

## **APPROACHING CHANGE: EXPLORING CRACKS IN THE ECO-MODERN SUSTAINABILITY PARADIGM**

Pernilla Hagbert<sup>\*a</sup>, Åsa Nyblom<sup>b</sup> and Karolina Isaksson<sup>a,c</sup>

\* Corresponding author

*<sup>a</sup>Department of Urban Planning and Environment, KTH Royal Institute of Technology,  
Stockholm, Sweden*

Postal address: KTH, Division of Urban and Regional Studies, 100 44 Stockholm, Sweden

*Email address: [pernilla.hagbert@abe.kth.se](mailto:pernilla.hagbert@abe.kth.se)*

*<sup>b</sup>IVL Swedish Environmental Research Institute, Stockholm, Sweden*

Postal address: IVL Swedish Environmental Research Institute, P.O. Box 210 60, SE-100 31  
Stockholm, Sweden

*Email address: [asa.nyblom@ivl.se](mailto:asa.nyblom@ivl.se)*

*<sup>c</sup>VTI Swedish National Road and Transport Research Institute*

Postal address: VTI Swedish National Road and Transport Research Institute, Box 55685, SE-  
102 15 Stockholm, Sweden

*Email address: [karolina.isaksson@vti.se](mailto:karolina.isaksson@vti.se)*

## **Abstract**

Sustainability discourse offers a plethora of perspectives on the type of change needed to ensure a just development within planetary boundaries, and how that change could come about. Calls for radical transformations nonetheless underline the need for examining prevalent discursive structures in society, including challenging the ‘ideology of growth’, in order to formulate new and transformative policy approaches. Based in empirical insights on how different actors – including grassroots, planners, officials and politicians – in Sweden perceive the transformations needed to reach sustainability goals, this paper explores how narratives of change reproduce, make use of or offer cracks in the eco-modern sustainability paradigm.

**Keywords:** transformation; beyond growth; policy; planning; Sweden

## 1. INTRODUCTION

Increased social fragmentation, a ‘crisis of democracy’ and continued stress on ecological systems indicate that we are still far from a *safe* and *just* operating space for humanity (as outlined by Raworth 2012). There is growing recognition that ensuring a socially just development without trespassing planetary boundaries will require significant societal changes. The need for fundamental, large-scale and long-term transformations that span across different sectors, dimensions and socio-technical systems has been underlined (Grin et al. 2010; van den Bergh et al. 2011; Markard et al. 2012). Yet, what this might actually entail for policymaking and planning remains vague or contested.

Calls for societal transformations furthermore point to the need for a critical examination of societal structures and power relations in the formulation of new trajectories and policy approaches, re-politicising the discussion of what socio-environmental futures might entail, and problematising the discourse on ‘sustainable development’ (Swyngedouw 2007;

Hilding-Rydevik et al. 2011; Lidskog and Elander 2012). While there has been a tendency, particularly in climate policy debate and research, to shun crisis-driven narratives as unconstructive (Giddens 2009), a range of alternative narratives have emerged in the recent few years. These narratives pose a mounting critique of current economic and social systems and underline the urgency of for example climate action.

There is a lack of more structured descriptions of *how* to reach normative visions of a sustainable future, including assumptions of under what conditions change will occur. Assuming that more profound socio-ecological transformations as those suggested by ‘degrowth’ scholars (Demaria et al. 2013; Kallis et al. 2014; Asara et al., 2015) will require “a disruption of existing institutional arrangements, some of which may be very persistent” (Joutsenvirta 2016: 25), there is a need to explore how this might come about, and who or what will drive it. Different narratives regarding the type of change implied will provide different conditions for transforming society in a certain direction.

In this paper, we set out to explore and discuss this, and the discursive structures and narratives that shape understandings of constraints and possibilities for change (Næss & Vogel 2012). The aim of the paper is to explore the narratives of change that are expressed by local, regional and national actors in planning and policy in Sweden, and to discuss how these reproduce, make use of or offer cracks in the Swedish eco-modern sustainability paradigm.

The paper takes departure in the discursive structures that signify ecological modernisation and the Swedish policy and planning context. This is followed by a section where we present various theoretical understandings of societal change and transformative processes towards a sustainable future. Following a section on methodology, the resulting empirical insights are then presented, centred around narratives of 1) the type of change needed and 2) the perceived opportunities and obstacles for achieving that change. The concluding discussion addresses key issues and tensions that arise between different narratives and examines strategies

for enabling new pathways in a country such as Sweden, where ambitions are high, but the road to a sustainable society remains vague.

## 2. BACKGROUND

### *2.1. Discursive structures and alternative narratives*

Recent research has pointed to the profound societal shifts required if we are to meet basic human needs without undermining key Earth-system processes (O'Neill et al. 2018). Others have acknowledged that long-term sustainable development cannot rely solely on technological innovations or a 'greening' of current production and consumption processes (Alfredsson 2004; Huesemann and Huesemann 2008), which – along with the monetarisation of environmental externalities – has been a key assumption in ecological modernisation, promoting economic growth, social welfare and environmental values as mutually supportive (Lidskog and Elander 2012). The reliance on, and belief in, continuous economic growth is increasingly called into question (Martínez-Alier et al. 2010; Alfredsson and Malmaeus 2017; Kallis 2018). The eco-modern notion of 'green growth', and the belief in decoupling economic growth from continued environmental pressures, also continues to be challenged as there remains little empirical evidence of decoupling at the scale and speed needed (Jackson 2009; Parrique et al. 2019).

Accompanying this critical debate and the attempts to outline a socio-ecologically sustainable society, there are many ideas about the practices and institutions that can facilitate such processes. The emerging discussion on degrowth, understood as the equitable downscaling of production and consumption in order to provide possibilities for both social equity and ecological sustainability (Schneider et al. 2010), calls into question a hegemonic notion of development and proposes that affluent societies need to "liberate conceptual space" for other countries and communities to define other trajectories (Kallis et al. 2014: 5). Contrasting eco-modern ideas of progress, degrowth instead promotes concepts such as 'conviviality', referring

to Illich's definition of convivial tools in everyday life (Deriu 2014: 79), and suggests diverse strategies for a society based in community as well as autonomy (Demaria et al. 2013).

While the role of institutional change in transitions to a new sustainable economy has been highlighted (Klitgaard and Krall 2012; Spangenberg 2014), more studies are needed on how institutional structures can be transformed in practice (Joutsenvirta 2016). As suggested by Næss and Vogel (2012), there is a need to challenge deeply rooted ideas, concepts and practices that characterise contemporary planning and policy, where prevalent discursive structures shape the perceived space for action. This is particularly relevant in countries with a decentralised planning system, such as in Scandinavia, where the state has a small say in priorities made by local administrations (Isaksson and Heikkinen 2018; Næss and Vogel 2012). In these contexts, socio-economic structures, but also laws, rules, norms and views on development and opportunities for change are essential to what type of transformations are perceived as possible.

Challenging norms and ideas connected to for example economic growth, as Asara et al. (2015) argue, entails re-politicising both sustainability science and practice, and opening up spaces for "new political and cultural imaginaries". Exploring future trajectories can illustrate and challenge what are often perceived as fatalistic path dependencies, norms and practices that permeate policy and planning institutions, and instead suggest the creation of new paths (Bradley and Hedrén 2014; Garud et al. 2010). It can also provide a starting point for understanding how different approaches to change are formulated into alternative narratives both of where we as a society currently stand, and where we ought to be going.

Narratives, as "key political devices", can "reshape perspectives and patterns of social action" (Smith and Raven 2012: 1032), and be called upon in enacting processes of change (Garud et al. 2010). Furthermore, shifting narratives, along with other internal and external pressures, might create tensions and cracks in the current paradigm (Dzebo and Nykvist 2017;

Geels 2010; McGrail 2012). These ‘cracks in the system’ could be seen to offer openings for change in which trajectories and notions of the future can be problematised (McGrail 2012), and where the governance of regime change can be discussed (Dzebo and Nykvist 2017).

## *2.2. Contextualizing a Swedish eco-modern paradigm*

Sweden – a relatively institutionally stable and affluent welfare state – is often lauded as a front-runner in environmental policy. While Sweden reports having reduced territorial greenhouse gas emissions by almost 30 % over the past 30 years (the Swedish EPA 2019a), if adopting a consumption-based calculation, the Swedish populations’ total consumption gave rise to just under 9 metric tons of emissions per capita per year in 2017 (the Swedish EPA 2019b). To achieve the Paris Agreement target, per capita emissions must fall to below one metric ton per year before 2050, and then continue to decrease (Fauré et al. 2016). Similarly, the ecological footprint from Swedish consumption was about 6.5 global hectares per person in 2016, placing Sweden among the highest in the world (Global Footprint Network 2019).

Swedish policy and planning over the past few decades could be characterized by a triple bottom line approach (people, planet, profit). A historically strong social welfare system, middle-of-the-road economics and ambitious environmental management have merged under the idea of ecological modernisation, assuming a compatibility (or even necessity) of continued economic growth and reduced environmental impact (Lidskog and Elander 2012), with policies to usher the ‘greening’ of several sectors (Hilding-Rydevik et al. 2011). The assumed efficiency of large-scale infrastructure in reducing resource use has been a particularly prevalent narrative, pursued in strategic investments in ‘frontline’ green developments (Bradley et al. 2013; Hagbert and Femenías 2016). These projects often highlight solutions connected to for example waste management (such as vacuum systems for multiple fraction waste sorting), energy (district

heating and smart electrical grids) and mobility (ranging from electrified or biogas fuelled public transportation to shared mobility solutions such as carpools or bike sharing).

The ‘Nordic model’ has built upon a culture of consensus, considered essential to maintaining economic growth as a key facet of social democratic politics, spurring tax revenues and securing the welfare system. However, these dynamics are changing, as corporatism in both policy preparation and implementation has declined (Öberg et al. 2011), and with the shift from “social engineering to governance” (Larsson et al. 2012). Simultaneously, there is a growing interest and sense of urgency among grassroots movements and in academia to challenge established economic and political structures, calling for more radical action. This includes adopting more ambitious emission reduction targets, but is also increasingly connected to a wider debate on individual responsabilisation contra the need for more conventional, regulatory modes of governance (Soneryd and Ugglå 2015).

### 3. APPROACHES TO CHANGE

#### *3.1. Incremental or system change?*

The debate on responsibility and agency in moving towards a sustainable future has tended to posit individual action against large-scale societal changes (Shove 2010, 2011; Whitmarsh et al. 2011). A commonly repeated dichotomy between theories that put an emphasis on incremental, technological and ‘behavioural change’ (assuming an evolutionary economic model), or on ‘social change’ (calling for situated socio-material studies of societal dynamics of change) has not only polarized research debates, but has also been raised in the public discourse on individual, collective, political or even trans-national responsibilities. Whereas individual-level perspectives leave little room for policy and planning to play a significant role, societal-level models often lack an empirical understanding of institutional conditions for change (Joutsenvirta 2016).

One way of approaching change that offers a complementary perspective situates socio-technical systems as the unit of analysis. Sustainability transitions research has acknowledged the need for major shifts in key societal systems (Markard et al. 2012). This implies for example moving to a fossil free energy mix, or the reconfiguration of transport and housing infrastructure. These types of shifts are understood to not only be a technical challenge, but rather demand transitions of various socio-technical systems that uphold or lock-in certain modes of production and consumption (Geels 2010). It further relies on “fundamental changes in economic and wider social–cultural conditions” (van den Bergh et al. 2011: 8). While acknowledging that established socio-technical systems are slow to change, some sustainability transitions research has also underlined that incremental change will not be sufficient, and instead seeks to explore how more fundamental transformations can be promoted and governed (Markard et al. 2012).

An important aspect to consider is whether environmental impacts and social inequalities should be seen as ‘symptoms’ of mismanagement (implying a better management could be possible) or as intrinsic to dominant societal systems. Degrowth scholars explicitly challenge incremental improvements within an otherwise maintained growth-oriented logic, positing that the exploitation of people and nature is part of the very fabric and guiding ideals of a modern growth-oriented, capitalist, society (Martínez-Alier et al. 2010; Kallis 2018). Or as expressed by Asara et al. (2015: 379), socio-ecological transformation entails a more radical proposition than just ‘transitioning’ in the sense of adjusting economic and social systems, which “differentiates degrowth from previous approaches to sustainability based on a transitory or reformist pathway”. Sustainability transitions research has also been criticized for not engaging in more explicit questions of politics or challenging power relations in hegemonic narratives and actor constellations (Avelino et al. 2016). As stated by Kenis et al. (2016: 581), particularly the hegemony of a “liberal-democratic growth-based market economy and its post-

political ideology” can pose “a key obstacle to realizing a proper sustainability transition, as the latter circumvents the need to move beyond merely ‘evolutionary’ change”.

An ecological economics framing of sustainability transitions, as suggested by Røpke (2019), further underlines the need for radical transformations of societal arrangements, or ‘socio-metabolic regimes’ – the patterns of energy and material flows associated with different societies (Krausmann et al. 2008). This illustrates the inadequacy of changing only a few parameters to achieve a different outcome, without changing the whole system and its fundamental characteristics. Røpke (2019) proposes a complementary systems perspective, where transition processes occurring at the boundaries of the economic ‘metabolic organism’ need to be linked to the dynamics of systems of provision as well as global inequalities in distribution systems, and must be understood in relation to the potential for governance at different levels.

### *3.2. Who and what is expected to drive change?*

In addition to providing different ways of approaching change, the understanding of what actors are assumed to be involved in transitions, and the arenas where these processes will take place, also differ. A sustainability transitions view proposes guiding transitions in line with long-term goals, where multiple actors are involved and assumed to work together, but where political actors and public policy will have to take a major role in shaping the direction of transitions (Markard et al. 2012). This could include more regulatory frameworks such as stricter environmental regulations and taxation, but also the formulation of policies and creation of new institutional frameworks.

Hobson (2013) outlines what can be seen as a paradox between on one hand the stark proclamations made in various policies, frameworks and programs regarding the need for transformations towards sustainability, and on the other hand a reliance on voluntary projects,

and the underlying assumption of continued growth. Hobson discusses how the formulation of environmental problems as solvable within existing structures ties into an ecological modernisation discourse of efficiency and informed consumers, where nudging and other non-regulatory interventions have penetrated policy discourse and practice.

According to deep green discourses, more radical transformations cannot rely on marginal efforts within what is otherwise framed as ‘business as usual’ (Dryzek 2005; Demaria et al. 2013; Hobson 2013). Strategies could in this view include both active opposition to and the reformation of existing institutions, while simultaneously building new, alternative, institutions (Asara et al. 2015). As Asara et al. point out, the actors involved will thus also be diverse, ranging from activists and practitioners to engaged researchers, building alliances with for example policy makers, unions and other citizens.

There could moreover be said to exist two strands of thought regarding what will or could drive change: that radical change can come about by ‘designing’ the way there (Victor 2008); or that some sort of larger (exogenous) influence, for example a crisis, will be needed to initiate a paradigm shift (Buch-Hansen 2018). Kallis et al. (2014) describe how grassroots practices and alternative institutions developed in the wake of the 2008 financial crisis, as conventional institutions failed to secure the basic needs of people in for example Argentina, Greece or Catalonia. The point of departure was nonetheless quite different in countries that were not affected in the same way by the economic crisis, and where trust in established institutions has traditionally been higher, as in Scandinavian countries (Grönlund and Setälä 2011). Insights from the major socio-economical shifts in Iceland and Latvia following the 2008 crisis (Nyblom et al. 2019) also illustrate the importance of institutional and governance dimensions as influencing the kind of transformation that can be realized in the wake of a crisis. Meanwhile, Kallis (2019) argues that reproducing a discourse of limits (such as planetary boundaries or scarcity of resources) can be counterproductive. Instead, seeing limits as

relational and depending on intention, Kallis proposes an “environmentalism of self-limitation”. Similarly, Asara et al. (2015) argue that challenging prevalent pathways will need to be intentional and deliberate.

## 4. METHOD

### *4.1. Research context*

The study presented in this paper was part of a trans-disciplinary research program exploring future scenarios ‘beyond GDP growth’ as a basis for discussing alternative development trajectories for a sustainable Sweden in the year 2050 (Svenfelt et al. 2019). While originally intending to explore different levels of GDP growth, including a ‘degrowth’ scenario, the program instead adopted what could be seen as an ‘a-growth’ position (van den Bergh 2011), in which the focus was not on defining a particular level of economic growth, but rather discuss what a sustainable society could look like if growth was not a given, nor sought for. Following a normative back-casting approach, four environmental and social sustainability goals for Sweden in the year 2050 were outlined relating to: climate; land use; just distribution of resources; and power and participation (Fauré et al. 2016).

### *4.2. Empirical material*

The presented empirical material consists of interviews with different actors, as well as insights from a dialogue session with policy makers. A qualitative interpretative approach was taken to explore the narratives of change expressed by different actors.

#### **4.2.1. Interviews**

Over the course of the program, semi-structured interviews were conducted with actors from different sectors, including public officials, planners, politicians, private and civil society

organizations, as well as people engaged in various forms of alternative practices. Different geographical contexts were explored, with three case study municipalities spanning from a large metropolitan municipality in the south, a middle-sized municipality in the south-west, to a rural municipality in the most northern part of the country. The empirical material presented here offers a cross-section of these studies and is specifically based on a deeper analysis of in total eight interviews (see table 1). The interviews were chosen to provide a broad, non-homogenous perspective from actors working with sustainability in practice in different contexts and sectors, while limiting the scope to be able to conduct an in-depth examination of the emerging narratives. The interviews addressed notions of sustainability, social and environmental goals, as well as the role of different actors in sustainability transformations. All interviews were recorded and transcribed in full.

Table 1. List of interviewees.

[insert table 1 here]

#### **4.2.2. Dialogue session**

The other main empirical material used in the analysis was gathered (and documented in writing) during a dialogue session entitled “Radical transition in policy and practice – insights from policy makers”, held on 19 June 2017, as part of the International Sustainability Transitions Conference in Gothenburg, Sweden. The session included a panel of four policy and planning actors, including:

- 1) a national opinion leader and former member of the European Parliament and the Swedish Parliament;
- 2) an environmental officer in a large Swedish city;
- 3) a Green Party politician in a region in south-western Sweden;

- 4) a climate activist and Left Party politician in a large Swedish city.

Main themes discussed in the session were: how do policy makers relate to the idea of major social change as a key feature for long-term sustainable development? and; what would be key elements of national and local policy measures in processes of ‘radical transition’?

#### *4.3. Narrative analysis*

A primary assumption made here is that the narratives told by different actors encompass multiple stories and can be seen as different strands reflecting an issue in general discourse (Czarniawska 2004). Narratives provide insights into discursive structures as they both reproduce or make use of these discourses to confirm or contrast understandings of society and motivations for change. We moreover approach ‘narratives of change’ as what Wittmayer et al. (2019) call an integrative concept, combining narrative research with an understanding of alternative futures and what is seen as meaningful “to bring about or hinder a specific future”, including the rationale given, the actors perceived as relevant, and the approaches to change expressed.

Narrative analysis was used “based in the presumption that we live in a social world characterized by multiple interpretations and that as people tell stories these numerous interpretations are manifest in multiple and sometimes conflicting logics.” (Feldman et al. 2004: 151). The narrative analysis of the interviews started with two different researchers identifying stories of change (both as they emerged in the material, and in relation to the theoretical approaches to change outlined in section 3), how they form a storyline relating to overarching discursive structures, and then examining and categorizing how this shapes different narratives that run across or provide contrasting narratives within and between interviews (ibid.). The documentation from the dialogue session was analysed in a similar way, keeping in mind the

particular context of the session (framing ‘radical transitions’) and the conference setting as being biased with respect to what narratives emerged.

## 5. EMERGING NARRATIVES OF CHANGE

### 5.1. *Urgency and scope of change*

A key aspect in the Swedish sustainability discourse has been whether the speed of and direction of transformations to a less environmentally detrimental and more socially just development is enough to meet the urgency of the problems at hand. This was also a key theme raised in the dialogue session, where all panellists emphasized the need for rapid and fundamental transformations of society. The panel advocated the need for prompt societal focus on climate issues, and to call the current situation “*for what it is: a crisis*” (environmental officer). It was emphasized that we need to find new ways of talking about the issues at hand, echoing a critique of previous sustainable development discourse as not having mobilized the sense of urgency needed. Other panellists called out for the need of “*a new Enlightenment, a new revolution*” (national opinion leader).

The inadequacy of the current rate and scope of incremental transition, and the discourse surrounding sustainability, was also raised in all interviews. An example was given by the traffic planner in a large urban municipality regarding the need to negotiate between different ambitions in planning and policy, but where environmental goals tend to come second to more socio-economic development issues such as employment and housing:

*“That’s a balance that we’re not sure about, of course, whether it’ll be achieved. We follow up on the environmental aspect, where we can see that, well, yeah we don’t really have the pace needed to reach the environmental goals for 2020 that have been set.”*

Some interviewees also pointed out the discrepancy between the insufficient change rate and the increased awareness of the type of systemic change implied to reach sustainability goals:

*“We have to live in a different way if it’s not all gonna go to hell. And we who are environmentally aware know this”* (environmental strategist, middle-sized municipality). This highlights a bias in that a majority of the panellists and interviewees work with sustainability issues. Yet they are aware that not everyone wants to acknowledge the need for system-wide change or make decisions needed to reach climate targets. Among the interviewees, some propose ways in which current system can be tweaked, while others instead argue that system will need to be changed in more radical ways.

As the current system is seen as self-cementing, there is a sense among some interviewees that more sustainable ways of living, planning and building will have to be ‘tacked onto’ or coincide with other narratives that might be perceived as more ‘attractive’. The environmental strategist at the municipal housing company for example talks about how politically sensitive it can be to work with consumption-related issues, and to try to influence how people live and behave. In some cases, it seems more ok to work explicitly with ‘setting the conditions’ - a sentiment echoed by other interviewees, in for example making it easy to travel more sustainably or steering the programming of areas or buildings to strengthen social cohesion. The implicit norms that these assumptions are based on are not reflected upon further, but instead seen merely as a condition for working with sustainability in ways that adhere to as well as potentially sparks changes within the current system.

In two of the interviews (with the environmental strategist at the municipal housing company, and the environmental and energy manager at the Swedish Construction Federation), conventional eco-modernisation and green growth views were clearly dominating, along with a self-described techno-optimism and belief in decoupling. They give accounts that express a belief in market forces and technology. The strategist points to the importance of economic incentives for steering sustainability work, and also for making visible the urgency to work with certain issues. *“Those are things that could happen by emission allowances or things that make*

*one invest money in what's currently not an economical cost*". The effectiveness of economic policy incentives is also advocated by the environmental and energy manager, who points to the need for monetary valuation, particularly in public procurement of for example infrastructure projects, in order to reward green innovation.

### 5.2. Narratives beyond growth

Several panellists and interviewees talk about the consequences of the current growth-based system society is based on, and the problems of trying to achieve more fundamental changes within this system. GDP growth in particular, as a national aggregated measure, is problematised as not saying much about the 'quality' of societal development. The local Centre Party politician in the rural northern municipality for example talks about how national economic politics and local rural development interests might even be at odds with each other:

*"When "Sweden Inc." is doing poorly, when there is a recession, then we have an immigration. /.../ sometimes it's almost like you wish that there would be a financial crisis as there was in the beginning of the 90s, when we increased the population."*

Some explicitly uphold the need to reduce the reliance on growth, and most – even those expressing more conventional eco-modern views on sustainability transitions – emphasize the importance of more actively striving to reach a society beyond current institutional lock-ins and unsustainable ways of living. As expressed by the environmental strategist in a middle-sized municipality:

*"There is an intrinsic contradiction in how the economic system works, compared to what natural science says we can handle in the form of human activity."*

At the same time, growth is by some seen as the very premise for being able to engage in sustainability, either in terms of tax revenue in municipalities, or as in profits for businesses to be able to research and develop new approaches and be incentivised to innovate. The

environmental and energy manager at the Swedish Construction Federation for example talk about how large-scale companies can work in-house on developing processes to reduce environmental impact and ‘lead the way’, while smaller firms are slower to implement, and generally more reactive to legislation rather than driving issues themselves. Similarly, the planning official at the northern county administrative board compares the prerequisites in different municipalities, and notes that “*the municipalities experiencing economic growth talk about these issues more.*”

There are also accounts of a disbelief in that a future without growth is likely, or desirable. Some interviewees have a hard time imagining what a society beyond growth might be like:

*“It would take a rather intense revolution almost, or I don’t know if that would be needed, but I do see it as a rather large shift. /.../ sometimes I can think that it turns into a utopic discussion, because of that.”* (environmental strategist, municipal housing company).

Yet other interviewees say they see the reluctance to even talk about alternatives as limiting. There is a fear of being labelled as “unrealistic and dopey” (environmental strategist, middle-sized municipality), when problematising the detrimental effects of the growth economy. The couple engaged in the transition movement in the same municipality underline the need for creating local resilience in the face of uncertainty, and to engage in a discussion with people at different levels. In order to avoid more significant negative consequences and to plan for a different future that can handle large shifts without facing revolutionary instabilities, they see a need to become more knowledgeable and empowered, rather than rely on mainstream narratives that shy away from discussing alternatives.

## 6. OPPORTUNITIES (AND OBSTACLES) FOR CHANGE

### 6.1. *By design and by necessity*

Both in the interviews and the panel discussion, different types of opportunities for a sustainable future society emerge, that build upon ideas of intentionally designing or planning for a different society, and on the necessity to adapt to changes that will occur whether we want them to or not. On one hand it concerns the micro-level, stimulating people to rearrange their lives, to work within their professional roles; on the other hand, on a societal level it includes enabling a change of mindsets, priorities, practices and policy measures. Necessity and survival are recurrent themes in the narratives as a driving force for both societal change, and in narratives of personal engagement and motivations. Insights of peak oil and “where society is heading”, for example, influenced the couple involved in the local branch of the Swedish transition movement to invest time on learning more and ultimately rearrange their lives in different steps, having finally moved out to a farm on the countryside:

*“We do this since we want our children to have something to eat, to be quite frank. So that we and the people we love will have somewhere to go when ‘the crap hits the fan’”*

The feeling of independence and self-sufficiency – to have power over important parts of one’s own life – and that it is *fun* and *fulfilling*, was also important for the couple.

Worries are nonetheless expressed that a system-wide transformation beyond growth would have to come about through an external crisis that reduces consumption, which might lead to other negative consequences. However, aspects of necessity and survival are also apparent in the narratives of what can bring change on a broader societal level. In arguing that the western world will have to change its economic system to reach sustainability goals, the necessity of change for societal survival is pointed to by the planning official from the northern county administrative board who, also with reference to peak oil, argues that change will come:

*“if not before, then when it is too expensive to extract resources. Then you will have to invent something else. The system we have now was created... this modern*

*liberalism...was created from coal. And after we have had this /.../ oil interval /.../ a new economic order will come, just as there was one before”*

## 6.2. Politics – hope or hindrance?

The view on the role of politics in sustainability transformations is ambivalent in the empirical material. This is especially prominent in the accounts of the panellists. Politics, and the current democratic system in Sweden, is portrayed as a weak system that won't necessarily be able to drive the decisions needed on neither international, national nor local level. Political decisions are depicted as being made on the basis of fear (of change and of public opinions, meaning you won't be re-elected), and not on the basis of facts:

*”When I started as a politician I thought facts were important for decision-making. They are not. That was a shock and it is tragic. People aren't mean, but they are afraid of saying 'this road should not be built'. The facts are there though”.* (Green Party politician)

At the same time, somewhat contradictory, both panellists and interviewees express that political reform is needed to accomplish more far-reaching change. The importance of cooperation between innovation processes and radical political reform is also put forward. One of the panellists remarks that: *“As long as EU doesn't impose design regulations for circular economy, recycling doesn't matter. You absolutely need reform”* (national opinion leader). Implementing politically decided sustainability goals is seen as an important strategy for achieving change by several of the panel members, both on local, regional and global levels. However, the formulation of goals is not enough – you have to achieve them despite of the existence of goal conflicts, path dependencies, fears and uncertainties regarding the appropriate means to do it.

The ambivalent role of politics in driving change is expressed in several of the interviews, particularly in terms of the limitations of the current political system to push through the radical changes needed for example vis-à-vis other actors in the planning process. The possibility for Swedish politics to resume its previously strong position, through a paradigm shift, is also put forward. Yet, as expressed by the environmental strategist in the middle-sized western municipality, who has experienced a shift in political priorities just within the last few years: *“Politicians on both sides say they think environment is important... to talk the talk is easy, but to walk the talk is not as easy”*.

### *6.3. The role of grassroots initiatives and media*

Just as politics are seen as a potential, although not given, driving force for change, so are citizens and ‘grassroots’ initiatives. Although there is an awareness of that there are different levels of environmental awareness among the general public, as within politics, citizens are sometimes seen as more progressive than the political and economic establishment: *“People were ready to live sustainably already in the 1970s, but the large companies did not want that”* (climate activist and Left Party politician). Citizens are by several panellists named as important in making sure that politicians live up to their promises, and to democratically decided goals. In their role as residents and local community members, citizens are also mentioned in the interviews. Resident initiatives that in different ways constitute alternatives to more formal economic, resource-intensive activities and structures, such as urban gardening, ‘swop days’ (exchanging clothes, household items, plants and other things), are upheld by for example the environmental strategist at the large municipal housing company. Citizen initiatives are seen as a key force for achieving change also in the transition movement. The couple involved in this movement emphasize the importance of cooperation and community to both handle the struggles of transition and in making their self-sufficient way of life work. Although their belief

in community is strong, it is not unconditional, and they are sceptical towards that their way of self-sufficient living has become of a ‘textbook solution’ within the transition movement.

In the same way, media - together with citizens and research – is seen as an important driving force for change, scrutinizing the goal-fulfilment of politics as well as communicating alternative narratives. At the same time, it is emphasized that media hasn’t been critical enough and that the journalistic capacity to handle environmental issues has been decimated. Others agree that critical scrutiny is needed, but that political compromises made shouldn’t be judged too hard, as it is part of the political process and necessary to move forward at all.

## 7. CONCLUDING DISCUSSION

As part of critical debates on the societal shifts needed to reach sustainability targets, there is often a lack of more structured descriptions of how to reach normative visions, also within calls to re-politicise sustainable development. The empirical insights presented in this paper provide snapshots of discourses surrounding sustainability transformations among actors involved in Swedish policy and planning. They offer pluralistic narratives of change that both reproduce and contest the hegemonic discourse of ecological modernisation in Sweden. It is here seen as especially relevant to examine how these narratives might influence future development and identify opportunities for transforming institutions and practices in an increasingly pressing situation.

[Insert Figure 1 here]

Figure 1. Narratives of change found. Source: Authors.

Figure 1 summarizes the narratives of change found (listed as bullet points), how these can be understood to contrast or feed into each other, as well as the categorisations made (illustrated

as circles) to understand the relations between narratives. Several tensions can be found, which tend to uphold status quo, but also possible cracks in the current paradigm can be revealed. The view on *economic growth* is for example a main tension, where an eco-modern discourse sees growth as a premise for engaging in sustainability issues, while a ‘beyond growth’ discourse sees the reliance on growth as an obstacle for change that creates several lock-ins. Similarly, contrasting narratives on *technology* versus the need for building *local social resilience* can also be found. This in turn can be seen to also influence the perceived scope of change, where an eco-modern discourse can be traced in narratives of *techno-economic change*, and to some extent *behavioural changes*, while narratives that here are categorised as part of a ‘beyond growth’ discourse rather aligns with *whole-system change* as a primary concern (although changing practices and mindsets among citizens and organisations is also considered important).

Different narratives of change obviously can exist simultaneously, some of which are in direct conflict with each other, as they propose different prioritisations and knowledge claims (considering for example the contrast between measures such as economic incentives and pricing and developing practical knowledge on self-sufficiency). Yet the empirical material also illustrates a growing critique against the eco-modern paradigm also from within, which we see as a possible ‘crack in the system’. In the interviews as well as in the dialogue session, we note that the actors do not believe that this paradigm will lead to the necessary transformations, that *sustainable development will not be enough*. Realisations of the severity and urgency of the issues at hand point to the failures of the current system – which provide one of the primary cracks that can offer what McGrail (2012) calls an opening for change, to problematise current as well as future trajectories, beyond ‘policy-as-normal’. Interviewees and panellists all place an emphasis on the need to speed up transitions in order to shift from what is seen as an unsustainable path dependency towards a different vision of the future. Yet strategies for

working within the system, changing the rules of the game or the entire playing field, aren't seen as mutually exclusive. This type of pragmatism in practice is not surprising, given how discursive and institutional structures limit more radical actions that challenge prevalent norms and beliefs. It also speaks to narratives that follow a 'change by design' logic, where combining *societal and micro level measures* offers different routes forward.

However, another key tension is the perceived need and/or risk of handling *large societal shifts* without facing revolutionary instabilities. Narratives of radical transformations, 'beyond growth', are not foreign to the interviewees and panellists, but they are problematised with respect to the social risks associated with leaving an established economic logic. Yet, with a spreading notion among different actors of the importance of knowledge and citizen empowerment, a common critique of the mainstream narrative is that it shies away from discussing alternative trajectories, which in itself can create a backlash.

In what Buch-Hanssen (2018) sees as a necessary catalyst for a paradigm shift, a narrative of *crisis* can also be found in the empirical material, which offers a crack in which new narratives emerge. While crisis-framed messages have previously been seen as non-constructive in motivating change, a range of narratives have emerged in recent years that underline the need to be able to talk about the gravity of the situation, both in research and in public debate. Just since the conclusion of this study, activist messages such as those put forward by 'Extinction Rebellion' or global school strikes for climate, offer a stark call for action, not the least placing expectations on politicians to use their legislative powers to implement far more radical climate and ecological policies. While the study was conducted before the 2020 Covid-19 pandemic, it is furthermore relevant to consider whether this type of complete *rupture* (rather than merely a crack) in the societal fabric will 'close-over' (McGrail 2012) the cracks identified and utilised by the climate movement. Or whether such large-scale

global events will continue to actualise the debate on the need to challenge the vulnerability of current systems regarding everything from welfare provision to agricultural practices.

To some extent, the global climate movement debates have also spurred policy initiatives such as ‘Climate Emergency Declarations’ made by several national and local governments, which although in many places are the first to be put on hold in the face of global distress, still form the basis for the potential institutionalisation of emerging alternative narratives. Figure 2 illustrates the arenas for driving change that emerge concerning the opportunities and obstacles identified in the empirical material, where the role of civil society, grassroots initiatives as well as media is underlined, along with calls for radical political reform to complement, and steer (rather than being steered by) innovation processes. There is at the same time a reported need to open up processes and create cross-sectoral arenas that can address beliefs and norms regarding for example what type of development is sought, and what is seen as desirable or appropriate in different contexts.

[Insert Figure 2 here]

Figure 2. Identified arenas for driving change. Source: Authors.

The role of and need for clearer political visions is upheld in both the panel and interviews. Especially in a context such as Sweden, which as many other Western liberal democracies has seen a decline of the idea of the strong state and a move towards market-oriented modes of governance, politically set long-term goals appear particularly important to be able to benchmark against, as well as to be able to challenge established political and planning institutions. Lidskog and Elander (2012) argue that Sweden is a particularly illustrative case of the institutionalisation of ecological modernisation. With the Covid-19 pandemic, the Swedish institutional approach has also been called into question, where the high

degree of trust in authorities, but also the authorities' trust in its citizens, becomes even clearer. A question that emerges is whether it might be harder to drive fundamental socio-ecological transformations 'beyond growth' (challenging the Swedish model), in a society that appears more or less institutionally stable, and where a de-politicised consensus-based notion of sustainability has become engrained in the dominant narrative? There is, according to what was expressed by some interviewees, a tendency to rely on the established system, which becomes self-cementing, creating a reluctance to transition other than in incremental and evolutionary ways. This is in itself not unique to Sweden and the narratives explored here, but rather pose similar challenges for the transformations needed in large parts of the world. As illustrated in the narratives presented here, there is nonetheless a need to revisit the idea of whether a narrative of crisis and risk will only paralyse or if it might mobilise capacity for change. And more importantly, to find ways and platforms for discussing normative visions of a future society that meets social and environmental sustainability goals – and the societal changes needed to get there.

#### ACKNOWLEDGMENTS

This study has been carried out within the research project 'Beyond GDP Growth: Scenarios for sustainable building and planning', funded by the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas) [grant number: 2013-1842].

#### REFERENCES

Alfredsson, E. C. 2004. "'Green' consumption—no solution for climate change'. *Energy***29**(4): 513-524.

<http://dx.doi.org/10.1016/j.energy.2003.10.013>

Alfredsson, E. C., and M. Malmaeus. (2017). 'Prospects for economic growth in the 21st century: A survey covering mainstream, heterodox and scientifically oriented perspectives.' *Economic Issues***22**(1).

Asara, V., I. Otero, F. Demaria and E. Corbera. 2015. 'Socially sustainable degrowth as a social–ecological transformation: repoliticizing sustainability.' *Sustainability Science***10**(3): 375-384.

<http://dx.doi.org/10.1007/s11625-015-0321-9>

Avelino, F., J. Grin, B. Pel and S. Jhagroe. 2016. 'The politics of sustainability transitions'. *Journal of Environmental Policy & Planning***18**(5): 557-567.

<http://dx.doi.org/10.1080/1523908X.2016.1216782>

Bradley, K., A. Hult and G. Cars. 2013. 'From eco-modernizing to political ecologizing: Future challenges for the green capital'. In J. Metzger and A. Rader Olsson (eds), *Sustainable Stockholm: Exploring Urban Sustainability in Europe's Greenest City*, pp. 168-194. London: Routledge.

Bradley, K. and J. Hedrén (eds). 2014. *Green Utopianism: Perspectives, Politics and Micro-Practices*. New York: Routledge.

Buch-Hansen, H. 2018. 'The Prerequisites for a Degrowth Paradigm Shift: Insights from Critical Political Economy'. *Ecological Economics***146**: 157-163.

<http://dx.doi.org/10.1016/j.ecolecon.2017.10.021>

Czarniawska, B. 2004. *Narratives in social science research*. London: Sage.

Demaria, F., F. Schneider, F. Sekulova and J. Martinez-Alier. 2013. 'What is degrowth? From an activist slogan to a social movement'. *Environmental Values***22**(2): 191-215.

<http://dx.doi.org/10.3197/096327113X13581561725194>

Deriu, M., 2014. 'Conviviality'. In G. D'alisa, F. Demaria and G. Kallis (eds), *Degrowth: a vocabulary for a new era*, pp.79-82. New York: Routledge.

Dryzek, J. S. 2005. *The politics of the earth: Environmental discourses*. 2nd edition. Oxford: Oxford university press.

Dzebo, A. and B. Nykvist. 2017. 'A new regime and then what? Cracks and tensions in the socio-technical regime of the Swedish heat energy system'. *Energy Research & Social Science***29**: 113-122.

<http://dx.doi.org/10.1016/j.erss.2017.05.018>

Fauré, E., Å. Svenfelt, G. Finnveden and A. Hornborg. 2016. 'Four Sustainability Goals in a Swedish Low-Growth/Degrowth Context'. *Sustainability***8**(11): 1080.

<http://dx.doi.org/10.3390/su8111080>

Feldman, M. S., K. Sköldberg, R. N. Brown and D. Horner. 2004. 'Making Sense of Stories: A Rhetorical Approach to Narrative Analysis'. *Journal of Public Administration Research and Theory***14**(2): 147-170.

<http://dx.doi.org/10.1093/jopart/muh010>

Garud, R., A. Kumaraswamy and P. Karnøe. 2010. 'Path Dependence or Path Creation?' *Journal of Management Studies***47**: 760-774.

<http://dx.doi.org/10.1111/j.1467-6486.2009.00914.x>

Geels, F. W. 2010. 'Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective'. *Research Policy***39**(4): 495-510.

<http://dx.doi.org/10.1016/j.respol.2010.01.022>

Giddens, A. 2009. *Politics of climate change*. Cambridge: Polity.

Grin, J., J. Rotmans J. and Schot. 2010. *Transitions to Sustainable Development. New Directions in the Study of Long term Structural Change*. New York: Routledge.

Grönlund, K. and M. Setälä. 2011. 'In Honest Officials We Trust: Institutional Confidence in Europe'. *The American Review of Public Administration***42**(5): 523-542.

<http://dx.doi.org/10.1177/0275074011412946>

Hagbert, P., and P. Femenías. 2016. 'Sustainable homes, or simply energy-efficient buildings?' *Journal of Housing and the Built Environment* **31**(1): 1-17.

<http://dx.doi.org/10.1007/s10901-015-9440-y>

Hilding-Rydevik, T., M. Håkansson and K. Isaksson. 2011. 'Sustainable growth' – the Swedish governmental discourse on sustainable regional development'. *International Planning Studies* **16**(2): 169-187.

<http://dx.doi.org/10.1080/13563475.2011.561062>

Hobson, K. 2013. 'Weak' or 'Strong' Sustainable Consumption? Efficiency, Degrowth, and the 10 Year Framework of Programmes'. *Environment and Planning C: Government and Policy* **31**(6): 1082-1098.

<http://dx.doi.org/10.1068/c12279>

Huesemann, M. H. and J.A. Huesemann. 2008. 'Will progress in science and technology avert or accelerate global collapse? A critical analysis and policy recommendations'. *Environment, Development and Sustainability* **10**(6): 787-825.

<http://dx.doi.org/10.1007/s10668-007-9085-4>

Isaksson, K., and S. Heikkinen. 2018. 'Sustainability Transitions at the Frontline. Lock-in and Potential for Change in the Local Planning Arena'. *Sustainability* **10**(3): 840.

<http://dx.doi.org/10.3390/su10030840>

Jackson, T. 2009. *Prosperity without growth: Economics for a finite planet*. London: Earthscan.

Joutsenvirta, M. 2016. 'A practice approach to the institutionalization of economic degrowth'. *Ecological Economics* **128**: 23-32.

<http://dx.doi.org/10.1016/j.ecolecon.2016.04.006>

Kallis, G., F. Demaria and G. D'alisa. 2014. 'Introduction: degrowth'. In G. D'alisa, F. Demaria and G. Kallis (eds), *Degrowth: a vocabulary for a new era*, pp.1-17. New York: Routledge.

Kallis, G. 2018. *Degrowth*. Newcastle upon Tyne: Agenda Publishing.

Kallis, G. 2019. *Limits: Why Malthus Was Wrong and Why Environmentalists Should Care*. Stanford: Stanford University Press.

Kenis, A., F. Bono and E. Mathijs. 2016. 'Unravelling the (post-)political in Transition Management: Interrogating Pathways towards Sustainable Change'. *Journal of Environmental Policy & Planning***18**(5): 568–584.

<http://dx.doi.org/10.1080/1523908X.2016.1141672>

Krausmann, F., M. Fischer-Kowalski, H. Schandl and N. Eisenmenger. 2008. 'The Global Sociometabolic Transition'. *Journal of Industrial Ecology***12**(5-6): 637-656.

<http://dx.doi.org/10.1111/j.1530-9290.2008.00065.x>

Larsson, B., M. Letell and H. Thörn. 2012. *Transformations of the Swedish welfare state: from social engineering to governance?* New York: Palgrave Macmillan.

Lidskog, R. and I. Elander. 2012. 'Ecological Modernization in Practice? The Case of Sustainable Development in Sweden'. *Journal of Environmental Policy & Planning***14**(4): 411-427.

<http://dx.doi.org/10.1080/1523908X.2012.737234>

Markard, J., R. Raven and B. Truffer. 2012. 'Sustainability transitions: An emerging field of research and its prospects'. *Research Policy***41**(6): 955-967.

<http://dx.doi.org/10.1016/j.respol.2012.02.013>

Martínez-Alier, J., U. Pascual, F.-D. Vivien and E. Zaccai. 2010. 'Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm'. *Ecological Economics***69**(9): 1741-1747.

<http://dx.doi.org/10.1016/j.ecolecon.2010.04.017>

McGrail, S. 2012. "'Cracks in the system': problematisation of the future and the growth of anticipatory and interventionist practices'. *Journal of Futures Studies***16**(3): 21-46.

Næss, P. and N. Vogel. 2012. 'Sustainable urban development and the multi-level transition perspective'. *Environmental Innovation and Societal Transitions*4: 36-50.

<http://dx.doi.org/10.1016/j.eist.2012.07.001>

O'Neill, D. W., A.L. Fanning, W.F. Lamb and J.K Steinberger. 2018. 'A good life for all within planetary boundaries'. *Nature Sustainability*1(2): 88-95.

<http://dx.doi.org/10.1038/s41893-018-0021-4>

Parrique, T., J. Barth, F. Briens, C. Kerschner, A. Kraus-Polk, A. Kuokkanen and J.H Spangenberg. 2019. *Decoupling debunked. Evidence and arguments against green growth as a sole strategy for sustainability*. European Environment Bureau EEB, Available at: [eeb.org/library/decoupling-debunked](http://eeb.org/library/decoupling-debunked)

Raworth, K. 2012. *A safe and just space for humanity. Can we live within the doughnut?* Oxford: Oxfam Discussion Papers Oxfam.

Røpke, I. 2019. 'Sustainability Transitions from an Ecological Economic Perspective'. *Ecology, Economy and Society-the Insee Journal*2(1): 3-8.

Schneider, F., G. Kallis and J. Martínez-Alier. 2010. 'Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue.' *Journal of Cleaner Production*18(6): 511-518.

<http://dx.doi.org/10.1016/j.jclepro.2010.01.014>

Shove, E. 2010. 'Beyond the ABC: climate change policy and theories of social change'. *Environment and Planning A*42(6): 1273-1285.

<http://dx.doi.org/10.1068/a42282>

Shove, E. 2011. 'On the difference between chalk and cheese - a response to Whitmarsh et al's comments on 'Beyond the ABC: climate change policy and theories of social change''. *Environment and Planning A*43(2): 262-264.

<http://dx.doi.org/10.1068/a43484>

Soneryd, L. and Y. Uggla. 2015. 'Green governmentality and responsabilization: new forms of governance and responses to 'consumer responsibility''. *Environmental Politics***24**(6): 913-931.

<http://dx.doi.org/10.1080/09644016.2015.1055885>

Spangenberg, J. H. 2014. 'Institutional change for strong sustainable consumption: sustainable consumption and the degrowth economy'. *Sustainability: Science, Practice and Policy*,**10**(1): 62-77.

<http://dx.doi.org/10.1080/15487733.2014.11908125>

Svenfelt, Å., E. Alfredsson, K. Bradley, E. Fauré, G. Finnveden, ... Öhlund, E. 2019. 'Scenarios for sustainable futures beyond GDP growth 2050'. *Futures***111**: 1-14.

<http://dx.doi.org/10.1016/j.futures.2019.05.001>

Swedish EPA 2019a. *Territoriella utsläpp och upptag av växthusgaser*. Stockholm: Naturvårdsverket [Swedish Environmental Protection Agency].

<http://www.naturvardsverket.se/klimatutslapp> (accessed 11 May 2020)

Swedish EPA 2019b. *Konsumtionsbaserade växthusgasutsläpp per person och år*. Stockholm: Naturvårdsverket [Swedish Environmental Protection Agency].

<https://www.naturvardsverket.se/Sa-mar-miljon/Statistik-A-O/Vaxthusgaser-konsumtionsbaserade-utslapp-per-person/> (accessed 11 May 2020)

Nyblom, Å., K. Isaksson, M. Sanctuary, A. Fransolet, and P. Stigson. 2019. 'Governance and Degrowth. Lessons from the 2008 Financial Crisis in Latvia and Iceland'. *Sustainability***11**(6): 1734.

<http://dx.doi.org/10.3390/su11061734>

Swyngedouw, E. 2007. 'Impossible 'Sustainability' and the Postpolitical Condition'. In R. Krueger and D. Gibbs (eds), *The sustainable development paradox: Urban political economy in the United States and Europe*, pp.13-40. New York: Guilford press.

van den Bergh, J. C. J. M. 2011. 'Environment versus growth - A criticism of 'degrowth' and a plea for 'a-growth''. *Ecological Economics***70**(5): 881-890.

<http://dx.doi.org/10.1016/j.ecolecon.2010.09.035>

van den Bergh, J.C.J.M., B. Truffer and G. Kallis. 2011. 'Environmental innovation and societal transitions: Introduction and overview'. *Environmental Innovation and Societal Transitions***1**(1): 1-23.

<http://dx.doi.org/10.1016/j.eist.2011.04.010>

Victor, P. 2008. *Managing without growth: slower by design, not disaster*. Cheltenham: Edward Elgar Publishing.

Whitmarsh, L., S. O'Neill and I. Lorenzoni. 2011. 'Climate change or social change? Debate within, amongst, and beyond disciplines.' *Environment and Planning A***43**(2): 258-261.

<http://dx.doi.org/10.1068/a43359>

Wittmayer, J. M., J. Backhaus, F. Avelino, B. Pel, T. Strasser, I. Kunze and L. Zuijderwijk. 2019. 'Narratives of change: How social innovation initiatives construct societal transformation'. *Futures***112**, 102433.

<http://dx.doi.org/10.1080/13549839.2015.1050658>

Global Footprint Network. 2019. *National Footprint Accounts*.

<http://data.footprintnetwork.org/> (accessed 11 May 2020)

Öberg, P.-O., T. Svensson, P.M. Christiansen, A.S. Nørgaard, H. Rommetvedt and G. Thesen. 2011. 'Disrupted Exchange and Declining Corporatism: Government Authority and Interest Group Capability in Scandinavia'. *Government and Opposition***46**(3), 365-391.

<http://dx.doi.org/10.1111/j.1477-7053.2011.01343.x>

## TABLES AND FIGURES

Table 1. List of interviewees.

	<i>Context/type of organization</i>	<i>Interviewee:</i>
1	The Swedish Construction Federation	Environmental & energy manager
2	Northern County Administrative Board	Planning official
3	Remote rural municipality in northern Sweden	Development strategist
4	Remote rural municipality in northern Sweden	Local Centre Party politician
5	Large urban municipality in southern Sweden	Traffic planner
6	Large municipal housing company in southern Sweden	Environmental strategist
7	Middle-sized municipality in western Sweden	Environmental strategist
8	Middle-sized municipality in western Sweden	Couple involved in the Swedish transition movement

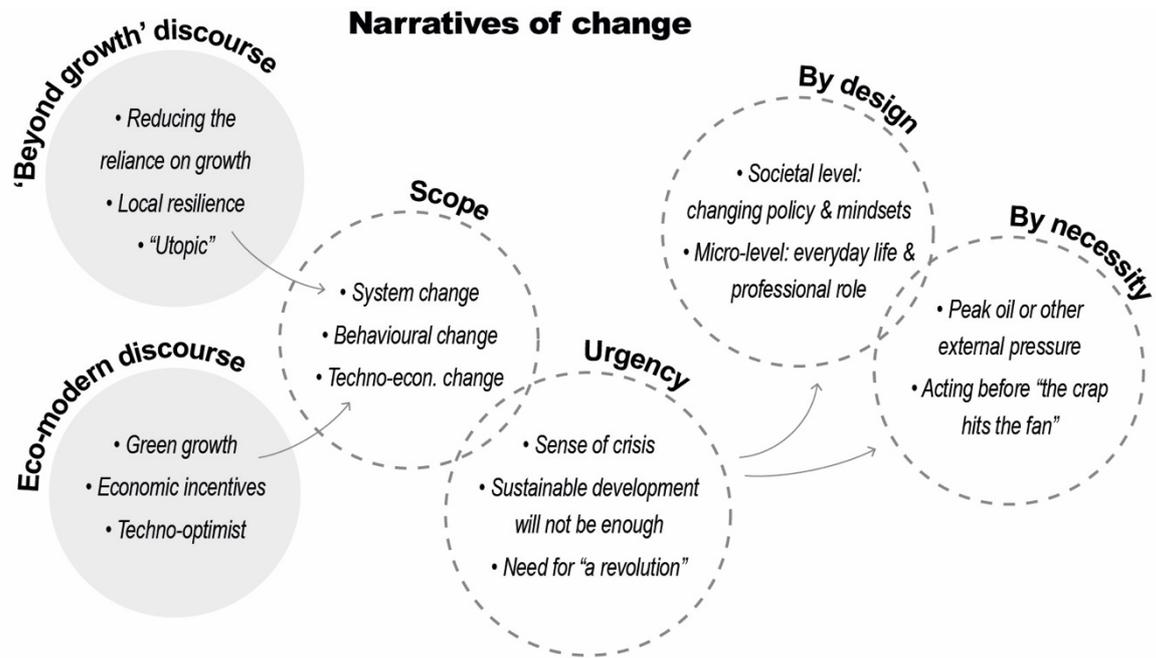


Figure 1. Narratives of change found. Source: Authors.

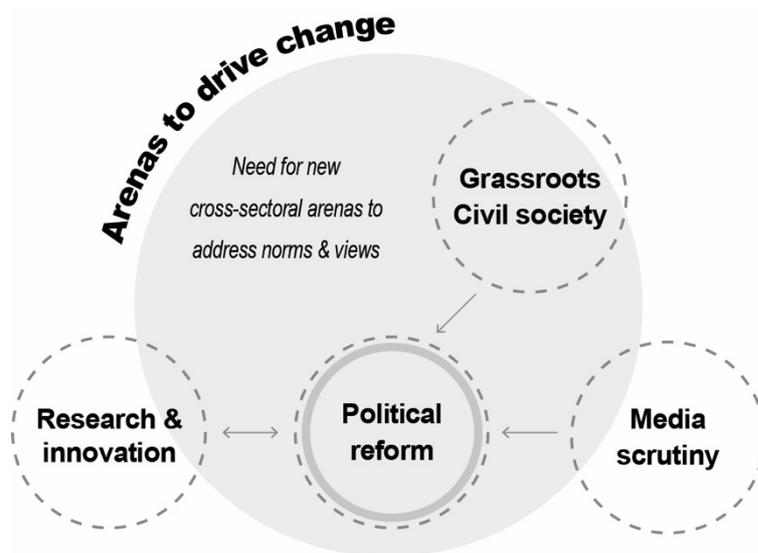


Figure 2. Identified arenas for driving change. Source: Authors.