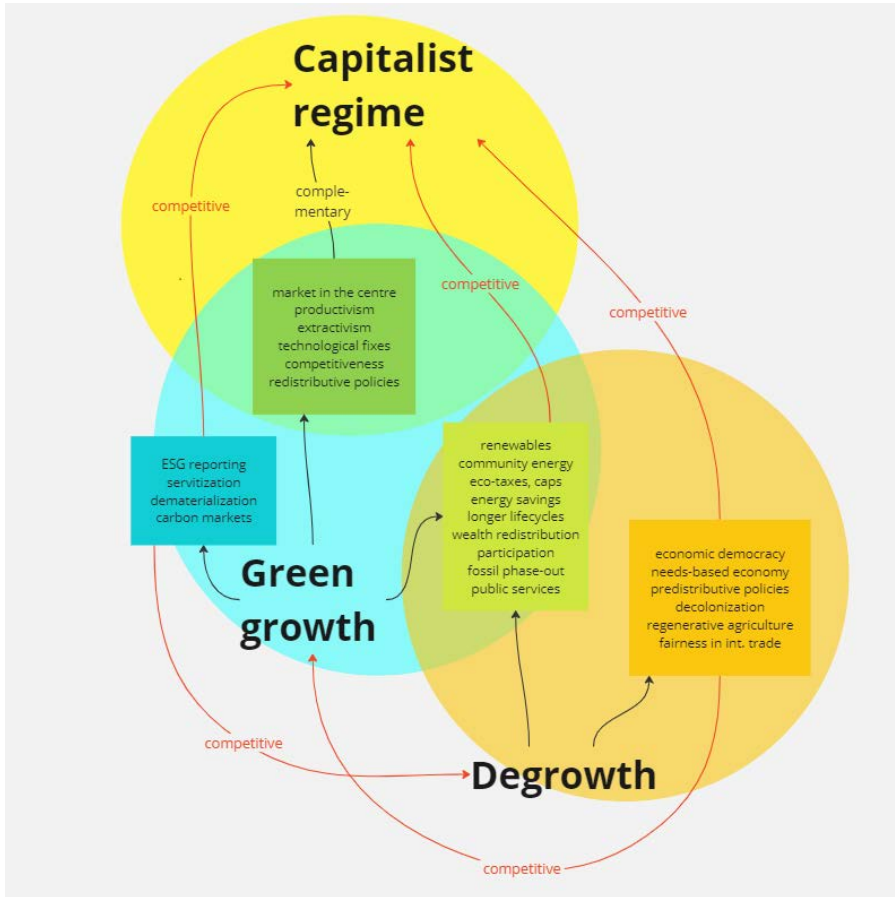
THEORY ADJUSTMENTS AND ANALYSIS FRAMING

The aim of the present paper is to study the green transition in the Czech Republic as a development shaped by the country's economic, institutional, and political contexts. STR offers a valuable basis for this precisely due to its origin in innovation studies because it can capture the complex interplay between various industrial, political and societal forces (KÖHLER ET AL. 2019). The MLP is used here as the backbone structuring the developments. Since the Czech Republic is not at the forefront of technological innovations for sustainability, the insights from technological innovations systems and strategic niche management are used only to a limited extent here. Finally, the prescriptive guidelines from transition management will be referred to only to contextualise current policies.

Focusing on the national context and pooling together various sectors is necessary in order to note the wider economic policy framing between green growth and degrowth but it also poses challenges. On one hand, international influences need to be accounted for in line with the cited geographical adjustments to STR; on the other, the delicacy of sectoral struggles may be lost in an overall national assessment. The latter limitation is addressed here by providing a more detailed insight into the most-researched sector, namely that of energy transition, which also underpins sustainability in many other sectors.

In order to account for the wider discursive framings of green growth and degrowth, the MLP adjustments proposed by Vandeventer, Cattaneo and Zografos (2019) and Feola (2020) are employed. For simplicity, only green growth and degrowth are considered as niches in relation to the present regime or simply the business-as-usual scenario (i.e. no or only minimal sustainability and climate measures). Note that in this simplified model, the synergies between the niches are their shared opposition to the regime, and the complementary features of green growth and the status quo are logical opposites to the points of competition between green growth and degrowth.

FIGURE 2: COMPETITIVE AND COMPLEMENTARY RELATIONSHIPS



The capitalist regime and its incumbents simply aim for changing the status quo as little as possible. However, an acceptable change, and therefore a potential complementary innovation, would be green and climate measures with a minimal impact on the structure of the biggest firms, incumbent politicians and institutions, and the economic and political model in general. Green growth promotes some potentially disruptive innovations such as ESG reporting, servitisation and dematerialisation of the economy, carbon markets (TERZI 2022).¹ Nonetheless, the underlying logic of green growth still rests on productivism, extractivism, technological fixes, international competitiveness, and market-based allocation of resources preceding redistributive policies. These factors point to complementary areas where green growth could be considered an add-on to the current regime without necessarily dismantling it.

Degrowth, here used as an umbrella term for the colourful range of post-growth and a-growth approaches, generally seeks deeper changes. According to degrowth, international trade and relations are to be based on the principles of decolonisation and fairness (LAZARD – YOUNGS 2021; HICKEL ET AL. 2022). Participation is to become a widespread principle, promoting local democratic sovereignty and deliberative tools, including economic democracy and setting limits to market decisions by stakeholders (CUMBER ET AL. 2020). While the desirable role of the state is disputed (D'ALISA – KALLIS 2020), the economy would be based on human needs satisfaction (COOTE 2022), declining material throughput, regenerative agriculture and landscape management, and pre-distributive policies (BARCA 2019). All of these suggestions would disrupt the current regime and are in a competitive relation to green growth proposals.

Importantly though, there are also synergies between the two niches. These would be found in the areas of rapid deployment of renewables (especially when based on community ownership and management), energy savings and retrofitting buildings, prolonging product lifecycles, ecological taxes and caps on extraction and pollution, local participation, redistributive policies (e.g. climate dividend), and improved coverage and quality of public services. All of these areas are competitive vis-à-vis the regime. There is no assumed synergy between degrowth and the regime (but this might change if there were other niches in the model that would, e.g., challenge basic human rights).

There is an open discussion about whether policies complementary with capitalism like ESG reports or green finance would cascade into a deeper shift towards a post-capitalist regime or whether they would serve the incumbents in providing the inevitable reforms and stop short of breaking the regime completely. These two scenarios are analogical to the *reconfiguration* and *transformation* pathways, respectively (GEELS – SCHOT 2007: 406–413). Only here, a higher level of abstraction is employed in line with Vandeventer, Cattaneo and Zografos, so it would be more precise to refer to the former scenario in their terms as a *pluriversal pathway* (2019: 276) where mutually symbiotic but different niches dismantle the capitalist regime and produce a range of place-specific combinations of various features, experiments, and ideas. The other option, where complementary innovations are integrated and contained and result in preserving the regime, can be called *transformed capitalism*. Finally, there is a zero, business-as-usual

scenario, *regime reproduction* as discussed in Geels and Schot (2007), which appears desirable for incumbents but runs the risk of accumulating niche innovations and external pressures that may eventually sweep away the regime in a swift event.

TRANSITION OF THE ENERGY SECTOR

This sub-chapter summarises recent developments in the sustainability transition of the power generation sector, as captured by other authors. This first step allows for concretising the Czech situation through a specific case study, and providing insights that can then be connected to the wider national transition and taken to the more abstract level of overall discourse. The case of the power sector proves instrumental for a number of reasons: i) it stands at the forefront of decarbonised technologies in an inter-sectoral comparison (VICTOR – GEELS – SHARPE 2019: 128), ii) it underpins the transition in many other sectors that depend on low carbon electricity, iii) it is the best-researched sector – STR applications in the Czech Republic to-date have focused almost exclusively on power, and iv) it is strongly affected by the EU regulation and intra-EU trade, while also inspiring national movements and struggles.

Ćetković and Buzogány (2016) pool together European post-socialist economies and identify a number of common features in their energy transitions. They are high corruption and weak state capacity, an inadequate state-industry-science collaboration, lack of transparency and political stability, and benefits flowing to foreign investors and privileged domestic actors. Ćetković and Buzogány (IBID.: 650) specifically observe a “stop and go” dynamic of deploying renewables, and this very well describes the Czech “solar boom” of 2008–2011 and the following long period of stagnation.

A generous feed-in tariff that led the Czech Republic to become a global leader in photovoltaic deployments, was passed in 2005. However, due to its policy design not allowing for much flexibility, an opposition of traditional energy producers and energy-intensive industries quickly formed, which led to a gradual dismantling of the policy from 2010 (GÜRTLER – POSTPISCHIL – QUITZOW 2019). The country met its 2020 renewables targets

early and indeed almost no new renewable sources were installed for the rest of the decade.

Gürtler, Postpischil and Quitzow ^(IBID.: 9) mention a lack of fossil phase-out policies as one of the pitfalls and this is where political coalitions come to the fore. Ending coal extraction was at the forefront of mobilisation around the “*Limity jsme my*” (We are the limits) movement in 2015 ^(LJM 2016) and the topic united a wide coalition of environmental and civil society actors ^(OCELÍK ET AL. 2019). A fossil phaseout with a clear date was first conceived by the Coal Commission in 2021, with a coal phaseout being planned for 2038, but this date was later adjusted to 2033 by the Fiala government ^(MPO 2021; ÚV 2022).

Ocelík et al. ⁽²⁰¹⁹⁾ map the political conflict over coal policies in the Czech Republic and identify two clusters of stakeholders in the two opposing camps. Interestingly, in the Czech Republic, political parties in regions of extraction do not always find themselves on the same side as their national headquarters. The opposition to further coal mining is thus formed mostly by local movements and national parties, and the pro-mining stance is upheld by the fossil firms themselves, trade unions and some local and national politicians ^(IBID.: 277).

Černý and Ocelík ⁽²⁰²⁰⁾ further map the narrative strategies of the coal incumbents and find that they mostly revolve around economic security. The same narrative resurfaces in the recent threats of the oligarch Pavel Tykač, who said that he would close the coal power plants Chvaletice and Počerady, which employ some 3000 people together with the associated mines ^(ČTK 2024). At the same time, the environmental movement is strongly concerned with questions of employment and energy poverty connected with the transition ^(REKTOR-POLÁNEK – PATOČKA 2022; KOLÍNSKÝ – ČECH 2023). This is an important link between energy and economic transition.

The Czech energy sector is closely tied to the German Energiewende policy. Due to cross-border flows, the Czech price is almost fully dependent on the German one ^(ČERNOCH ET AL. 2016: 44). Since the start of the large-scale development of renewables in Germany, Czech energy producers have seen reductions in their revenues ^(IBID.: 62). Other impacts of this are technological

and best-practice spillovers and effects mediated via the European policy and renewables deployment targets (IBID.: 2016: 37).

These dependencies may be connected to the reluctance of Czech renewable support policies. The Czech Republic currently has the lowest share of power generated by renewables in the EU (EMBER 2024). Its original National Climate and Energy Plan (MPO 2019) literally undercut the mandatory minimum set by the European Commission (EC 2020: 22). A recent update of the document was welcomed as “ambitious” (OBNOVITELNĚ 2023) but if the share of renewables reached 30 percent in 2030 as planned, the Czech Republic would still remain among the EU states with the lowest share of renewables (EMBER 2024).

The Czech decarbonisation plans are mostly revolving around new nuclear developments despite the criticism of the long approval and construction process, the lack of flexibility in supply, and high costs (ČERNOCH ET AL. 2016; OSIČKA ET AL. 2021; SKLENÁŘ 2023). Osička et al. (2021) suggest that this is precisely because of path dependency influencing both decision makers and information production, leading to further institutional lock-ins of the nuclear technology. This trend continues into the present, as the new State Energy Policy Update proposal foresees the share of nuclear energy growing from 18 percent at present to 32–42 percent in 2050 (MPO 2024).

Since the end of the solar boom, renewables have been entering Czech energy policies mostly through external pressures and the transposition of European-level legislation. While the recent boom in small-scale renewables is mostly motivated by financial reasons and, to a lesser scale, independence (MAKEŠOVÁ – VALENTOVÁ – PILNÁČEK 2023: 6), there is also a growing constituency of community energy producers setting up an autonomous niche (ZINDULKOVÁ 2023). While not explicitly embracing the concept of energy democracy (IBID.: 32, 26–27), Czech community energy pioneers report motivations connected to community building and sustainability on top of the more widespread economic motivations. The niche thus acknowledges the social innovation ambition on top of the technological aspects.

Based on the typology of Hess (2018), all four ideal types of energy transition movements are present in the Czech Republic: alternative industry development (renewables), industrial democratisation (energy

communities), industrial opposition (fossil phaseout), and industrial access (addressing economic injustices). The latter two, associated with sunseting (technologies and economic practice), are, however, clearly less prominent. This could be explained by the fragmentation of policy formulation described by Ocelík et al. (2019) – while sunrising can be supported in parallel with support to incumbent industries, sunseting requires a consensus and is more likely to be blocked by the affected coalition.

THE CZECH SITUATION – A MULTI-LEVEL PERSPECTIVE

The following analysis is structured along the three levels of the multi-level perspective. It aims to capture the present situation and past developments influencing it. Following the situation, key vulnerabilities are discussed as potential shocks threatening the regime. Some implications, possible outcomes and scenarios for the Czech Republic are then elaborated in the discussion.

Landscape

The landscape of the capitalist regime consists of external influences and pressures, namely physical, social, and political ones. With 2023 being again the hottest year on record (NOAA 2024) and climate-related disasters happening all over the world, the attention dedicated to the climate crisis keeps increasing. The same holds true for the mounting inequalities (OXFAM 2023) that were exacerbated and exposed by the pandemic. The Russian aggression in Ukraine and tensions in Taiwan reinvigorated security-oriented narratives. And the related shortage of chips and the US Inflation Reduction Act brought back discussions on protectionism, free trade, and local self-sufficiency.

The EU reached a widespread consensus on combining a pandemic recovery with the green transition and passed the Fit-for-55 package, ratcheting up its climate goal for 2030. The expectations from the 2024 elections for the European Parliament and their impact on the green agenda are, however, mixed at best (WETTENGEL 2023). Degrowth has also been gaining traction in academia (KING – SAVIN – DREWS 2023) and among the public (PAULSON – BÜCHS 2022). The European Parliament hosted its first Beyond Growth conference in April 2023.

The Czech public acknowledges climate change and supports swift and consequential action in this regard (STEM 2022: 9–11). Its knowledge of the Green Deal is, however, extremely limited, with the majority having no or very little information about it and the population is divided between seeing it as a threat, and seeing it as an opportunity (IBID.: 15–18). A more recent communication analysis reveals that the terms “degrowth” and “Green Deal” stir rather negative emotions but 55 percent and 77 percent of the respondents, respectively, knew nothing about the given term’s meaning; “sustainable growth” fared slightly better in terms of the respondents’ knowledge of it and much better in terms of their emotional responses (STEM 2023: 15–16). Czechs are also found to be more worried about local nature protection than the planetary level, but neither topic is of primary concern to them (IBID.: 4).

Regime

A regime is a cluster of practices, infrastructures and incumbent stakeholders intertwined in a hegemonic power-structure. This chapter starts by looking at historical and institutional developments of the Czech state and then moves on to the current policies and alliances. Past developments are then contextualized by the current economic performance and the regime’s stance of green transition.

Despite their different starting positions after the fall of socialism and their shared ambition to build national capitalism, the four Visegrad countries eventually converged on “foreign-led capitalist models” (BOHLE – GRESKOVIC 2012: 140–146). The Czech Republic had an especially strong starting position with its small and stable debt but this paradoxically led to its weaker integration into international financial frameworks. Together with the coupon privatisation program prolonging the state ownership of the economy via banks, this led to “distorted industrial-financial relations” (IBID.: 145).

The quick decline of domestic heavy industry and the replacement of national capitalism by the dependence on foreign capital brought about a rise of comprador elites. Their interests were closely tied to the attractiveness of the country for foreign investors, and in the 2000’s there was a vision of the Czech Republic as a competition state that was shared across

the political spectrum (DRAHOKOUPIL 2008: 365). This meant attracting foreign direct investments primarily through investment subsidies, tax breaks, and infrastructure investments.

Bohle and Greskovic (2012) identify some common factors among the Visegrad countries. These are weak corporatist relations, a limited inclusion of labour into decision-making, and a peculiar combination of aggressive pro-market policies and welfare states, especially with regard to pensions. A systematic representation of various groups in the political process gave way to an ad hoc top-down assignment of benefits to strategically important groups. Another common feature that can be traced way back to the early 20th century, is the rivalry among the Visegrad countries hampering their cooperation, with the exception of specific moments of truce like when the EU accession was conditioned on their cooperation (IBID.: 164).

Krpec and Hodulák (2019: 2) then ask why the long-term dedication of Czech policies to liberal economic recipes has not resulted in a faster convergence with Western Europe. They show that the pro-export character of the Czech economy in fact largely consists in within-firm transfers, resulting in a blowing up of the data on exports but also on value-added that in fact happens elsewhere. Their answer to the riddle of the lack of convergence lies in the semi-peripheral or dependent character of the Czech economy, as even among other Central European states, it is extreme in its *“excessive dependence on foreign investments, control of the private sector by foreign owners, and weak national socio-economic structures”* (IBID.: 21).

Krpec and Hodulák (2019) point to the Czech Republic’s limited ability to outgrow its semi-peripheral position due to i) outflow of profits, ii) a lack of national projects of shared interest between the state and capital owners, and iii) a lack of opportunities to focus on non-price competitiveness due to the subsidiary role. A related question then is whether green competitiveness as conceived especially in Western Europe (AMBEC 2017) could serve as a Czech domestic convergence project or whether it would be doomed precisely due to these characteristics.

The Czech Republic is among the most industrial EU countries by share of GDP and has a relatively high emission intensity of GDP (MŽP 2021).

This is due to its industry structure and the historically cheap energy produced from its abundant coal. The cost-competitiveness and high energy intensity combine into a powerful lock-in that is difficult to address. The market-driven sustainability transition and green competitiveness both rely on robust, technology-neutral regulations, R&D investments, and proactive planning that helps coordinate commercial stakeholders in efforts to reach agreed targets (NEVER – KEMP 2017; AMBEC 2017; PORTER – VAN DEN LINDE 1995). This runs contrary to the neoliberal approach historically embedded in Czech economic policies and is also more difficult to do with the country's weak administrative capacities and lack of traditions of a coordinated economy. According to the European Semester, the Czech Republic is failing in all these areas. It utilises a limited number of environmental taxes, continues to provide subsidies for fossil fuels and polluting practices in agriculture, lacks a framework for incentivising investments in energy efficiency and underfinances the circular economy and environmental protection as the added revenue from emission permits was dissolved in the general budget rather than earmarked for transition (EC 2023A: 33–35). Furthermore, transition-related goals originate from the European level and lack implementation plans and impact assessments (EC 2023B).

Hojnik, Prokop and Stejskal (2022) analyse data from Czech and Slovenian firms and show environmental regulation in those countries to be connected to the environmental performance of firms but do not confirm a connection between regulation and firms' R&D investments. They interpret it as a refutation of the weak version of the Porter hypothesis which states that environmental regulation spurs private innovations (IBID.: 155). Nonetheless, in the light of Krpec and Hodulák's (2019: 3) findings, it seems to be rather a result of the specific position of CEE's firms within the global value chains because there, "*investment into research and development is significantly lower than in the core, and usually reserved to improving the cost efficiency of known tasks using existing capital*". The promise of a hi-tech green economy is then difficult to fulfil.

Interestingly, green transition is hardly a topic in the Czech political discussion, as indicated by, among other things, the low familiarity with its key concepts among the public. In January 2024, the National Economic Council, an advisory body of the government, produced a working paper of pro-growth policy proposals. Among its 37 recommendations, green

transition only appears indirectly in the 35th, and it is discussed mostly in connection with facilitating the influx of EU funds into green investments (NERV 2024: 39). Economic advisors to the government here do not seem to consider green growth to be of any relevance for the Czech Republic.

Braun (2020: 1118) argues that the negative perception of EU climate policies in the Czech Republic largely has to do with the country's socialisation among the other V4 countries and the countries' converging views of climate policies as a threat to the economy. Negotiating compensation mechanisms in the V4 coalition could be seen as a new moment of truce among the old rivals (BOHLE – GRESKOVIC 2012), as it creates a shared discourse of resistance to more ambitious goals in the Eastern semi-periphery.

Niches

Hess (2014) shows that the political struggles around the green transition bring together stakeholders from various industries. It could typically be both niche and regime actors from other sectors (hi-tech, finance, insurance) that may not have a direct interest in climate but support the niche for strategic reasons. Hess (IBID.) calls them “countervailing industrial power” and they are a part of a sustainable constituency.

No such stakeholders appeared in the public discussion until the mid-2010's, when the data of Ocelík et al. (2019) were collected. The sustainable constituency did not emerge from the solar boom because of its policy design. Due to a small time window, high capital requirements and no limits on size, most of the new market was captured by existing incumbents or foreign investors with a weaker lobbying power and lower levels of trust among the public (GÜRTLER – POSTPISCHIL – QUITZOW 2019). The countervailing industrial power did emerge later but remains small and will be discussed below.

Geels et al. (2016: 898) discuss the possibility of regime actors gradually transforming to a more sustainable model. This could be a reaction to a changed socio-economic environment but also a result of the agency of employees and management. Geels et al. (IBID.: 899) propose a sequence of i) a local search and small adjustments in routines, ii) exploring new technologies or processes, and iii) transforming models, the mission and identity.

The ESG rating compiled by the Association of Social Responsibility provides a good opportunity to assess this process among the biggest and best established firms as it can be considered as being awarded to incumbents at the forefront of sustainability efforts. It was awarded based on reporting and goals along the ESG categories that correspond to small adjustments in functioning that are unrelated to business models (ASO 2023). While in the long run, ESG reports could trigger deeper changes, currently they correspond at most to the first stage of incumbents' transformation.

A prospective countervailing industrial power was formed recently. In November 2023, some of the big players attempted a new spin on the sustainability vs. status quo debate and founded the Alliance for an Emission-Free Future. In the opening event, they said that the Green Deal needs to be stripped of ideology and that the decarbonisation debate should be kept strictly technical and financial (CAFOUREK 2023), which could be interpreted as a compromise between green growth and the status quo in the categories utilised here. A backlash came from both sides – Green Deal opponents and green transition experts, suggesting that there is very little manoeuvring room left between opposing the Green Deal and supporting decarbonisation. It might point back to the fragmentation described by Ocelík et al. (2019), where such a middle ground is difficult to build.

Green growth and green competitiveness both remain niche concepts in the Czech Republic. Perhaps the most established player to start embracing them is the Confederation of Industry, which provides a whole website on green transition, the available tools, and good practice examples (ZT N.D.). Although not quite an advocacy project, the website keeps up a neutral to positive framing of the green transition as a trend that is coming and that firms should prepare for.

A more positive stance is taken by two other firm coalitions: Change for the Better (ZKL N.D.) and the Modern Energy Union (ME N.D.). While relatively small within the Czech context, these initiatives utilise the eco-modernist framing of sustainability innovations and their potential for economic growth and green competitiveness. They connect innovative, high-tech firms (especially in the field of energy) and more service-oriented corporate players with a stronger commitment to sustainability. Apart from providing a common platform and sharing good practice among

members, both formations are openly building up political momentum for speeding up the transition.

Another currently forming business initiative in this regard is Doughnut Czechia, which organised its first conference in November 2023. While explicitly including approaches like ESG, it is named after and framed by Kate Raworth's post-growth concept of Doughnut economics. The platform aims to facilitate networking and good practice in service design across institutions, firms and the non-profit sector (PÁBENÍ 2023).

Within the sustainable business environment, there is also a formation more focused on economic democracy and post-growth entrepreneurship that was set up around the publishing house PeopleComm. It publishes Czech translations of degrowth authors and literature on non-hierarchical organisations and individual transformation, and engages in a systemic critique of global capitalism. Unlike in the green growth coalitions, there is no advocacy structure in this group, and the group has limited political impact, but there is a growing constituency of business people exposed to some of the sustainability thinking around it.

Degrowth itself is then mostly established in the climate movement and NGOs focused on just transition, extractivism, global and local inequalities, education, housing and energy poverty.² And although it is based on inspiration from foreign sources (from both the global North and South), the niche is more lively in the application of the theory, localised experiments and international networking with partner movements. The degrowth bottom-up, pluriversal logic also prevents domestic practitioners from simply replicating foreign models and “catching up” with “more advanced” locales – the movement inevitably has to look for place- and context-specific solutions (PUNGAS ET AL. 2024). Apart from “the Green Deal without ideology”, these are perhaps the only sustainability practices being developed locally.

Within academia, social science research on green growth and green transition remains a fringe phenomenon. The situation is barely better for degrowth. Perhaps an exception to both cases is Masaryk University in Brno, which houses much of the above cited research and also serves as a degrowth niche that has, over the years, produced an ample record of

domestic grassroots movements and initiatives that captures their common features and potential alliances but also their richness that cannot be enveloped within a single label (JOHANISOVÁ – CRABTREE – FRAŇKOVÁ 2013; FRAŇKOVÁ – CATTANEO 2018).

An academic/activist niche of its own is research based on philosophy, decolonial studies, resilience, anthropology, design and art that studies the deeper root causes of unsustainability and stimulates a radical imagination of how they could be addressed (STÖCKELOVÁ – SENFT – KOLÁŘOVÁ 2023; KOUBOVÁ – BARONOVÁ 2023; PELOUŠKOVÁ – ZBIEJCZUK SUCHÁ – NOVOTNÝ 2022; BARŠA 2015). It clearly deserves a mention here because it constitutes a majority of Czech academic and artistic reflections on sustainability, again place-specific and original, but it cannot be assigned to either green growth or degrowth without some discursive violence because it is not primarily concerned with economic policies and discourse. Breaking the simplified dichotomy between green growth and degrowth at this place can serve as a memento to the actual richness of alternative ways of thinking about sustainability that spans the volume of the *pluriversal pathway*.

Vulnerabilities

The historical account of STR demonstrates very convincingly that no regime is ever quite stable and permanent. This must be even more valid in the turbulent times of the climate crisis, wars, and humanitarian disasters. Outlining some existing weaknesses and vulnerabilities here does not lead to specific predictions but it provides model examples of how the transition might ensue.

The above cited European Semester (EC 2023: 31) offers a comparison-based vulnerability assessment of the EU members, and its assessment of the Czech Republic is as follows: “Czechia has medium-high vulnerabilities related to ‘inequalities and the social impact of the transitions’ and ‘value chains and trade’. It also shows higher vulnerabilities compared to the rest of the EU in the areas ‘cybersecurity’ (mainly due to ICT security incidents in enterprises) and ‘financial globalisation.’”

Bohle and Eihmanis (2022) found four structural vulnerabilities common to the Visegrad countries: a severe crisis of care, strains in social

solidarity, democratic erosion, and dependent capitalism. This would be very much in line with the Czech literature on structural exclusions and the systemic lack of resilience especially in the internal peripheries (BĚLÍČEK ET AL. 2021; PROKOP 2019).

Finally, the Ministry of Social Affairs conducted a series of foresight workshops aiming at identifying potential systemic risks to the society. The “time bombs” they identified were: income and labour market insecurity; the growing cost of life; impacts of digitalisation on the labour market; impacts of the ageing population; increased occurrence of mental health issues for youth; digital vulnerability, and addictions.

DISCUSSION

Given the institutional background and economic dynamics, there is a very limited space for green growth or green competitiveness policies in the Czech Republic. This is due to a historically entrenched *laissez faire* approach to the economy (BOHLE – GRESKOVIC 2012), a cost competitiveness lock-in and weak national socio-economic structures (KRPEC – HODULÁK 2019), a division among experts and knowledge production networks (OCELÍK ET AL. 2019), and a disconnect between environmental regulation and private R&D investments (HOJNÍK – PROKOP – STEJSKAL 2022). It follows that sustainability measures are mainly entering the economy from the outside, often in a top-down manner. This is the case with EU taxes, regulations, or mandatory goals on decarbonisation, but also with internal standards in foreign companies driving their organisational transformation.

The niche of green growth is largely dependent on alliances with regime actors but also aims to build its own constituency (especially in the field of clean energy) and a countervailing industrial power (finance, consultancies, and even automotive incumbents involved in the niche coalitions). This is done based on a promise of an external trend that is eventually arriving, and many measures are implemented in expectation of the coming regulation or transformed business norms. In this regard, eco-modernisation fits very well into the older catch-up development narrative because it aims to copy a Western trend and ride it towards convergence.

Reasons for doubt, however, lie in the very core of the green competitiveness idea. It consists in seizing the first-mover advantage and relies on product differentiation and proactive market shaping (AMBEC 2017). This is very difficult to do while following the track of others from a semi-peripheral, dependent position, and without localised know-how and cooperation networks spanning across industry, academia, and institutions. Furthermore, Braun (2020: 1117) argues that it is no coincidence that the ecological modernisation narrative is not so appealing in the relatively poorer CEE countries because the vision of modernisation that transcends current conflicts is more distant here than in the richer or “more developed” Western Europe.

And this opens the question of the political economy of a green growth transition. Incumbents do not seem to hope for gains from a speedy transition, but neither is there a strong enough niche that would maintain the speed at least at the level of the rest of the EU. Workers are not mobilising for faster transition policies either, and the impacts on them are expected to be mixed at best under the current circumstances (ČERNÝ ET AL. 2023). In this situation, green growth is unlikely to win support for a fast transformation and has to rely on slow changes coming from external influences. This would constitute the transformed capitalism pathway, here consisting of a gradual top-down policy tightening and an eventual reorientation of the incumbent firms themselves along the lines proposed by Geels et al. (2016).

If the capitalist regime was largely successful in narratively framing the green transition as a threat (ČERNÝ – OČELÍK 2020; BRAUN 2020), it poses an obstacle for degrowth just as well as green growth. Given the stability of some institutional features of Czech capitalism, degrowth has to rely on ruptural developments, typically shocks coming from the landscape level. Given all the discussed vulnerabilities that seem to be stemming directly from the nature of the current socio-political regime, it would appear unlikely that it can survive for long without changes. But neither is it already collapsing, so the patchwork manner of combinations will probably have to work specifically with the cracks and ridges of the current regime if it is to grow on its side.

A recommendable course of action would be finding measures perceived as symbiotic by the two sustainability niches and applying them in

a manner that would tackle the structural vulnerabilities of the society. Based on figure 2 this could mean an improved public participation in transition plans, community energy or energy savings designed as countermeasures against energy poverty. In other words, it means addressing environmental issues together with social ones, and addressing inequalities in a more reliable way than green growth itself. This generally means an emphasis on social innovations and political coalitions across niche contexts countering the problem of niche isolation (HANSEN ET AL. 2018) and offering opportunities to *scale out* and *scale deep* (VAN DEN BOSCH – ROTMANS 2008).

It is quite common to imagine a degrowth shift through a gradual development of green growth that would slowly enable more radical sustainability measures to take root (GIBBS – O’NEIL 2018: 304–306). This assumption stems from some of the core elements of STR models, which describe reinforcing feedback loops of new political and social institutions as they gradually get entrenched and evolve towards more transformative changes. It is in line with the models of deep transitions (SCHOT – KANGER 2018) and societal tipping points (LENTON ET AL. 2022) and it can be tracked in some future projections of the European Environment Agency (ASQUITH – SPECK 2021: 39–49). But such a linear development is arguably relevant especially for Western European core countries with already highly developed green growth niches and it is by no means the only one possible. The limited entrenchment of ecomodernist approaches in the Czech Republic can be seen as an opportunity to shuffle the sequence, experiment with a different order, and perhaps later return to some ecomodernist innovations that prove successful elsewhere.

And this is precisely what Vandeventer, Cattaneo and Zografos (2019) mean by a *pluriversal pathway*. Rather than a hegemony of “pure degrowth”, it opens up a way for a mixture of various innovations prioritising pragmatic applications of place-specific solutions and addressing contingent political situations before ideological consistency. If there is a new overarching paradigm emerging, as suggested by the deep transition concept, it will only reveal its inner consistency ex-post, not during the transition period when various logics need to be combined in an ad-hoc, patchwork manner.

It should be noted that the simplified model discussed here omits nationalist and authoritarian approaches to sustainability as an autonomous niche that they in fact constitute. In the Czech Republic, they remain

very weak for the time being, as shown, on one hand, by the failure of “decarbonisation stripped of ideology” to inspire conservative support, and, on the other hand, by the unconvincing presence, or indeed, tokenisation, of sustainability in the proposals of the illiberal left (DRULÁK ET AL. 2021). Eco-fascist and eco-authoritarian innovations are nonetheless being developed abroad and may find their way into Czech politics, very likely benefitting from potential ruptures and landscape-level shocks (BOHLE ET AL. 2022).

CONCLUSION

The Czech case proves unique in its many institutional, economic, and political characteristics. It therefore offers an instructive case for imagining sustainability transition outside the established frames. This paper aimed to contribute to the literature on degrowth as a niche innovation within STR. It did so by combining insights from existing STR applications in the Czech Republic with a wider framing of the national institutional background. Based on these inputs, it outlined some possible developments, including recommendations for action for the degrowth stakeholders.

Further research is needed in how precisely the coalitions between green growth, degrowth, and the regime work and what it means for specific mobilisations or policy proposals. Given the many existing comparisons of the V4 and CEE states, one focused specifically on degrowth strategies and agendas in these countries would very well fit the literature and might prove extremely useful for studying degrowth in semi-peripheral contexts.

ENDNOTES

- 1 The disadvantage of combining all sectors of the economy together is losing sensitivity to inter-sectoral struggles. E.g. mandatory ESG reporting reinforces the regime of consultancies, creating a significant new market for their services, but on the other hand it threatens the fossil energy regime because all firms would then have an incentive to buy renewable power. Inter-sectoral power and interest dynamics are discussed below in the empirical analysis.
- 2 A support for degrowth is openly avowed by the organisations Hnutí Duha (Friends of the Earth), NaZemi, Re-set, Limity jsme my, Fridays for Future, Univerzity za klima, and Iniciativa nájemník a nájemníků; a part of the community housing movement and some local agriculture initiatives.

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NOTE

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