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The green economy and the Nordic welfare state

Reconceptualizing green economy narratives from a Nordic perspective

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The green economy and the Nordic welfare state

– Reconceptualizing green economy narratives from a Nordic perspective

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Preface

This report is written within the project New Nordic Ways to Green Growth (NOWAGG) which is funded under the 'Green Growth and Innovation Programme' of Nordic Cooperation, a joint venture of NORDFORSK, Nordic Energy Research, Nordic Innovation and nine national research funding agencies. The report constitutes the first deliverable of Work Package 1 were a conceptualization is made of the main green economy narratives that can be found in the international policy literature, and how this relates to the Nordic welfare states. Main author of the report has been Anton Olsson with support from Roger Hildingsson and Jamil Khan.

Lund, March 2020

Anton Olsson, Roger Hildingsson and Jamil Khan

Abstract

The green economy with its aim to combine ecological and economic objectives has gained in both significance and political contestation in recent years. In this working paper for the *NOWAGG* project we revisit the literature on the green economy to understand its implications from a Nordic perspective. Our ambition is to improve the conceptualization of different approaches to green the economy by subjecting them to often overlooked aspects relevant to the Nordic welfare states, including dimensions of innovation as well as social welfare. By conducting a literature review and making use of narrative policy analysis we demonstrate that a binary division, common in the academic literature and policy debate, is insufficient to grasp the nuances of the green economy. We arrive in the finding that not only 'green growth' and 'beyond growth' narratives are prevalent in academic and policy literature but also a reformist narrative in-between these two; what we refer to as a 'transformative green economy' narrative.

This is of importance for the Nordic welfare state which arguably have the potential to incorporate a 'third way' to sustainable development and for greening the economy. Building on this insight and Nordic welfare state literature we suggest a conceptual framework for the economy of the green Nordic welfare state, a revised reformist narrative on the green economy. Empirically, however, the welfare states are confronted by numerous challenges and ongoing liberal transformations. Thus, it remains for future studies to conclude which green economy path the Nordic states will take and how that will affect the prospects for achieving inclusive, long-term welfare while respecting ecological limits.

Keywords: Green economy, Welfare state, Narrative policy analysis, New Nordic Ways to Green Growth

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1. Introduction

The green economy, a concept that seeks to combine ecological and economic objectives, is gaining in both significance and political contestation. Leading economic institutions have set up green growth strategies and countries are in an increasingly rapid pace lining up for implementing them (GGGI 2016). Meanwhile, critics have become more vocal in their skepticism for green growth while suggesting more radical interventions for a green economic turn (Fiorino 2017). Some scholars argue that the green economy has now replaced sustainable development as the leading discourse in the international environmental debate (e.g., Onestini 2012; Gómez-Baggethun & Naredo 2015). But it is perhaps less controversial, and more accurate, to state that it is one of the most debated and influential concepts both within the economic and environmental discourse (Ferguson 2015: 17). As we have come to understand that the way in which we construct concepts matter in environmental politics (Meadowcroft & Fiorino 2017), it is of great importance to enhance our knowledge of this increasingly influential concept.

Particularly so as we have observed that the green economy is occasionally, in both academic literature and policy debate, seen as merely *one* solution where economic and ecological objectives are combined, e.g., Caprotti & Bailey (2014), Rio+20 (UN 2012). However, the green economy can mean many different things and the debate is highly polarized, as shown by e.g., Bina (2013) and Urhammer & Røpke (2013). This polarization, and the multifacetedness of the green economy, serves as the basis for this working paper.

This working paper is a part of the *New Nordic Ways to Green Growth (NOWAGG)* project where we specifically seek to understand the greening of the economy from a Nordic perspective. The Nordic countries are interesting to study as they have been comparatively progressive in introducing environmental reforms and have achieved decoupling of carbon emissions from economic growth, at least to some degree (Jiborn et al. 2018; Stoknes & Rockström 2018; Nordic Council of Ministers 2014). However, they share some significant obstacles in achieving inclusive, long-term welfare without environmental degradation based on contemporary challenges to the welfare state. In order to assess how the green economy can tackle such challenges we need a reconceptualization to understand aspects specifically relevant to the Nordic welfare states and the Nordic model.

1.1 Aim and purpose

Our main objective is to revisit the green economy literature, both policy reports and academic publications, to improve the conceptualization of different narratives on greening the economy. Conceptualizing the differences within the concept is important in order to fully understand what the different takes on the green economy are suggesting, both in terms of direct changes

of policies/interventions and in overarching scenarios for societal change. While similar conceptualizations have been carried out before (e.g., Bina 2013; Urhammer & Røpke 2013; Khan & Clark 2016), we argue that there is a need to address a broader number of dimensions in order to better understand what a green economic transition implies. In order for a green economy to be truly inclusive *and* sustainable, we suggest that there is a necessity to look closer at social welfare and innovation aspects of how the different approaches seek to 'green the economy'. These dimensions are generally important for a green economic transition but particularly important for the Nordic welfare state model, which relies on both innovation and social welfare dimensions (Andersen et al. 2007). Furthermore, social aspects in particular have had a history of being overlooked in the green economic transformation publications (Kronsell 2018; Fiorino 2017). Hence, throughout this paper, and the process leading up to it, we are guided by Daniel Fiorino:

> "The green economy should be revised to present a more equitable, defensible and systematic strategy for change" (Fiorino 2017: 301).

This broadening also contributes to understanding the nuances within the green economy concept. As some authors have reasoned, it might not be beneficial to view the different approaches within the green economy as antagonistic (e.g., van den Bergh 2011; Ferguson 2015). Such a binary distinction, in the likes of 'pro- or no-growth', might in fact miss some interesting in-between elements that can increase our understanding of the concept. It is also our belief that when moving away from merely looking at a two-faced way of how different approaches consider the growth imperative and the role of the state, this multifacetedness becomes more evident. Many scholars have previously acknowledged these in-between proposals but for the sake of simplicity separated them into either the pro- or no-growth camp (e.g., Urhammer & Röpke 2013: 64; Bina 2013: 1026). We believe it is fruitful to take these in-between elements into account in conceptualizing the green economy. Subsequently, with inspiration from Peter Ferguson (2015: 28; cf. Bina 2013), we aim to outline a third 'reformist' approach that resides in-between what we chose to call *green growth* and *beyond growth* approaches.

This 'reformist' approach becomes valuable when discussing the green economic transitions for the Nordic welfare states who traditionally have sought to follow a 'third way' with strong focus on social welfare and development in a consensus-based and compromise-seeking model of governance (cf. Giddens 1990; Hall & Soskice 2001). Our second objective relates to the welfare state literature and our task is to investigate how our conceptualization correspond with the Nordic states, and how compatible the Nordic welfare state is with the different approaches for greening the economy. Although we have arguably seen a significant liberalization of the Nordic welfare states in later years (Hildingsson & Khan 2013), the typical green economy approaches might be challenged and/or enriched by the Nordic tradition of progressive social welfare combined with comparatively strong government regulation and economic expansion. Our ambition is to analyze whether there is a need for a refined green economy approach for the Nordic countries, which goes beyond the current international policy and academic debate.

We discuss that there might be space for an additional reformist narrative, about a green economy for the Nordic welfare state.

We take this discussion on the green economic narrative of the Nordic welfare state a bit further for our third objective where we discuss contemporary challenges that face the Nordic welfare state and the pathways that are available to the region. The Nordic region has both been world leading in green technology (Gerdes 2016) and been the first countries to pledge to ambitious greenhouse gas reduction targets (Andersen & Ekins 2009). However, they face numerous challenges such as a continued marginalization of rural areas, a recent rise of wealth inequality (Weber et al. 2012; Nordic Economic Policy Review 2018), and a continuous overexploitation of natural resources (WWF 2016). From our conceptualization we will discuss how such challenges might affect the development of a green economy in the Nordic welfare states.

2. Method and material

In reconceptualizing the green economy and discussing the implications for the Nordic welfare state, we set out with our aim of reviewing both academic literature as well as influential policy reports by subjecting them to a number of distinguishing and partly overlooked dimensions. In order to be as transparent as possible this section lays forward the methodological and theoretical underpinnings of this study, the operationalized dimensions that are used for the green economy conceptualization (see Chapter 3) as well as which publications we argue represent the different narratives prevalent.

2.1. Narratives as materializations of a discourse

When it comes to conceptualizing the green economy, we argue that while empirical data on the state of the environment and the economy may be objective (see e.g., Rockström et al. 2009; Steffen et al. 2007), the choice of data to highlight, and the different solutions presented are socially constructed through the way we make sense of environmental and economic challenges. Consequently, we adopt an interpretative methodological approach where we argue that discourses, the way we speak about and assign meaning to issues and social realities, matter in environmental politics (Dryzek 1997; Hajer 1995). What we find most interesting to study within these discourses is how the nature of the policy problem at hand is understood and how the discourse is translated into different coherent ways of 'solving' and handling environmental and economic challenges. Thus, we adopt a narrative policy analysis to identify such 'coherent solutions', i.e., policy narratives, embedded in the overarching discourse (e.g., Kaplan 1993; Roe 1994; Urhammer & Røpke 2013; for a review, see e.g., Hajer and Laws 2006). We define narratives as the structures in which disparate facts are constituted and woven together in order to make sense of and find solutions to the political reality (Patterson & Renwick Monroe 1998: 315). The different narratives of our interest here are in this sense materializations of the overarching discourse on the green economy (Urhammer & Røpke 2013: 64).

Worth noting is that we differentiate storylines, as adopted by Hajer (1995), from narratives, unlike, for instance, Urhammer & Røpke (2013). We contend that a narrative is a broader concept that is comprised by a set of storylines and narrative elements that, put into context, provide a coherent and structured story about, in our case, policy challenges and responses. To Hajer, storylines is "a generative sort of narrative that allows actors to draw upon various discursive categories to give meaning to specific physical and social phenomena" (Hajer 1995: 56). Such storylines are often condensed statements used by actors as short-hands in discussions (Hajer 2005: 302) to "provide actors with a set of symbolic references that suggest a common understanding", i.e., as in a fully articulated narrative. Thus, policy narratives could be understood to provide basic assumptions about and interpretations of the policy problem at hand and a rationale, or motif, for alternative approaches to handle the articulated problem. This

understanding of narratives has guided us in the conduction of our literature review and in the construction of our analytical framework, including the selection of dimensions we argue for below.

It is also worth noting that there is a linguistic vagueness on the green economy where scholars have adopted different labels for mapping alternative understandings and 'solutions'. Examples of such labels are: paradigmatic scenarios, categories, approaches, discourses and proposals. We argue that they are all essentially referring to the same thing, overarching solutions on a number of different issues relating to the environment and the economy, i.e., what we choose to call 'narratives on the green economy'. One should consequently see this working paper in the same light as previous articles that have tried to map different 'solutions' to environmental and economic challenges.

2.2. Dimensions for the mapping of green economy narratives

The first step in our study was to make a comprehensive literature review of earlier academic publications that have sought to conceptualize the different narratives of the green economy (Bina 2013; Urhammer & Røpke 2013; Ehresman & Okereke 2014; Tienhaara 2014; Khan & Clark 2016; Ferguson 2015; Death 2015; Faccer et al. 2014). A summary of this review can be seen in Appendix 1 of this report. It has been our ambition to make use of what other researchers already have argued for and improve the conceptualization on the green economy on this basis. The review has been used both to single out the narratives that we wished to study further and to identify the dimensions to be used when describing the narratives. From the review we found that there are several similar dimensions that are recurring in the mapping of narratives in earlier publications such as the view on economy and progress and the role of the state. However, we also found that there are some dimensions, particularly important from a Nordic perspective, that have previously been overlooked in the literature, even though some publications have acknowledged them. These are issues related to technology/innovation and welfare/equity. Based on the review we settled with the following dimensions in our analysis of green economy narratives;

- Key storyline
- Economy/progress
- State intervention
- Technology/innovation
- Welfare/equity

First of all, we argue both for the sake of clarity and as a way of introducing our reconceptualization that a *key storyline* is of importance for grasping the different core values of various green economy narratives. A storyline, according to Maarten Hajer (1995), is a narrative element embedded within the discourse that creates unity through the sense-making of a complex issue positioning subjects and structures in a simplified way. Contrary to the definition of a narrative, the storyline is more concrete and apprehensible (Hajer 1995), thus well suited for an introducing segment. We see the key storyline as a way of reducing the green

economy narratives into simplified overarching solutions, often summarized in a few sentences. A comparable storyline dimension has previously been used by Olivia Bina, but she does not develop one key storyline present in-between the storylines she chose to call 'greening' and 'all change' (2013: 1025). This dimension consequently contributes with understanding the key differences between the narratives in broad strokes as well as opening up for a more nuanced understanding of the narratives.

Our second dimension, the role of the *economy* and the view on *progress*, is perhaps the aspect most commonly referred to when discussing the green economy. All prior conceptualization literature has taken the growth imperative (as progress) into account, reasonably due to the very defining character this dimension possesses. In particular, discussions on GDP growth have for long been on top of the agenda (e.g., Meadows et al. 1972; Jackson 2009), which has contributed to shape the common understanding of the green economy as either 'pro- or no-growth' (Urhammer & Røpke 2013). In recent years this dichotomic division has been challenged by influential publications (e.g., Stiglitz et al. 2009; van den Bergh 2011), and, as we observe, the idea of progress has been broadened beyond merely positive versus negative growth. While being discussed by many, this is one of the key distinguishing elements within the green economy debate and arguably should be addressed when mapping the narratives.

Our third dimension builds on the premise of the revitalized role of *state intervention* in responding to environmental change (Eckersley 2004; Meadowcroft 2005; Hildingsson et al. 2018), in looking for what different narratives suggest in terms of how the state could intervene in economic relationships and its capacity to regulate the market. The role of the state is treated in several of earlier mappings, however, mostly in connection to specific policy instruments that are suggested in different narratives (e.g., Urhammer & Røpke 2013; Khan & Clark 2016). Hence, there is room for an increased understanding on the differing views on state intervention in a broadened sense as well as at which institutional level the interventions are thought to take place. This is of course of importance given our focus on the Nordic welfare state, but also of general significance since the state still has significant influence in global environmental politics.

As everyone, from market environmentalists to radical ecologists (OECD 2011a; Wells 2016), seem to agree that *technology* and *innovation* plays a fundamental role in countering environmental degradation our fourth dimension relates to different narratives on technological innovation and ways to further facilitate green innovation. While the innovation aspects often are described lengthier within growth-oriented approaches there is need for a better understanding of innovation and technological solutions in a proposed 'post-growth' society. Informed by some new writings on this topic (e.g., GGGI 2015; Wells 2016), we further develop the understanding of these aspects within the different narratives.

Our last dimension, *welfare/equity*, relates to the social aspects often neglected in the green economy discourse (Ehresman & Okereke 2014). For this dimension we specifically look at how social challenges, both existing and those brought along with a green economic turn, are met by different policies proposed by the different narratives. Although the question of

distribution is brought up by e.g., Khan & Clark (2016), the welfare and equity aspects can benefit by being broadened. Specifically, we look at social welfare, regional income gaps and lifestyle aspects, particularly relevant to both the Nordic region and the entire industrialized world.

Structuring our analysis along these five dimensions, the contribution of our reconceptualization becomes twofold, both to add a more nuanced understanding of some key aspects of the green economic transition, albeit already studied, and by studying dimensions largely overlooked in previous works on the green economy.

2.3. Key publications for the three narratives

The second step in the study was to identify the main influential policy reports as well as the prominent academic publications published in recent years, to reconceptualise the main narratives on the green economy. The three narratives covered in this report are: Green growth, Transformative green economy and Beyond growth. In total we have studied twenty-four sources, summarized in Table 1, ranging from the World Banks official growth report to the academic degrowth proponents. In the analysis of the policy literature we have made use of the five dimensions to conceptualise and distinguish the different narratives. The narratives are described and analysed at length in the next chapter.

Green growth	Transformative green economy	Beyond growth
OECD 2011a; 2011b GGGI 2015; 2016; World Bank 2008; 2012; WBSCD 2010; WTO 2012; Bowen & Hepburn 2010	UNEP 2011; 2014; Stiglitz et al. 2009; ILO 2012; van den Bergh 2011; Patil 2012; Antal & van den Bergh 2014; Caprotti & Bailey 2014	Jackson 2009; NEF 2010; D'Alisa et al. 2014; O'Neill et al. 2010; Victor 2010; Martinez-Alier 2010; Kallis 2011

Table 1. Key literature for the three green economy narratives, in order of importance for the conceptualization

3. Reconceptualizing the narratives on the green economy

G*reen growth, transformative green economy* and *beyond growth* – after reviewing the literature presented above, we argue that these are the three main narratives present in the green economy debate. In this section we present these narratives and analyze how they correspond with our operationalized dimensions; *key storyline, economy/progress, state intervention, technology/innovation* and *welfare/equity*. This is described in the body of text below and summarized in Table 2.

3.1. Green growth

The first and perhaps predominant narrative is *Green growth*. The narrative is represented by major international economic organizations such as the OECD (2011a; 2011b), the World Bank (2008; 2012) and WTO (2012), as well as the World Business Council for Sustainable Development (WBCSD 2010, a network organization of major global companies, and the Global Green Growth Institute (GGGI 2105; 2016), an intergovernmental organization focusing on promoting green growth.

This narrative is built on the premise that promoting growth is compatible with protecting our planet from environmental degradation. Green economic growth is in this sense seen as essential for supporting increased welfare, poverty alleviation and environmental sustainability. This idea is reflected in definitions of what we argue constitute the *key storyline* of the green growth approach as expressed, for instance, by the OECD: "[…] fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies" (OECD 2011a: 9). Still, green growth is clearly distinct from business-as-usual since it entails a pronounced shift in the economy to encompass environmental protection.

The straight-forwardness in the green growth narrative leaves little room for uncertainty on how to measure *progress* and what *role the economy* has. Deeply embedded within green growth is the growth imperative. It is acknowledged that the current way to measure GDP needs to be modified to better take into account natural capital and incorporate environmental degradation (OECD 2011a; World Bank 2012: xi), and alternative ways of measuring a progress and well-being are discussed. Still, GDP growth remains the central tool for measuring progress in a country and sticking with this concept is considered beneficial since it attracts policy makers to adapt green strategies (Bowen & Hepburn 2014: 410). An important strategic goal in this narrative is consequently to decouple growth from carbon emissions and other environmental impacts mainly through various fixing of market externalities, described more in length below. Even if the possibility of achieving growth that is able to decouple from carbon emissions

historically has been unsuccessful (Jackson 2009), green growth proponents argues that this may not hold true for the future, rather that this is the change that we need to achieve (Bowen & Hepburn 2014: 413). This narrative consequently does not see any inherent limits to growth, if market failures are corrected. The studied sources representing this narrative also do not suggest a transition of our economic system towards a circular- or shared economy, as the other narratives deem necessary.

Consistent with ascribing leading roles in green transitioning to private enterprise and finance capital, green growth perspectives argue that the substantial financial resources required for transitioning need to come primarily from private funding. The main policy challenge from this perspective is to redirect financial flows toward green investments through polices such as green bonds, public-private partnerships and concessionary financing (OECD 2011b). Measures are limited to enabling and facilitating, while more direct control over and regulation of financial resources and activities are not considered. Strong regulation of property rights is however considered essential for resource efficiency (OECD 2011a) based on the belief that it is the lack of property rights on natural resources, i.e. the restriction of the market, rather than the existence of it, that leads to excessive exploitation of natural capital (OECD 2011a: 28).

Our third dimension, *state intervention,* correlates well with the reliance on market solutions. While sharing a belief in green transformations as a means to promote growth, market environmentalists realize that unregulated markets will generate negative externalities such as environmental degradation. To correct for such 'market failures' and put a price on emissions is the primary rationale for state interventions and market regulations. Relying on correcting market externalities is not to say that the policies are merely 'business as usual', several different regulations and changes in the functioning of the market are suggested, including e.g., carbon-pricing, taxes on emission and 'green education', to correct the externalities present (OECD 2009). State interventions can also be used to support green developments, and subsidies to green innovation and incentivizing capital flows into green production and consumption are considered key aspects in the economic transition (OECD 2011a). Whereas these kinds of policies are supported in all narratives, green growth-proponents argue that they are largely sufficient, and that market regulation should be kept as low as possible (WTO 2012).

In general, there is a focus on centralized and general policies. Although green growth-strategies are thought to be adopted differently depending on local conditions (World Bank 2012: 16), a 'local turn' or the strengthening of local authorities is not envisaged. A large emphasis is rather put on having as much of the same rules as possible in order to increase competition and facilitate the innovation needed (WTO 2012; Bina 2013:). We will see below that there are alternative views on this local aspect of intervention in the greening of the economy.

But where little support is given to strengthening local aspects, all the more attention is directed at our fourth dimension, *technology/innovation*. In fact, much of this narrative is relying on the techno-scientific solutions and the policies thought to strengthen them. The interventions on the market already described, the pricing of carbon emissions in particular, are thought to facilitate

more efficient use of our resources through incentivizing investments in research and development of green technology (OECD 2011a: 53). However, as technology has not been advancing fast enough to achieve robust results of decoupling growth from emissions, it is commonly regarded even within the green growth narrative that more is needed to address market failures. A number of complementary policies are suggested to advance innovation in green technologies, such as support to research and large-scale demonstration, market creation policies (e.g., feed-in tariffs), regulatory frameworks and standards, access to finance and infrastructure investment (OECD 2011a:58). There is a clear understanding of the need of policy support in the different stages of the innovation cycle and even reference to innovation systems analysis for green growth policies (GGGI 2015). Still, in its report on policy tools the OECD (2011b) clearly favors market-based instruments affecting prices and cautions against the use of more intrusive government policies.

As previously noted, where much focus is put on market solutions, growth and technological advances rather scant attention is put on the social aspects of this transformation, i.e., in relation to our fifth *welfare/equity* dimension. Welfare is seen as something directly related to growth and economic wealth development while poverty is portrayed as a major challenge to the green transformation which will be eradicated by continued growth (OECD 2011a: 11). For instance, there is surprisingly little attention in the World Bank Report *Inclusive Green Growth* (2012) to inclusiveness and social aspects. What is said is that green changes in the labour market, that risk depriving rural areas due to loss of jobs, must be compensated by direct infrastructure investment to facilitate the possibility to adapt to changes (World Bank 2012: 31). Generally, as is reinforced by Khan & Clark (2016: 80), the issue of distribution of wealth receives limited attention in the green growth narrative. Welfare and well-being are also considered as synonymous with an increased ability to consume (OECD 2011a), compared with the other narratives which adopt broader understandings of these concepts. Drastic lifestyle changes in order to reduce environmental pressure are deemed unnecessary, and presumably dangerous due to the alleged negative effect on development and the risk of enlargement of the brown sector (Bowen & Hepburn 2014).

To summarize, this narrative is clearly aligned with the present global market economy but does propose a purposeful 'greening' of the market sphere. General economic policies are in focus although a broader approach is deemed necessary to spur green technology innovation. Welfare is conceived mainly in economic terms and there is little discussion of alternative ways of conceptualizing well-being. This is thus essentially a market-oriented way of solving the undergoing ecological crisis.

3.2. Transformative green economy

The second narrative, which we label *Transformative green economy*, proposes a stronger role of the political in the economy and more focus on other measures of progress beyond GDP growth (cf. Bina 2013: 1029). This narrative is more diverse compared to green growth and is represented by the United Nations Environment Programme (UNEP 2011; 2014), the

International Labour Organization (ILO 2012) and a number of academic publications (van den Bergh 2011; Patil 2012; Antal & van den Bergh 2014; Caprotti & Bailey 2014).

This narrative is largely inspired by the influential *Report on the Measurement of Economic Performance and Social Progress* (Stiglitz et al. 2009), which sought to transform our understanding of progress beyond the GDP indicator. This narrative essentially reasons that other indicators than GDP growth should be the concern of the green economic transition, suggesting a stronger focus on increased well-being, social equity and sustainable environmental practices. This is highlighted in what we choose to refer to as the *key storyline,* the definition of the green economy put forward by UNEP: "[…] one that results in improved well-being and social equity, while significantly reducing environmental risks and economic scarcities" (UNEP 2011: 9). This storyline goes further than the green growth narrative in terms of regulatory- and social policies but not as far as the beyond growth narrative as we will see below.

What clearly distinguishes this narrative from the former is in relation to the *economy/progress* dimension. Even if there are slightly different takes on growth present within this narrative, depending on which perspective you study among the quite motley collection, they share some commonalities in their strong criticism of the current GDP indicators. Economic growth is not deemed unsustainable per definition as in the beyond growth narrative, but it is strongly problematized. UNEP is suggesting a comprehensive modification of the growth imperative promoting other well-being indicators including environmental and equity factors (2011: 16). Van den Bergh (2011), among others, goes further and suggests an agnostic approach to growth as such, what he refers to as a-growth, and proposes to instead focus on environmentally and socially sound development. Regardless of these differences they both relate to an idea of development close the sustainable development goals, broadening the trajectory for societal development and human progress (Ehresman & Okereke 2014: 21).

This transformative, in-between idea of progress is fundamentally a way of overcoming the acknowledged inherent limits with economic growth, as it is measured today (UNEP 2011: 23; van den Bergh 2011: 885). The transition into a circular economic mind-set, in which material and waste use is minimized, is considered an essential way to make the economy inherently sustainable (UNEP 2011: 292). Thus, it is evident that the actors supporting this narrative see progress in the green economy as something different than in the present economy, also supporting ideas of a 'sharing economy' and a changed mind-set of consumption behavior (UNEP 2015: 22). Overall, the strong criticism of GDP growth differentiates this narrative from green growth, but while still being positive to some kind of economic expansion it is also differentiated from the third narrative on beyond growth.

The present financial system is seen as highly problematic and a UNEP report refers to the last two decades as an era of 'gross misallocation of capital', financial investments pouring 'into property, fossil fuels and structured financial assets with embedded derivatives', and relatively little into 'renewable energy, energy efficiency, public transportation, sustainable agriculture, ecosystem and biodiversity protection, and land and water conservation' (UNEP 2011:14). Still,

it is acknowledged that green financial investments are necessary for a transition to a green economy and an important policy goal is to facilitate and support a major change in financial investment streams towards sustainability. Regarding property rights the view is mixed, on the one hand there is an assertion of stronger property on natural capital rights to avoid overexploitation of resources (UNEP 2011), on the other hand there is a wariness of economizing nature and a call for stronger public protection of natural assets.

In order to facilitate change, the transformative green economy proponents acknowledge the historical strength of growth in alleviating people out of poverty, but strongly oppose the unregulated form which has caused environmental degradation and overexploitation of natural resources (Ehresman & Okereke 2014: 22; UNEP 2011: 15). *State intervention* is consequently proposed at greater length than the green growth narrative, including and beyond merely correcting externalities (UNEP 2011: 19). One key difference from green growth is that these regulations are more based on what social and environmental impact they have rather than the effect they have on growth, causing them to have a more intrusive character (van den Bergh 2011: 888; UNEP 2011: 19). This means that when moving beyond just the minimum interventions in markets, stronger regulations, higher taxes and greater subsidies are proposed (UNEP 2011: 15). In essence, this results in a stronger emphasis on the role of politics and the regulative power of the state.

There is also an idea present within this approach for an increased mandate of the local. A common understanding within this narrative is the necessity to empower local institutions to create local 'environmental resilience' beyond market measures (Caprotti & Bailey 2014: 4). However, this does not imply a large transition towards decentralization, there is still strong support on the importance of universal agreements and centralized power (van den Bergh 2011: 888).

There are certainly dimensions where the transformative green economy differentiates from green growth. Where the two narratives resemble each other however, is in their techno-scientific belief in *technology* and *innovation* as a key solution for making economic expansion, measured in growth or other forms of development, feasible with ecological objectives. Innovation is thought to be incentivized through a combination of carbon price mechanisms (e.g., green taxes) and directed policy support in the different stages of the innovation cycle, such as high-risk research and development, demonstration, targeted subsidies, market creation policies, regulatory frameworks, favorable loans and infrastructure investment (UNEP 2011: 553-557). This is similar to what is suggested by the OECD (2011a) but goes further in its advocacy of government measures (Khan & Clark 2016: 78), e.g., by highlighting subsidies and green public procurement as important policies (UNEP 2011: 556).

For our fifth dimension, *welfare/equity* there is yet again more clearly dividing elements between the narratives. With less focus on a market-oriented understanding of economic growth and welfare more attention is put on the social aspects of a green economic transition. As a clear distinguishing factor from the former narrative is its emphasis on justice and distributional aspects of a green transition as well as intra-generational equity (Ehresman & Okereke 2014:

21). Not only infrastructure investments and 'green new jobs' are suggested to counter geographical differences and negative effects of economic restructuring, but so are substantial social investments in human capital and a framework for redistributive taxation (UNEP 2011: 171). While such proposals are not radical, they are clearly more progressive than the social policies laid forward within the green growth narrative. The concept of welfare is also considered in a broader sense, based on the very definition of the green economy as stated above, and seen as both increased well-being, prosperity and equity (UNEP 2011: 11). A renewed sense of welfare goes hand in hand with the opinion that a core component of the current welfare arrangements, i.e., our unsustainable western lifestyle, needs to be altered (UNEP 2015: 27): Still, there is not an outspoken proposition on reducing consumption, rather that consumption needs to be made sustainable through e.g., more circular flows, dematerialization and sharing. The general observation is that this transformative narrative is more progressive on social issues in the greening of the economy.

In essence, this narrative goes further than green growth in promoting a green economic transition. Market measures in themselves are not seen as enough and stronger state intervention, broader concepts of social welfare and new ways to measure progress are needed for greening the economy. However, the positive sum game between ecological and economic objectives is all the while present although the need for revising our society's economic goals is central to the transformation. This belief in a positive sum game is one of the main dividers from the more radical propositions.

3.3. Beyond growth

The third narrative, *Beyond growth,* is perhaps the most heterogeneous among the three. It is not represented by any international organizations like the other two narratives, but rather by grass root think-tanks like the New Economics Foundation (NEF 2010), and academics within the fields of ecological economics and degrowth (Jackson 2009, D'Alisa et al. 2014; O'Neill et al. 2010; Victor 2010; Martinez-Alier 2010; Kallis 2011).

Advocates share the perception that sustainable growth on a finite planet is unachievable, but the policy proposals vary within this comparatively radical narrative. Basically, it is founded on the idea of reducing the economic throughput of our society, lessening the environmental impact, and distributing the rights to emit and prosper equally (e.g., Kallis 2011: 874; Victor 2010: 370; NEF 2010). This means a comprehensive transition of both the goals of our society and the measures we undertake to protect our environment. Inspiration is often gathered from ecological economists like Herman Daly and Tim Jackson and the assertions of the 'myth of decoupling' (Jackson 2009) and steady-state economics (Daly 1977) are widely adopted. For a *key storyline* which all actors would sign off on we found this definition of the proposed economic shift: "socially sustainable and equitable reduction (and eventually stabilization) of society's throughput" (Kallis 2011: 874)

When searching for unity within this narrative, perhaps the most uniting factors among the various actors is related to the *economy/progress* dimension and the wide-spread criticism of

the prevailing growth imperative. Critical voices often point to Jevon's paradox, the constant occurrence of when innovation, facilitating efficiency and growth, fails in creating sustainability due to an increase in the aggregate usage of products and services (sometimes referred to as the rebound effect) (Faccer et al. 2014: 651). As we are yet to see any absolute decoupling, that being an increase in GDP growth combined with an aggregate decline in carbon emissions, this narrative argues that the positive sum game is merely hiding the true contradictions (Jackson 2009).

Coming from these insights there is allegedly an inherent limit to growth and all movements sharing this narrative would consequently suggest some form of downsizing of the economy to a sustainable level (degrowth, steady-state or a 'great transition'). This applies particularly to advanced industrialized states while some developing countries will still need economic growth in order to increase welfare levels. Worth noting is that this perspective does not argue that downsizing is the end goal but rather the means to achieving progress (Kallis 2011: 874). But on the question of what constitutes the end goal is also where the narrative becomes internally fragmented, namely in terms of how we instead ought to measure progress. Where some argue for progress as meeting basic human needs in a sustainable way (e.g., Gough 2016; Koch et al. 2016), others argue for sustainable subjective well-being (e.g., Bartolini 2010) and yet others for sustainable objective well-being (O'Neill et al. 2010). All strands could however, be said to imply and promote equal and social welfare without environmental degradation as measurement of progress.

Beyond growth perspectives see the current financial system as a root cause of ecological problems. Debt-fueled economic growth driven by a financial sector swelling well beyond the productive capacities of the 'real economy' (production of goods and services) is seen to underpin unsustainable resource extraction and exploitation of what ecological economists call the 'real-real economy' – flows of energy and materials (Kallis et al. 2009; Martinez Alier 2010). Policies proposed from this perspective include measures to regulate finance (e.g., state monopoly on money creation, taxes on financial transactions, barriers to tax evasion through tax havens), and in the long run to design a financial system conducive to a steady-state or no-growth economy.

In order to achieve change, *state intervention*, needs to be increased to fix inherent problems with the current economic system. This narrative includes the suggestions laid forward by the other narratives, i.e., pricing carbon, new taxes and regulations, but goes further with stronger restrictions on the financial market, progressive social policies as well as varyingly radical redistributive proposals (see e.g., NEF 2010; Kallis 2011). These reforms are thought to be provided both top-down from the state governments and global institutions but also from bottom-up initiatives and experiments. In accordance with the 'subsidiarity' principle, local communities should gain more power and a gradual decentralization be undertaken (NEF 2010: 56). The state and the local has certainly a larger role to play in a beyond growth future.

This enlarged regulation is largely due to the disbelief, as already noted, in *technology/innovation* to make the growth imperative sustainable and facilitate absolute

decoupling (Jackson 2009). That is not however, to say that technology and innovation are not of importance for the beyond growth narrative and thinking around these issues has recently started to develop (Kerschner et al. 2018). There is a division between those who see technological innovation as an essential part of the solution and sceptics to technology (Kerschner et al. 2018). To incentivize innovation without growth is challenging and still only theoretically explored, as illustrated by de Saille & Medvecky (2016). Beyond growth proponents thus call for other incentives than economic profit such as the ecological crisis in itself and the efficiency that low-carbon innovation can provide to compel researchers to find new solutions. An important concern is to find new criteria to evaluate and assess technologies so they are conducive to a degrowth society (Kerschner et al. 2018). Furthermore, new business models with different structures and goals than the current profit-driven enterprises are suggested (Wells 2016: 2). Exactly how innovation can be promoted, we argue, is still vague on a large scale, and there is need for further exploration of this theme within the beyond growth community.

More elaborated is the *welfare/equity* dimension. Social justice and equality are certainly at the core of the beyond growth narrative. Policies promoting an equal distribution of wealth and a widening of social security are suggested to counter geographically induced poverty and inequalities (NEF 2010). What this often means is socially progressive policies like minimum- and maximum income regulations, equally distributed carbon caps or other 'windows of opportunities' arising from the societal change of downsizing policies, e.g., adjusting work-time according to a decreased demand on the labor market (Kallis 2011). The idea of a sharing economy is promoted to help facilitate the sustainable downscaling of the economy, making greater use of our common resources (Kallis 2011: 879). As seen from the discussion on progress indicators, the welfare definition of beyond growth is much broader than in the other narratives. Perceived well-being and prioritizing basic human needs for all goes beyond what other narratives argue for. All these social aspects go hand in hand with the general idea that we need to transform our society in terms of our lifestyle choices in the western industrialized countries and high-consumption societies to be able to facilitate these social reforms in the global South (NEF 2010).

To sum it up, even if this narrative is perhaps not the most compatible with current day politics (cf. Khan & Clark 2016), it could be seen as a possible goal for the society in a longer time perspective. Such an approach is proposed, for instance, by Ian Gough who makes the case that a 'post-growth'-society is the last step, and ultimate goal, of a longer-term green economic transformation, where the first and second steps are thought to represent an orientation towards 'eco-efficiency' and 'recomposing consumption' (Gough 2016: 201). What this narrative already succeeds with, however, is to shed light on some of the contradictions and challenges with the more market-liberal narratives on the green economy.

	Green Growth (market oriented)	Transformative Green Economy (reformist)	Beyond Growth (radical)
Key storyline	"[…] fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies" (OECD 2011a: 9)	"[…] one that results in improved well-being and social equity, while significantly reducing environmental risks and economic scarcities" (UNEP 2011: 9)	"socially sustainable and equitable reduction (and eventually stabilization) of society's throughput" (Kallis 2011: 874)
Economy/ Progress	- Sustain growth imperative, modify its components - Altered GDP growth at the essence of progress - No inherent limits with growth, just the current state of market failures - No focus on circular or shared economy - Financial sector will play a major role in a green transition	- Modify growth significantly/ abandon the growth imperative - Sustainable development at the essence of progress - Some inherent limits with growth, not just the current state - Strong focus on circular economy, some focus on shared economy - Financial sector currently driver of unsustainable investments; but will play a major role in a green transition	- Degrowth imperative, downsize the economy to a steady/sustainable level - Increased equal and social welfare at the essence of progress - Inherent limits with all kinds of growth (expansions of economies) - Strong focus on shared and circular-economy - Financial sector root cause of environmental problems
State intervention	- Limited intervention to correct externalities: e.g., taxes, subsidies, carbon-pricing and 'green education' - Policies to incentivize green investments in financial sector - Property rights on natural capital - Local contexts should be acknowledged – but not a 'local turn'	- Intervention including and beyond correcting externalities: regulatory measures to address aspects where the market measures fail - Policies and regulations to incentivize green investments in financial sector and avoid misallocations - Property rights on natural capital; public protection of natural assets - Strengthen the mandate of local institutions	- Intervention, including the former, but also equally distributed carbon caps and socially redistributive policies like minimum/maximum income etc. - Strong regulations of financial sector to resist misallocations - Public and collective protection of natural assets - Gradual re-localization/ decentralization
Technology/ Innovation	- Create market-based incentives for green technology - Innovation systems-approach - Strengthen competition and patent rights - Belief in decoupling through technology	- Create market-based and government-subsidised incentives for green technology - Innovation systems-approach - Strengthen competition and patent rights - Belief in decoupling through technology	- Creating incentives beyond financial objectives - Changing the terms of competition, away from the centralized resource-intensive technology - Disbelief in decoupling through technology, emphasis on arguments based on Jevon's paradox
Welfare/ Equity	- Welfare seen as increased ability to consume – trickles down through the economy - Market as provider of universal economic welfare (growth) - Infrastructure investments and 'green new jobs' to counter geo-differences - Western lifestyle made possible through decoupling	- Welfare as increased ability to consume, but also increased well-being, prosperity and social equity - State and market as providers of universal social welfare (development) - Infrastructure, human capital investments and tax redistribution to counter geo-differences - Some lifestyle changes necessary	- Welfare as increased well-being (objective or/and subjective), prosperity and social equity - State and local authorities as providers of universal social welfare (redistributive development) - Equal (re-)distribution of wealth and a widening of social security to counter geo-differences - Great societal changes, current lifestyle unsustainable

Table 2. Our conceptualization of different green economy narratives

Main distinguishing elements: ____
Main commonalities: ____

3.4. Comparison and assessment

Through the above assessment we hope to have shown that there exist many different visions on how a future green economy can look like and what the pathways towards this can be. We contend that it is necessary to move beyond a simple dichotomy of either pro-growth and market-oriented or no-growth and critical of the global market system. There is also an important middle narrative which is highly critical of many features of the current global market system, including how we measure progress, but does not advocate no-growth as an overarching goal. In the following we wish to highlight both the similarities and main differences between the narratives.

The main thing that unifies all three narratives is an assertion that business as usual is not an option and that the current functioning of the global economy is highly unsustainable. All narratives call for important changes although in different ways and to different extents. Green growth strives for a continuation of the present global market system but with changes to steer it in a green direction. Transformative green economy is not inherently opposed to a global market system but sees major flaws in its current functioning which calls for major policy interventions to increase ecological sustainability, social welfare and equity. Beyond growth contends that global market capitalism and continued economic growth is not, and cannot be, compatible with long term sustainability which means that a complete shift in economic and societal prioritizations is necessary.

Still, even if the three narratives we have identified in our review have clear distinguishing elements they do share some important similarities. They all favor policies and regulations correcting the market externalities present through carbon pricing, taxes and education (Urhammer & Røpke 2013: 65). All narratives also recognize that innovation plays an important role in the transition, although they differ in putting their trust to it as well as in their view on how to facilitate innovations and investment in new technologies. Lastly, they share a recognition of the critique of the GDP indicator as it is currently measured, even if they have different solutions on how to overcome the faults of the current measurement of (economic) progress. These commonalities might sound trivial but the consistent imperative of change is of course of importance.

Just as important are the key contentions between the three narratives. There is a tangible distinction between the narratives in the different opinions on the growth imperative present which are represented by the *sustain*, *modify/a-growth* and *degrowth/downsize*-views as seen above. While other scholars have already have pointed to the different view on growth across the narratives (Ferguson 2015), we argue that there is also a key difference in terms of their view on social and welfare policies and on the state's facilitating role, where the narratives are more progressive/radical and interventionist the further away from the *green growth* narrative you come. Additionally, there seems to be a dividing element in how to regulate/nourish the market where the green growth proponents promote nourishing it, facilitating financial flows from brown to green sectors. Transformative green economy proposals instead contain both regulation to counter inherent market failures and incentives to promote innovation and

investments in the transition. Beyond growth proponents have a more critical view on market forces, and thus, consider restraining them through more stringent regulations of market activities.

It should also be noted that the policy reports representing the narratives had a stronger focus on certain issues while downplaying others. The green growth narrative, as already mentioned, lacks a thorough understanding of social aspects of a green economic transition. Quite contrary, the beyond growth narrative, while recognizing the importance of innovation, does not make an assuring case on how to facilitate innovation in a steady-state or shrinking economy on a large scale. Since both these aspects, i.e., social welfare and innovation, are of importance for the Nordic welfare states we argue in the next section that the kind of 'green welfare state' pursued in the Nordic countries have the potential to account for these weaknesses.

4. Towards a green economy for the Nordic welfare states – a revised narrative

The Nordic countries have historically pursued a reformist way to the economics of the welfare state, largely guided by social democratic ideas about modernization (Esping-Andersen 1990), and social welfare and innovation have been defining elements of this regime (Andersen et al. 2007: 15). Furthermore, comprehensive welfare state arrangements, as in the Nordic countries, have proven to correlate well with progressive environmental institutions and outcomes (see e.g., Duit 2011, 2016; Hildingsson & Khan 2013; Stoknes & Rockström 2018). Studying the Nordic region in order to improve and broaden our understanding of the green economy can consequently be fruitful.

In this chapter we outline the general characteristics of the Nordic welfare states and compare this to the global green economic narratives presented in the previous chapter, based on the same five dimensions as used above. Obviously, such a characterization will be a simplification of reality and there are important nuances between the different Nordic countries that cannot be covered. The outline of the key characteristics of the contemporary Nordic welfare state will be based primarily on a general understanding of the Nordic model through academic publications (see e.g., Brandal et al. 2013; Hildingsson & Khan 2013; Nordic Economic Policy Review 2018), and secondarily on policy reports published by the Nordic Council of Ministers (2017a; 2017b; 2018). It is beyond the scope of this paper to study in detail the characteristics of each Nordic country and their respective policy strategies concerning a green economic transition. Such a deepened analysis will be carried out in a later stage of the NOWAGG project.

Still, we believe it fills a purpose to make a broad characterization and we argue that the Nordic welfare states have many similarities with the transformative green economy narrative but that it they share important treats with the other two narratives. We argue that much can be learned about greening the economy by studying what is being done in the Nordic states and that there might be room for a reformed narrative of the Nordic green welfare state. At the same time the Nordic countries are in a period of change both when it comes to the re-modification of traditional welfare arrangements and in how a transition to a low-carbon and green economy can be managed. Thus, in the coming years the Nordic countries will face a number of political challenges and decisions that will decide which kind of green economy narrative that will be pursued. At the end of the chapter, we will further discuss what these challenges imply.

4.1. Key characteristics of the Nordic welfare state

It is not straightforward to construct a key storyline of the Nordic welfare state in terms of its relation to green economy. The Nordic welfare economies have evolved since the beginning of the 20th century and it is only in later years that environmental issues have come to the forefront

of political decision making, thus, as in other countries there is a maybe green economy in the making but far from an existing one. Still, based on the other characteristics discussed below we argue that it is possible to suggest a storyline that essentially could be boiled down to: achieving inclusive long-term welfare while respecting ecological limits. This storyline captures the nature of the Nordic welfare state, its traits and environmental objectives, all in a simplified story.

At the core of this storyline is the social democratic regime (Esping-Andersen 1990). This regime, sometimes referred to as the 'Nordic model', still prevails in the Nordic countries although in later years it is undergoing a marked transformation. This Nordic welfare model has historically relied heavily on the growth imperative. Even if the main role of the model arguably has been redistribution of wealth, social justice and universal social welfare (Andersen et al. 2007), much in line with what an alteration of the way to measure progress beyond GDP indicators suggests (cf. Stiglitz et al. 2009), these objectives have presupposed economic growth (Brandal et al. 2013: 129). Economic growth, currently measured in GDP, consequently remains a core goal in the Nordic states. There have been discussions whether Nordic countries can be seen as empirical evidence in favor of the decoupling theory. Recent data show that the Nordic countries have managed to achieve decoupling of growth from environmental degradation, measured in an aggregate decline of carbon emissions (Stoknes & Rockström 2018; Nordic Council of Ministers 2014). This data, however, does not take into account emissions embodied in imported goods and services, a problem which is highlighted in a recent case study on Sweden where it is shown that carbon intensity of imports has increased in recent years (Jiborn et al. 2018). A full account of the decoupling theory needs to address a global perspective on emissions. Also, carbon emissions are only one aspect while other environmental issues also need to be considered.

Although GDP growth remains a main goal in the Nordic states there are signs of change. The Swedish government has for instance suggested a slight move away from the GDP indicator to adopt other measures of progress that account for social and environmental factors to a higher extent (Swedish Parliament 2016). There is also an increased environmental focus in the Nordic region with an embracing of circular economics, e.g., seen in the CIRCit (2017) project and different national initiatives. Distinctive for the Nordic region has also been the ambitious environmental targets and visions that each country has set up, where Sweden and Norway have the most far-reaching goal of becoming carbon-neutral/net-zero emitters by 2045/2050 (Nordic Council of Ministers 2017).

In sum, we argue that with the broad social welfare objectives of the Nordic countries while still relying on growth to achieve it, a green economy of the Nordic welfare state mostly resembles the green growth narrative in terms of ways to measure *progress* and what role the *economy* has in the transition to a green economy, although there is a slight movement in the direction of the transformative green economy narrative.

More distinctive is the relation between the Nordic countries and our second dimension, *state intervention*. Throughout the history of the social democratic welfare state, there has been a

high tolerance for regulatory state interventions trying to ensure social welfare for all citizens (Brandal et al. 2013). Acceptance for strong state intervention in regards to welfare aspects has, in turn, generated a comparatively high tolerance for intervening to mitigate environmental externalities and to decrease carbon emissions (Gough & Meadowcroft 2011; Hildingsson & Khan 2013). Based on this traditional idea of the Nordic model it is safe to say that it resembles the more intrusive ideas of the state in the global debate on state intervention in the green economy, i.e. the narratives we call transformative green economy and beyond growth. These historical records have, however, been challenged by contemporary transformations of the Nordic countries in a more liberal direction (Hildingsson & Khan 2013). This might decrease the acceptance of state intervention and is arguably correlated with a marketization of environmental policies and governance. Correspondingly we have witnessed an increased mandate of both local authorities, private actors and individuals to intervene in environmental matters (Hildingsson & Khan 2013: 17), further decreasing the role of the state.

Despite this evolution of a narrower role for state intervention, the state, at least in Sweden, is still considered the "ultimate guarantor of policy attainment" (Hildingsson & Khan 2013: 16). We have also seen a broadened ecological responsibility of the welfare state in recent decades and Andreas Duit (2011, 2016) even considers the Scandinavian countries to represent 'thick eco-states' or 'established environmental states', i.e., states with high levels of environmental administration, regulations, taxation and public spending. Consequently, we argue that there is still a case to be made that the green economic narrative of the Nordic welfare state goes beyond merely correcting market failures and is characterized with more active government intervention, however in a reformist rather than radical sense. Thus, we argue that the Nordic model, compared with the global narratives, reassembles the transformative green economy with the more intrusive character of state intervention. However, we observe that there has been a tendency in the Nordic countries, witnessed by e.g., Hildingsson & Khan (2013), to move towards more green growth-inspired ideas in relation to state intervention.

Another area, related to state intervention, in which the Nordic countries often are referred to, is *technology* and *innovation*. The Nordic countries are highly ranked in most innovation indexes, see e.g., Bloomberg Innovation Index where Sweden, Finland, Denmark and Norway are all top 15 (Bloomberg 2018). Mazzucato (2013) also shows that states with strong interventions to incentivize innovation have historically been successful in facilitating green technology. This incentivizing has for the Nordic states historically mainly consisted of supplying technology through research and development investments (Andersen et al. 2007: 35), and adopting market-based solutions to facilitate further technology, such as carbon taxes and emission trading (EU-ETS) (Hildingsson et al. 2018: 9). There are, however, also policies directed at other stages of the innovation cycle such as technology push instruments (e.g., subsidies, public investments and tax breaks), niche creation (feed-in tariffs, green certificates, public procurement) and demonstration programmes, as well as more systemic instruments, such as infrastructural and organizational solutions. For example, in the case of developing biorefineries in Sweden we have seen both a tendency of adopting broader, more systemic, innovation strategies, such as developed research infrastructure and actor networks, but also system weaknesses such as bad policy timing and weak coordination among ministries

(Hellsmark et al. 2016). We suggest that although market-oriented policies still dominate in the Nordic countries there is a shift towards a broader approach on innovation and green technology policy. We therefore conclude that the Nordic region resembles the more interventionist transformative green economy narrative, rather than the more market-oriented green growth narrative.

These differences, compared to the market-liberal green growth narrative, are echoed also in the Nordics *welfare* and *equity* characteristics. The Nordic region has a distinctive relationship with this last dimension. Using care ethics, Kronsell and Olofsdotter Stensöta have shown that the welfare state (all Nordic states are considered advanced welfare states) has the capacity to care for its citizen, including children, sick and elderly (Kronsell & Olofsdotter Stensöta 2015: 227). Furthermore, the Nordic welfare states have a history of providing welfare and redistributing wealth while decreasing the economic inequalities in society (Brandal et al. 2013). In terms of gender equality, the Nordic countries are also considered global leaders (Boschini & Gunnarsson 2018). Based on this emphatic rationality that has gained foothold in the Nordic societies we argue that this welfare aspect incorporates both well-being, but also prosperity and social equity.

However, the welfare and equity dimensions of the Nordic states have been challenged partly due to globalization and liberalization reforms (Hildingsson & Khan 2013). For instance, the Nordic countries have, during recent years, had rapidly rising inequality, although from comparatively low levels, and there are large geographical differences between some rural areas of the Nordic region and other richer areas (Weber et al. 2012). Furthermore, the Nordic countries' renowned redistributive transfers, such as unemployment and sickness benefits, have experienced a rapid decline in recent years (Pareliussen et al. 2018). Göran Therborn goes as far, when describing the development in Sweden, as to say that "the 'People's home' is falling down" (Therborn 2017). These changes have not passed without notice. Nordic ministers seem to agree that the economy of the coming decades must account for this development and the challenges it has brought (Nordic Council of Ministers 201X). But we must remember, emphatic rationality, interpreted here as social welfare and equity, is not the only rationality for the green economy of the welfare state. There are competing rationalities in the welfare states as shown by Kronsell and Olofsdotter Stensöta (2015), e.g., bureaucratic, market and deliberative rationalities that are conflicting with the notion of care (Kronsell & Olofsdotter Stensöta 2015).

There is also a debate whether profound lifestyle changes are needed in the Nordic region or if our way of living with a high degree of material consumption and longer travels can be made sustainable, a question even more critical if a larger percentage of the global population is alleviated from poverty. Though, this debate is alive in the Nordic countries, even within policy circles (Naturvårdsverket 2012; 2015), a questioning of the present consumption patterns is still far from entering official policy doctrines.

Despite these challenges, we argue, based on the traditional characteristics of the welfare state combined with the alleged ambitions of the Nordic Council of Ministers that the welfare state

goes further in terms of intervening to secure a broad equitable sense of welfare, placing it beyond the transformative green economy. Still, we have yet to observe any radical propositions in e.g., work-time, changed economic mind-set, reduced consumption and a local turn in order to say that the Nordic welfare state resembles in social aspects the beyond growth narrative. Yet again we seem to have found a need for an in-between narrative, when it comes to a Nordic approach to the green economy transition.

4.2. Challenges and pathways for the Nordic welfare states

The above characterization has shown that the Nordic welfare states share many traits with the transformative green economy narrative. This narrative proposes certain ideas for how a green economic transition could be pursued and we can see that the Nordic welfare states already embody many of these elements such as an increased focus on circular economy, comprehensive environmental policies and institutions, an emerging innovation systems approach to green innovation policies, a traditional strong focus on social welfare and equity and, to some extent, a public discussion on the need for lifestyle changes in a green direction. Still, in other aspects there is more resemblance with the green growth narrative, most importantly when it comes to the continued reliance on the growth imperative and on GDP as the main measure of progress and wealth, but also in terms of an increasing marketization of environmental policies, a weakening of welfare services and increasing economic inequalities. We find least resemblance with the beyond growth narrative although there are some similarities in the traditional strong focus on social welfare and redistribution, and an emerging discussion on the need for lifestyle changes.

We contend that the pathway towards a green economic transition in the Nordic countries is open at the moment and that decisions in coming years will determine which direction will be taken. An increased understanding of existing green economy narratives combined with empirical studies of ongoing policy debates in can help shed light on crucial challenges and dilemmas that lay ahead. At the end of this chapter, we wish to highlight three challenges that we think are particularly important for a green economic transition in Nordic countries.

- Dealing with the continued overexploitation of natural resources in the Nordic region
- Increased wealth inequality, specifically in the urban-rural divide and deregulation reforms that might alter the welfare state composition
- The need for radical and not just incremental innovation

4.2.1. Dealing with overexploitation of natural resources

Even if some of the Nordic states disputably have achieved genuine decoupling in some areas, the Nordic region is still far from living sustainable. If everyone would live like a Swede for instance, we would need the resources of 3.7 planets to keep up our everyday lifestyle, compared to the 1.6 planets that are used globally (WWF 2016). Seeing to the whole region, according to the Global Footprint Network, all Nordic countries reside among the world's top 20 largest 'ecological footprinters' per capita (2013). Still, the Nordic countries are often

considered frontrunners in the environmental transition due to its relative records, i.e. disputed decoupling, and ambitious carbon targets. But the road towards carbon-free societies and post-fossil economies is a long and winding one, opening up for different pathways.

Indeed, as shown above, there are several proposals to overcome the overexploitation present. In the global debate we have identified three ways of changing the overarching role of the economy and ways to measure progress to combat this exploitation: 'green growth', the belief in GDP decoupling, 'a-growth', the change of focus away from measuring GDP towards e.g., environmental factors, and 'de-growth', the shrinking of the economy towards sustainable levels such as in a steady-state economy. The Nordic countries have traditionally been relying on the growth imperative to sustain welfare. But there are some tendencies to abandon this imperative, and we could witness a slight and emerging questioning of GDP growth in some Nordic countries. Furthermore, the statistics that indicate genuine decoupling have been disputed due to increased numbers of carbon-intensive import (Jiborn et al. 2018). If such a disbelief in decoupling is strengthened and ways to measure progress are altered beyond the GDP indicator, we might see a Nordic welfare state with less focus and reliance on GDP growth. On the other hand, if the decoupling theory is strengthened, we might instead see a continuous reliance on the growth imperative.

Another possible pathway to overcome the overconsumption of natural resources is to put larger emphasis in policy support for lifestyle changes in a green economic transition, i.e., more or less profoundly changing the current western lifestyle. More profound suggestions are proposed in the radical narratives, i.e., beyond growth, in the global debate but we are yet to find any tendencies of advocating an excessive lifestyle overhaul in the limited number of Nordic policy documents that we have studied. More likely in the Nordic region might be policies directed towards slight changes of our lifestyle patterns, i.e., aviation taxes, information campaigns etc. which are now starting to be implemented, rather than exhaustive restrictions and bans.

In sum, even if the Nordic countries traditionally have oriented around growth and economic expansion, it should not be ruled out that a move in the direction of 'beyond growth' or more transformative lifestyle change policies is possible. The pathway the Nordic countries take will probably depend on the environmental performance and the success of the decoupling theory in genuine terms. What the ambitious carbon targets at least show us is that the problem of overexploitation is identified and a change of the current Nordic society is deemed necessary. What remains uncertain is the question of what exact path will be used to try to reach these goals.

4.2.2. Wealth inequality and deregulation of the welfare state

Our second challenge relates to the, to some extent, already discussed (neo)liberal development of the Nordic states since the 1980s that has resulted in liberal reforms of the welfare sector, and is linked to an increasing wealth inequality (Nordic Economy Policy Review 2018). This development is expressed e.g., by a heightened difference between the rural and urban parts of the Nordic society (Weber et al. 2012), as well as a decreased acceptance for state intervention

(Hildingsson & Khan 2013). As already noted, some scholars claim that the egalitarian character of the Nordic welfare state might very well be at risk (see e.g., Therborn 2017).

Considering the characteristics of the Nordic welfare state in relation to the green economy, the liberalization of the Nordic model that we have witnessed arguably affects both the acceptance for state intervention and the empathic rationality of the welfare state, i.e., the welfare and equity dimensions. That might be worrisome, if the acceptance for state intervention in economic and social issues is lowered, then the acceptance for the state to intervene in environmental issues might also be at risk (Hildingsson & Khan 2013). Furthermore, a decreased legitimization of state intervention also has the potential to negatively affect the innovation and technology dimensions of the green economy. In order to achieve radical, and not just incremental, innovation extensive policy support by the state is needed (Söderholm 2020).

In a general sense, recent developments might have moved the Nordic welfare state towards more market-oriented green growth line of thinking. Whether egalitarianism and acceptance for state intervention will remain as one of the key characteristics of the 'Nordic model' seems to depend on what policies the Nordic countries will adopt in coming years, i.e., what (green) economic path that is pursued.

To combat the challenges arisen from this welfare state transformation there are different pathways open for the Nordic region. One pathway would arguably be to reintroduce the more interventionist policies of the past that served to redistribute wealth and provide welfare for all citizens (Brandal et al. 2013), combined with environmental reforms direly needed today. Such a turn could possibly imply more intrusive policies like minimum- and maximum income, a more environmentally regulated financial market and equally distributed carbon caps, and other proposals found in the beyond growth narrative. However, there are challenges for such proposals to gain acceptance, much like the observed challenges for the beyond growth narrative.

An alternative path would be for a continuing of the liberalization trend, that has arguably transformed the Nordic societies, and tackle the existing challenges by more market-oriented policies, e.g., 'green new jobs' and infrastructure subsidies (cf. OECD 2011a). Such suggestions are dependent on the belief in market policies, liberal reforms of the welfare state and green growth strategies to combat environmental degradation. But much like the critique against green growth proposals, such suggestions might not fully account for the welfare and equity consequences of this development.

Essentially, the welfare state transformation that is underway asks questions whether the Nordic model will continue to exist in the future. But even if the development is moving in a market-liberal direction, there are still some significant aspects of the Nordic model left that continue to endure. Perhaps there will continue to be room for a more reformist, transformative narrative in-between the others;

> "Despite decades of a supposedly neoliberal hegemony, the Scandinavian countries remain admired not only for innovation and competitiveness but also for their family policies, gender equality, and participation in the labour market" (Brandal et al. 2013: *92)*

Based on this theoretical discussion on the Nordic welfare state, it remains unclear what welfare and equity dimensions of a green economic transition the Nordic countries will adopt in the ensuing years, whether it will be more inspired by green growth-, transformative green economy- or beyond growth-thinking. We believe that a closer look at the empirics of different strategies in the Nordic states are necessary to understand how the Nordic welfares state will tackle the described challenges in the future.

4.2.3. Radical innovation beyond the incremental

The Nordic economies have a tradition of a high degree of innovation, generating productivity gains and new business opportunities. When it comes to green technology there are a number of policy instruments in place both of a general nature (R&D, taxes, emission trading), more targeted (electricity certificates, subsidies, public procurement) and systemic (infrastructure, organizational). Still, for a transition to a green economy, there is a need to step up the rate of technological transformation which requires more radical innovation that goes beyond the kind of incremental innovation associated with Nordic reformist traditions. This includes promoting breakthrough technologies in some industrial sectors. In a recent issue from September 13, 2018, the Swedish technology-focused newspaper Ny Teknik (2018) lists a number of technological transitions which the new government needs to deal with, including the electricity, transport and industry sectors.

Söderholm (2020) has identified a number of reasons why radical innovations of green technologies are difficult to achieve including unwillingness of market actors to take long-term risks, weak incentives to invest in long-term technological development, unfair competition with incumbent technologies, and existing institutions and infrastructure that favor existing technologies. This has implications for the kind of innovation and industrial policies pursued. According to Söderholm (2020) this means that the role of state must be to go beyond creating enabling framework conditions and general policy instruments that set a price on carbon, and instead apply a broader mix of policy instruments in the green economy, including technology-push instruments, demand-pull instruments and more systemic instruments. There is also a need to use technology specific instruments in order to promote certain technologies that have high potentials to contribute to a low-carbon transition.

As we have seen, the Nordic countries already have in place a fairly broad mix of policy instruments although there is arguably the need to further develop this in order to promote radical green innovation. Kronsell, Hildingsson and Khan (2018) have for example shown that, in Sweden, the state has until recently been reluctant to pose strong climate requirements on energy-intensive industry while industry representatives have maintained the position that decarbonisation is not possible. This is, however, changing and today industry in different

sectors (mining, steel, cement, chemicals) endorse the goal of decarbonisation while new policy initiatives are in place to support radical technology development (e.g., hydrogen steelmaking).

Still, market-liberal environmental policies remain the norm in the Nordic countries and there are strong voices advocating a more green-growth oriented path towards a green economic transition. Thus, it is far from certain how innovation and industrial policies will develop in the Nordic countries and here are important choices to be made.

5. Conclusions

This working paper has had the general ambition of improving our understanding of the green economy concept, specifically with a focus on the Nordic region. We contend that we have achieved this ambition through our three objectives;

- Reconceptualizing the green economy with a broadened focus on social and innovation aspects of the transition
- Proposing the key characteristics of the Nordic welfare state in relation to the green economy
- Discussing the contemporary challenges for the Nordic region and possible pathways for the future

First, through our literature review, we have gained a more nuanced understanding of the green economy concept. After having broadened the conceptualization to also include social and innovation dimensions we have observed three global narratives on the green economy; what we refer to as *green growth*, *transformative green economy* and *beyond growth*. These three narratives relate to our operationalized dimensions and present solutions to both ecological and economic challenges in different ways. Green growth represents a market-oriented way of greening the economy, transformative green economy is characterized by an in-between, reformist approach and beyond growth embodies the more radical, down-sizing proposals. This threefold conceptual framework of the green economy is important since it challenges both the homogenous and antagonistic perceptions of contrasting conceptions, common in academic and policy debate. The framework, summarized in Table 2, can also be used to better understand different green economic policy proposals and the underlying assumptions and narratives that they are based upon. It also opens up for a third way to understand the greening of the economy, important for reformist Nordic countries.

Relating the green economy to the Nordic region, we have observed that it is not possible to subsume the Nordic welfare state, based on its key characteristics, in to any of the global narratives on the green economy. Instead, we have identified key characteristics for a renewed reformist narrative mostly based on our theoretical understanding of the Nordic welfare state. This proposed narrative resembles transformative green economy in the global debate but is arguably more growth-oriented, on the one hand, but goes further in welfare and equity aspects, on the other hand. This tentative understanding of Nordic characteristics in relation to the green economy can beneficially be used in future studies when empirically analyzing strategy documents and actual policies in the Nordic states.

Lastly, we have discussed three critical challenges that face the Nordic region; continuous overexploitation of natural resources, increased wealth inequality coupled with a deregulation of the welfare state model, and achieving radical green technological innovation. These

challenges have the potential to alter our understanding of the Nordic welfare state and provide pathways in both market-liberal, transformative and radical directions. This shows that what the green economy will look like in the Nordic region is far from definite and depends on policy choices in the coming years, in turn influenced by the kind of narrative about a Nordic green economy transition that will be nurtured and that eventually might dominate the policy debate.

From these conclusions, different avenues for research on the green economy open up. We suggest that empirical studies on green economic strategies in the Nordic countries could provide interesting insights about a reformist green economy approach in practice, especially in comparing the Nordic countries. In general, we believe that the green economy is a good platform for dialogues of opportunities and antagonisms of different policy proposals to green our economy. We hope that more scholars will adhere to this concept.

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Appendix 1. Literature review of academic publications on the green economy

Anton Olsson, May 2018

In this appendix a review is presented of ten academic publications that have sought to categorize and conceptualize different narratives of the green economy. The review has been used both to single out the narratives that we wished to study further and to identify the dimensions to be used when describing the narratives. The first eight articles offer a framework quite similar to the one used in this report while the last two have a slightly different focus, while still discussing 'green economy' with broad strokes. In the review the main contents of the articles are summarized along with reflections on how they contribute to the analysis of the green economy narratives.

Bina, Olivia, 2013. The green economy and sustainable development: An uneasy balance? *Environment and Planning C: Government and Policy*, Vol. 31, Issue 6, pp. 1023–1047.

Main arguments

In this article Olivia Bina maps out three 'categories of discourse' in terms of greening the economy in the run-up to Rio+20. This article has its main focus on distinguishing different ways of solving the 'double crisis', which in 2012 was the combination of a looming financial and environmental crisis. But the focus, since it's in the run-up to Rio, is also how different proposals relate to sustainable development, rather than welfare. By using Dryzek's classification of environmental discourse Bina arrives at three different 'underpinnings' for creating her categorization/conceptualisation. These underpinnings work to differentiate the categories "almost BAU", "greening" and "all change".

1) Their socioeconomic paradigm
2) Their concept of progress
3) Their theoretical economic framework'

Almost BAU

This is what Bina refers to as restarting the market mechanism, addressing the financial crisis with green stimuli. It includes targeted investment in a Keynesian spirit but is solely within the current market system. The proposals are often suggested in terms of national 'packages' that slightly involves the state in investing in energy efficiency, physical infrastructure, clean technology and R&D.

1) Economic (GDP) growth
2) Progress as growth (trickle-down, benefiting all society)
3) Mainstream/neoclassical/Keynesian economics

Greening

Represents a more comprehensive strategy than 'Almost BAU'; Clear focus on achieving resource efficient growth. It stems from a 'technoscientific paradigm' and aims to serve all society and reduce poverty. Many shades of green. There is limited attention to the differences in the 'Green Economy' and 'Green Growth'-paradigms. Gradual transition from the OECD-report to a more Polanyi-inspired line of thinking, i.e. rediscovering the state's role, wider concept of welfare and linking the economy with the social and cultural sphere. This latter category is something that could be expanded on, by including more dimensions.

1) Science, technology
2) Progress as efficient growth (serve all society/eradicate poverty)
3) From more mainstream (OECD) towards more environmental (UNEP) economy

All-change

Stemming from the Easterlin (GDP/Happiness) and Jevon (tech/efficiency) paradoxes the 'all-change' category is a mixed bag of more radical approaches from the *The Great Transition* to the 'degrowth'-movement. They all however, propose a transformation in our socioeconomic paradigm. They do differ in some important ways. They either question the centrality of the global economy (a'-growth) or means that we have to acknowledge and put emphasis on the devastating aspects of the global economy (degrowth). But they unite again in seeking progress in well-being and happiness.

1) Transformative ecocentrism, radical movements
2) Progress as well-being and happiness
3) Ecological economics (resource restraints)

Other insights

Economisation and polarization figures in the discourse. Government elites and the finance sector leans towards 'Almost BAU'/'green growth' while international agencies, multinationals and a few governments leans toward 'green economy'/'in-between' and civil society and some disciplinary outliers lean toward 'all-change'. This polarization is also seen in how different a sees the world. Bina also efficiently show that a weak interpretation of sustainable development remains present and suggests that a new perspective is needing aimed at human progress.

Contribution to analysis of green economy narratives

Bina has built what arguably is one of the cornerstone articles for green economy narratives. Her categorization is however, something that can be evolved. Bina refers to a possible narrative 'in between' greening and all-change. She argues that "it does not allow a clear-cut allocation

to either 'greening' or 'all-change'. However, such an allocation might be possible and necessary for understanding the green economy, coming from a Nordic welfare state model.

Her dimensions 'socioeconomic paradigm', 'theoretical economic framework' and 'conception of progress', although not sufficient enough to address inclusiveness and welfare aspects, clearly add important insights in the creation of our own dimensions. The article generally functions well as an oversight of the discourses prevalent in the 'greening the economy'-spectrum.'

Khan, Jamil and Eric Clark, 2016. "Green political economy: Policies for and obstacles to sustainable welfare" in Max Koch and Oksana Mont (eds.), *Sustainability and the Political Economy and Welfare,* London: Routledge, pp. 77–93

Main arguments

Differentiating themselves from Bina, Khan and Clark do a similar categorization while instead focusing on welfare aspects, rather than development, of an economic green transition. Their focus is describing dominant strands of green political economic thought, show the obstacles in implementation and evaluate their potential in reaching sustainable welfare.

Five spheres

They differentiate the policy narratives in two different camps, while acknowledging that the reality is far more diverse, building on Urhammer & Røpke's work. While doing so they look at two corresponding categories, 'pro-growth' and 'no-growth'. Consequently, they put the thoughts of 'green growth' (OECD) and 'green economy' (UNEP) in the 'pro-growth' category and 'the great transition' (NEF), 'prosperity without growth' (Jackson 2009), 'steady-state economy' (CASSE) and 'degrowth' (Kallis 2011) perspectives in the 'no-growth' category. While doing this simple division they add important insights through looking at five different 'spheres' in which these two opposites differ in their view on 'greening the economy':

- Mitigation and technology development
- Financial and business sector
- Distribution of income and wealth
- Labor and work
- Consumption

They come to the conclusion that the first sphere, mitigation and technology development is what unites the two opposites the most. Both the 'pro-growth' and 'no-growth' are in favor of some market-based instruments, like taxes or cap and trade, although to a different extent. The OECD is only in favor of fixing externalities in the least intrusive way while UNEP suggests that more than just market mechanisms, more active government intervention, is needed. The no-growth perspectives go even further, while also suggesting more profound interventions, taxes, cap and trade and technology incentives. Some perspectives even suggest determined

caps on emissions/natural resources (Jackson; Kallis; Dietz & O'Neill). In the 'no-growth' camp there is a clear emphasis that these measures should be *distributed equally* addressing general concerns with inequality.

These two opposites differ more in the second sphere. Where no-growth perspectives see the financial sector as the root cause of environmental problems the pro-growth category means that it's the very thing that needs to fix these issues. Pro-growth approaches acknowledge the need to redirect capital flows into green enterprise through incentives. It's also suggested to expand property rights to also include most commons and to regulate the control of these. The no-growth category does instead suggest that a much more regulated financial sector is needed and that it need to be in line with the 'no-growth'-thought. Instead of enhancing the role of private property these perspectives also suggest that more emphasis is put on building alternatives to private commons, such as communal property, land trusts, etc.

In the distribution-sphere there is also a significant divide between the two. OECD does not give much attention to this issue but saying that it is best fixed with lowering taxes and strengthening social benefits (2011: 25). UNEP does recognize the great need to eradicate poverty in line with the SDGs, in a more development-oriented way, targeting local communities, through new jobs to the poor etc. No-growth perspectives mean that fixing the distribution-issue is crucial in order to curtail growth. Egalitarian thoughts from social democratic responses to more radical suggestions as universal basic income are present.

Both in terms of consumption and labor & work no-growth perspectives suggest a turn in mind-set. Both the current way of trying to maintain full employment as well as the consumption-pattern in rich countries are not realistic according to this view. No-growth perspectives consequently encourage less of a division between paid- and non-paid jobs and a turn to strong sustainable consumption with radical changes in lifestyle. Pro-growth perspectives rather seek solutions in preparing the job market for the gradual transition suggested. In terms of consumption, they suggest more 'weak sustainable' policies like information, more energy-efficient consumerism, etc.

Other insights

After giving a summary on these 'spheres' and how the no- and pro-growth categories correspond with them, Khan & Clark moves on describing what obstacles the planet is really facing and what transition is needed. They suggest, while recognizing that these are dependent on the authors, that these obstacles are:

- The growth imperative – driving consumption and production beyond boundaries
- Inequalities in economic and political power
- Functionless private property displacing commons
- Financialization of ever more spheres

In tackling these obstacles, they show how the pro-growth perspectives are feasible when it comes to being passed by legislative bodies. But they also make the case that pro-growth

strategies are insufficient and sometimes even counter-productive. Most problematic is the making of property rights. They also make the case that pro-growthers may provide false comfort through the belief in the decoupling-myth, the belief that technology investment without larger societal change could be the solution.

No-growth strategies, however, are not at all as feasible when it comes to being passed by legislative bodies. Although they are, according to Khan & Clark, much more compatible with sustainable welfare. The problem is then, how to make them feasible for actual policy.

Contribution to analysis of green economy narratives

Many of their 'spheres' add important insights in building the dimensions in the analysis in this report, as seen in **Table 1** below. Most notably this is done with insights in terms of inclusiveness and the no- and pro-growths perspectives on the economy and market forces. Much like the case of Bina, I want to argue that this binary division is too narrow and more nuances is needed. Some of these nuances are, as the five spheres show, displayed within the pro- and no-growth-categories, but need to be given more consideration. In seeking a perspective that might be feasible within the Nordic welfare states, we need more attention to what lurks in-between.

The latter segment on obstacles may also spark some critical empirical thoughts on how to build on the intersectional analysis. They effectively show how some perspectives does not address certain problems with the transition. What traditionally is not shown within certain economic perspectives is, as we've discussed, also of great importance for us.

	Pro-growth	**No growth**
Mitigation & technology development	- Market based instruments (green taxes, cap and trade) - Technology policies - Government intervention	- Market based instruments (green taxes, cap and trade) - Technology policies - Government intervention - Caps should be distributed equally
Financial and business sector	- Financial sector plays a major role to invest in green technology - Policies to give incentives to green investments - Development of property rights from undefined and incomplete to fully defined and complete	- Financial sector fueling debt-financed economic growth root cause of environmental problems - Policies to control financial sector and reduce economic growth - Non-profit business models - Strengthening commons and alternatives to private property
Distribution of income and wealth	- Distribution not a main issue - Poverty reduction important but not equal distribution	- Equal distribution a basic precondition for no-growth economy

		- Minimum income; maximum income; redistributive taxes
Labour and work	- Policies to prepare labour market for changes in economy	- Reduction in labour time central policy to share work and reduce material consumption
Consumption	- Policies to change consumer behaviour towards green products and services - Information; economic incentives; labelling - Weak sustainable consumption	- Reduced consumption a major goal - Non-materialistic lifestyles; regulation of advertising; sharing economy - Strong sustainable consumption

Table 1. Policy focus of pro-growth and no-growth perspectives.

Urhammer, Emil and Inge Røpke, 2013. "Macroeconomic narratives in a world of crises: An analysis of stories about solving the system crisis", *Ecological Economics,* Vol. 96, pp. 62–70.

Main arguments

In this article, Urhammer & Röpke create the binary division which Khan & Clark have built on. They describe how two dominant strands, pro- and no-growth, have taken shape in the aftermath of the financial crisis in 2008. They look at discursive and narrative elements of both the issues of the current economic order but also solutions to it. In doing so they acknowledge that these narratives are embedded within the larger discourse of the complex systemic crisis.

Admitting that it's a crude separation they argue that common denominators for the pro-growth (OECD, UNEP, UN DESA) is highly institutionalized with their main audience in governments and authorities. No-growth (NEF, CASSE, SDC, WI) on the other hand, are far less institutionalized and the audience is farther away from policy-making. After broadly mapping these two they actually do make a more defined separation when they put forward the stories of *green growth* (GG), *green economy* (GE), *great transition* (GT), *prosperity without growth* (PWG), *steady state economy* (SSE) and *degrowth* (DG).

What can be said of these camps, no matter what kind of classification you make, is that they agree on the urgency for addressing environmental issues. They do however, differ in both how they frame the problems and the way the problems should be solved. This is familiar when coming from Khan & Clarks article. In **Table 1** and **Table 2** they show how these six camps differ in certain specific issues.

Other insights

In describing two grand stories, the one that pro-growth and the one that no-growth, put forward they are admitting that these stories do have some similarities. Building on these similarities could be a way of addressing polarization. The similarities put forward might also serve as a ground for what's **in between.** The authors suggest that such similarities within the two camps could be tax-reform, green investments and redefining measures of progress (Stiglitz 2009). However, how these two camps should address these similarities is widely disputed sine it might undermine the great critique of the pro-growth movement.

Contribution to analysis of green economy narratives

The best use that can be made from this article is to look at **Table 1** and **Table 2** in the article when mapping the dimensions in this report. These tables add important insight on many of our initial dimensions as function of the state/market, as well as inclusiveness and what certain perspectives doesn't address. It's also worth considering a similar way of presenting the different paradigms/narratives/categories.

They also make an interesting observation in the early version of NEF 'green new deal' (2008) as to something that is in-between pro- and no-growth. When reading these academic oversight articles, it's interesting to see how much they cling on to the growth imperative when discussing the different narratives. None of these do, in my view, properly address either the a'growth- (van der Bergh 2011) or the NEF (2008) proposals where there is a clear focus on steering away from the discourse of growth. If we give less attention to this growth imperative, maybe as a dimension and not the main divider in itself, we could better grasp what's in-between.

The methodological discussion on narratives and discourses (2013: 63f) is helpful in the creation of the mapping in this report.

Table 1
Governing supply and demand.

	Macro narratives					
Macroeconomic means	GG	GE	GT	PWG	SSE	DG
Price-based instruments:						
Ecological tax reform						
Carbon tax						
Cap and trade						
Border tax adjustments						
Picking the winner:						
Technology policies						
Stopping perverse subsidies						
Green subsidies						
Governing demand:						
Green stimulus						
Education and re-education						
Mainstreaming						
Increasing the demand for resource-extensive services						
Redirecting financial flows (green investments):						
Pension fund investments in green infrastructure						
Eco-tax revenues invested in green transition						
Financial transactions tax financing green transition						
Advertisement tax revenue invested ingreen transition						

Table 1: *Governing supply and demand.*

Legend	
	Agitates for
	Discusses or mentions
	Does not speak about

Table 2
Change of socio-economic structures.

	Macro narratives					
Macroeconomic means	GG	GE	GT	PWG	SSE	DG
Means for localisation:	■	▒		▒		
Local currencies	■	■	■	■		
Strengthening the informal economy	■	■		■		
Enhancing local production and services	■	▒				
New redistribution and labour marketpolicies:	■	■				
Maximum and minimum income	■	■	■			
Citizen's income	■	■	■	■		
Worksharing	■	■				
Employer of last resort	■	■	■	■		▒
Harnessing the financial sector:	■	■		▒		
Division between investment and retail banking	■	■		■	■	
Forced demergers of financial actors too big to fail	■	■		■	■	
Tax on financial transactions	■	■				
Ban of obscure instruments	■	■		■	■	■
Capital control	■	■		■	■	
Limit on bonuses	■	■		■	■	■
Fight tax havens	■	■		■	■	
State-monopoly on money creation	■	■		■		▒
Regulation of and creation of new businesses:				▒		▒
Limit to size (and right-size profits)	■	■		■		■
Cooperative ownership	■	■		■		▒
New business models				▒		▒
Regulation of international trade	■	▒				▒
New measures for economic progress						

Table 2: *Change of socio-economic structures*

Legend	
	Agitates for
▒	Discusses or mentions
■	Does not speak about

Ferguson, Peter, 2015. "The green economy agenda: Business as usual or transformational discourse?", *Environmental Politics*, Vol. 24, pp. 17–37.

Main arguments

Much related and similar to the already mentioned articles Peter Ferguson lays out three different discourses on 'greening the economy'. This is done in a slightly different manner, and with slightly different dimensions than previous authors, as seen in **Table 1**. Thus, it possesses useful information. But he also goes further, when suggesting the different discourses' chances of succeeding with their respective goal and whether they propose a 'post-growth'-society. He is normative in the regard that he proposes that a 'post-growth society' is both more desirable and superior to a growth-society.

The major dimension, which he builds his typology around, which is shown in **Table 1**, is growth, where the respective categories is largely dependent on their view on growth. But he also discusses the respective category's view on weak and strong notions of ecological

modernization. This idea, building on Christoff and Paterson's etc. work, 'that increasing resource efficiency and waste minimization can have mutually reinforcing environmental and economic benefits', also becomes largely influential to Fergusons typology.

Other insights

Ferguson reaches the conclusion that a strategy that moves in a post-growth direction must be taken. The viable options lie in the broad discourse of greening the economy, in the more radical approaches, the ones which both propose a strong ecological modernization as well as a turn in the growth imperative.

Contribution to analysis of green economy narratives

Even though Ferguson is more evaluative than descriptive, he does point out some significant elements for what characterize what he calls 'transformational green economy'. Even though only incorporating some dimensions, not considering welfare or inclusiveness aspects, just separating OECD- and UNEP-approaches gives us great insight. According to Ferguson, what differentiate these two is how the growth imperative is framed. He argues that *selective growth* or *transformational green economy* is much stronger in their criticism of current measuring of progress, i.e., GDP growth, and consequently more agnostic to growth.

Table 1. Typology of green economy discourses.

	Weak green economy	Transformational green economy	Strong green economy
Macroeconomic trajectory	Green growth	Selective growth/ A-growth	Limits to growth/ post growth
Economic, social & environmental indicators	Unmodified GDP	Modified GDP	Encompassing measures of welfare
Western levels of consumption sustainable or unsustainable	Western consumption sustainable/green consumerism	Green consumerism/ institutional changes needed	Western consumption unsustainable/ more systemic institutional changes needed
Focus of security discourse	State security	Limited economic and environmental security	Extensive economic and environmental security
Key institutional literature	World Bank 2012, Lagarde 2012, WTO 2012, OECD 2011, US Department of Defense 2010, Tamiotti et al. 2009, CNA 2007	United Nations Statistical Division 2012, Patil 2012, UNEP 2011 European Commission 2009, Stiglitz et al. 2009	Academic literature only e.g. Jackson and Victor 2011, Cato 2009

Death, Carl, 2015. "Four discourses of the green economy in the global South", *Third World Quarterly,* Vol. 36, Issue 12, pp. 2207–2224.

Main arguments

Instead of Fergusons three, Carl Death uses four categories to distinguish different paths in greening the economy, *green resilience, green growth, green transformation* and *green revolution*. He also manages to show how these discourses have been adopted differently by countries in the global South. While doing so, he argues that he moves away from just an ecological modernization-debate when looking at countries that is not as developed as the global North.

Four discourses

Green resilience is described as merely the adaptation-aspect of greening the economy, i.e., securing livelihood. I would not see this discourse as antithetical to the other discourses, and it is seen to be promoted by both the World Bank and UNEP but also more radical initiatives. Hence, I can't fully grasp why it should be categorized as its own discourse, since I'm quite sure all other discourses address resilience strategies in some way.

In my opinion Death also has trouble of distinguishing the differences with the *green growth* and *green transformation*, where he argues that the latter is closer to the sustainable development concept and the first is closer to business as usual. While this may be true, as seen from other publications, he continuously refers to the same actors, UNEP and OECD, under both subheadings. South Korea is pictured as a prime example of both *green growth* and *green transformation*, where I would suggest it fits better with the former. Both these middle-ground-discourses supposedly support the growth imperative, which differentiate Death from Fergusons finding. I'll come back to this discussion in the next article.

The last discourse *green revolution* is quite straight-forward. As its name suggests is much in the line of already mentioned radical perspectives, ranking from prosperity without growth to degrowth. No specific dimensions are mentioned that haven't been addressed by other authors already mentioned in this

Contribution to analysis of green economy narratives

Death does add important insights in showing the application of various perspectives, something we might return to in later parts of the analysis of the green economy in Nordic countries. However, he does also headlights the urgency to make more distinct categories. It is important to conceptualize different paradigms/approaches, in order to not be trapped in broad categories that can't be separated from each other.

Tienhaara, Kyla, 2014. "Varieties of green capitalism: economy and environment in the wake of the global financial crisis", *Environmental Politics*. Vol. 23, Issue 2, pp. 187–204.

Main arguments

While only looking at the more capitalist perspectives of greening the economy, Tienhaara succeeds in showing how distinctive features differ within the more growth-positive approaches. This is done both in regards to how they look at regulating the market and the financial sector, but also their position on ecological modernization. Tienhaara continuously tries to show that there is not simply one capitalist approach to green the economy, rather different models of capitalism. In showing these differences Tienhaara looks at the following dimensions:

"[…] the categories are compared based on several criteria: **the role of the state, the market**, and the financial sector; the role of technology; and the **role of economic growth** in the form of capitalism proposed."

Three proposals (models of 'green' capitalism)

The first category described is the *green new deal*-approach. Closely affiliated with the *New Economics Foundation*, it acknowledges the criticism of growth, and proposes lower or no growth as the way forward. It's more positive to stronger regulation of finance and the market as well as downsizing certain economic institutions. I would say that it's the least capitalist of the green capitalist approaches.

The second approach, *green stimuli,* is as its name suggest less intrusive. This perspective argues that by addressing causes of the financial crisis with green measures it also helps in mitigating an environmental crisis through decoupling. It resembles the green growth-perspective that other authors describe as "almost BAU". It adds to authors as Bina in looking at other dimensions, as shown in **Table 1**.

The last approach, *green economy*, is quite synonymous with the initiatives by UNEP, and tries to handle both environmental and development concerns. It could be argued that growth is suggested, but their definition is more 'meeting the future generation's needs'. Hence, one could argue as Ferguson does, that this perspective is agnostic to growth, rather than as Tienhaara suggests, promotes green growth.

Contribution to analysis of green economy narratives

Tienhaara adds similar thoughts to the project as Ferguson in the sense that he opens up the less radical approaches for enquiry. Especially interesting in this respect is what characterizes the category he calls *green new deal*. While not indulging in inclusive- and welfare-aspects it does show what could be considered in-between pro- and no-growth discourses. As shown in **Table 1** below, it also increases our understanding for our state- and market-dimensions, for all, in some sense, pro-growth discourses.

Table 1. Varieties of green capitalism.

	Green new deal	Green stimulus	Green economy
Growth	Shift to low/no growth	Green growth	Green growth (greater than brown)
Technology	Invest in renewables and efficiency but also reduce consumption	Invest in renewables, efficiency, nuclear, carbon capture and storage etc.	Invest in renewables, efficiency, nuclear, carbon capture and storage, agricultural/waste/water management etc.
Markets	Some role for carbon pricing and trading	Key role for carbon pricing and trading	In addition to pricing carbon, need to price 'natural capital' (ecosystem services)
Finance	Re-regulate and downsize sector	No clear position	Harness sector to make conservation profitable

Faccer, Kristy, Anton Nahman and Michelle Audouin, 2014. "Interpreting the green economy: Emerging discourses and their considerations for the Global South", *Development Southern Africa*. Vol. 31, No. 5, pp. 642–657.

Main argument

This article aims at showing both how the concept of 'greening the economy' emerged, presenting three different 'agendas' within it and discussing how they can be applied in southern Africa. Most interesting for our purposes is of course the second target of this article, looking at how the discourses have been framed and what dimensions that are taken into consideration.

Three agendas/discourses

The framing of these three 'agendas' serves two purposes, it adds insight in what options countries has in transforming the economy, but it also seeks to show the potential disputes and contradictions around this transformation. Faccer et al. choose to divide the discourses in to the 'incrementalist', the 'reformist' and the 'transformative' approach, in a similar fashion to Ferguson.

The 'incrementalist' discourse is pretty much equivalent to the 'weak green economy' proposed by Ferguson, or the 'green stimulus' perspective proposed by Tienhaara. This discourse accepts the current macroeconomic trajectory of growth and sees interventions as necessary to correct market externalities, i.e., environmental issues. It sees technology investments, and decoupling as a result, as key in this transition. Importantly, this discourse does not stress the physical limits to growth or problem with commodifying natural capital.

The ‘reformist’ agenda reassembles the ‘transformative green economy’ but differs slightly. This perspective adds a more diverse agenda to the green economy, which encompass more social and environmental elements than the ‘incrementalist’ perspective. Differentiating themselves from Ferguson, Faccer et al. argues that this perspective, with its roots in UNEP, consider growth possible, and means that addressing environmental concerns may contribute to a positive growth, but only if the measures of growth are corrected according to the environment.

The ‘transformative’ discourse put forward does not differ much from other authors take on more radical discourses in greening the economy. It entails a large extent of critique from civil society and academic outliers on the mainstream discourses, i.e. the already mentioned. It calls for a radical view of how to look at progress, i.e. wellbeing rather than GDP growth, and social equity in the transition. What is most coherent is the critique against the growth paradigm (thus, Faccer et al. does not suggest that A’growth lays within this discourse), and the current capitalistic system. This discourse refers to the initiatives of ‘Steady-State-Economics’, ‘prosperity without growth’ and the ‘degrowth’-movement.

Other insights

Besides this conceptualisation of different discourses Faccer et al. do give a short conceptual history of the term ‘green economy’. They show how it was at first just considered just the economic tools for sustainable development but that it has evolved and now encompass a disputed, diverse set of ideas. Rio +20 is considered to have helped make this broadening shift, and polarization, possible.

After discussing the prospects of southern Africa in the green economic transformation, the authors conclude that it of uttermost importance that these countries are active in evolving the discourse. Much of the prevalent discourses are

Contribution to analysis of green economy narratives

One of the contributions that this perspective, framing the discourses to the global South, is that it looks at social dimensions to a larger extent, rather than just economic. Hence, Faccer et al. succeeds in providing us information on both the social aspects of labor, lifestyle changes and human rights, as seen in **Table 1**. This is valuable to some of our dimensions, most specifically the dimensions that have not been properly addressed.

When it comes to the more ‘raw’ economic dimensions, Faccer et al. differ slightly from Ferguson as their middle category, ‘reformist’, leans slightly more to the growth-paradigm than Fergusons ‘transformational green economy’. Both articles highlight that these ‘in-between’ perspectives acknowledge the problems of the growth imperative and that a change from GDP growth is needed. But while Ferguson argues that his middle ground-category is more agnostic to the concept of growth, Faccer et al. seeks to hold that an alternated growth concept is at the core of the ‘reformist’ thought. This debate is of great essence when looking at the ‘progress’-dimension.

Table 1: Distinguishing features of the three discourses

Discourse	Distinguishing features
Incrementalist	• Pro-growth, consistent with the prevailing economic paradigm • Environmental cost avoidance (e.g. emission taxes) will provide insurance against slowed growth and crises over the medium term • GDP as an unchallenged and appropriate measure of progress • No clear comment on environmental limits (although efficiencies are emphasised) • Job opportunities through manufacturing and technology associated with environmental efficiencies
Reformist	• Pro-growth, with improvements to (but still within) the existing economic paradigm • Costs of inaction important (as above) for the long term and new sources of wealth (e.g. ecosystem services) available for advanced growth • Additional indicators of value needed in addition to what is in current use (e.g. 'beyond GDP') • Recognition of some environmental limits (e.g. imperative of fossil fuel reduction) and supportive of decoupling (mostly relative) • Social returns with an emphasis on green jobs including through natural resource management and lifestyle changes (e.g. green cities and products)
Transformative	• Pro-development (broadly defined, beyond simply GDP growth) for developing countries; zero/de-growth most appropriate for developed countries • Demands more attention to human rights, including voice of minorities in green economy debate • Emphasis on absolute rather than relative decoupling • Suggest alternative measures of progress, including a consideration of a broader conception of societal well-being • Caution against technology as a panacea, highlighting risks of overconsumption and risks to social and ecological communities

Table 2: Relative visibility or emphasis of key issues in each discourse

	Relative visibility or emphasis of key issues						
Discourse	Growth[a]	GDP[b]	Human rights	Social development	Technology	Resource limits and decoupling	Natural capital as source of potential economic value
Incrementalist	+++	+++	–	+ (jobs)	+++	–	–
Reformist	++	+	++	++ (jobs and lifestyle)	+++	++ (relative)	+++
Transformative	– (developed), + (developing)	–	+++	+++ (well-being)	–	+++ (absolute)	–

Notes: The number of '+' signs indicates the level of emphasis and import given to a specific issue by the different discourses; '–' signs indicate either detraction or distance from value of the issue identified, or ambiguity on this subject.

[a]Importance placed on physical size of the economy. [b]As the primary measure of progress.

Ehresman, Timothy and Chukwumerije Okereke, 2015. "Environmental justice and conceptions of the green economy", *Int Environ Agreements*. Vol. 15, Issue 1, pp. 13-27.

Main argument

Ehresman & Okereke investigates, like the already mentioned authors, the differences within the concept of 'green economy'. What's unique about this article is that it adds an environmental- and social-justice-perspective to this discussion. Which of course, is of interest for this WP. The authors find this of great importance, and somewhat neglected, to discuss how justice is applied in the different pathways to the green economic transition.

Thin, moderate or thick green economy

Their categories combine already distinct 'green economy'-approaches with their corresponding view on justice. Apart from justice they have also tried to incorporate the role of institutions, the role of the state (politics) and their respective environmental philosophy. These dimensions are shown below in **Figure 3**.

Thin green economy is quite similar to Faccer et al. 'incrementalist'- and Fergusons 'weak green economy'-approach. There is a large focus on correcting market failures and to stick with the growth imperative, as it is seen as the best way to tackle poverty and inequality (through trickle-down effects). Environmental sensitivity is not seen to oppose business sense, rather the solution is seen as investments in a 'green new deal' that both facilitate job opportunities as well as protection of natural environment by relative decoupling. This perspective is argued, by the authors, to propose *market justice*. This is a very rights-based justice approach suggesting that property/economic rights for citizens correlate with the need of right to ownership over natural capital. If commodified, i.e., right to be owned, the market would be able, with minimal protection from states, to fix these externalities.

Moderate green economy is the proposed middle-ground for 'greening the economy'-approaches and is situated somewhere in between Fergusons and Faccer's middle-categories. According to Ehresman & Okereke the 'moderates' suggest that the market-based approach is insufficient for the environmental and social concerns. But with large-scale reforms and increased state intervention a total abandonment of that system is not needed. The authors do not in depth pin-point what exactly is suggested by this in-between approach, other than showing its will to strengthen institutions, as seen in **Figure 3** below. This perspective adapts some form of egalitarian justice approach, ranging from a Rawlsian notion to the thoughts about human rights justice and inclusive development. Consequently, they see the global liberal economy as the best solution, if regulated, to increase the absolute level of welfare of the world's poor, and where possible decrease the income gap.

The *thick green economy* is very similar to the radical and beyond-growth proposals already described. It is built on the premise that there are intractable limits to the current economic system and that the 'moderates' are therefore nothing more than disguised neoliberals. Instead, the authors argue that this perspective suggest a turn to either SSE or de-growth. Their justice perspective is a more profound justice-based structure in which marginalized groups are

empowered, freedom and equality is promoted and a new relation with nature, beyond merely the economy, is established.

Contribution to analysis of green economy narratives

The justice-perspective is interesting since it adds interesting thoughts to the dimensions of inclusiveness and welfare. Market-, egalitarian and structure-based justice all have something to say about these dimensions. The justice-perspectives also heightens the understanding for the different approaches suggested. Their different take on justice is what legitimises their respective road to a green economic transition. But it's not only the justice-perspective that is of interest, also the way of handling the categories strengthens the view that a 'in-between' category is needed to portray the perspectives prevalent.

	Thick Green Economy	Moderate Green Economy	Thin Green Economy
Understanding of Economy	-Abandon a full commitment to neoclassical economics -Turn to 'de-growth' or 'steady state' economics	-Green economy provides a useful paradigm within which to conceptualize and actualize changes in economic policy and practice. Some level of intervention in the global economy will be necessary to capture the justice potential of green economy.	-Overall neoliberal ethos remains the best hope for environment and global poverty reduction -Green economy is an acceptable addition to a global business model
Understanding of International Environmental Justice	-Structural Justice	-Egalitarian Justice	-Market Justice
Role of State	-State and global civil society play central role -Emphasis on local economy	-Emphasis on building and strengthening global governance institutions	-Minimal state role -Full market operation -Avoid price distortion caused by subsidies
Ecological vs. Environmental Economics	-Ecological Economics		-Environmental economics
Politics	-Revolutionary	-Reformist	-Incremental change when necessary
Eco-Philosophy	-Ecocentric and anthropocentric -Limits	-Enlightened anthropocentrism -Limits	-Anthropocentric -Innovation and human ingenuity

Fig. 3 Green economy and international environmental justice

Fiorino, Daniel, 2017. "The Green Economy: Reframing Ecology and Economics" in Meadowcroft & Fiorino, eds., *Conceptual Innovation in Environmental Policy*, Bradford Books/MIT Press.

Main argument

This article differs a lot from the other articles since it is more conceptual historical-oriented and does not offer the same distinct categorization. However, the historical context offers valuable insights.

Fiorino argues that the concept of 'green economy' stems from the idea that economic and ecological goals should not be seen as antithetical, rather constructed as sharing common goals. There has historically existed a plenitude of interpretations of the term, starting with the publication of *Blueprint for a Green Economy*. All of these have laid forward quite different proposals, while still acknowledging environmental degradation and economic goals. Thus, it is not surprising that the term has been criticised both from the left and right given its many understandings.

He ends this exploratory chapter with arguing what the future may hold for the concept. In this future Fiorino argues for the importance of creating a stable balance between ecological and economic concerns, and promote equity in ways that is not established in UNEPs and OECDs work:

"To ague simply that growth alleviates poverty and delivers a better quality of life without addressing inequity is irresponsible" (22).

Contribution to analysis of green economy narratives

This article is a very good introduction to the 'green economy' concept. It adds a historical context to the emergence of the different approaches discussed above and it succeeds at explaining why an ambiguity around the concept has emerged, and why this ambiguity is of importance.

Fiorino's discussion on the difference of green –growth (OECD) vs. -economy (UNEP) is also important when trying to argue what characterizes them. OECD leans more toward the growth imperative and the dire need to price natural capital according to its environmental cost, and UNEP leans more towards social equity and 'a new engine of growth'.

Fiorino refer to the *third way* systematically in his text. This thought of a reformist path meeting both economic and ecological goals is of course of interest for discussing the Nordic welfare states role in the green economic transition. The idea of finding a middle ground for economic, equity and ecological goals is at the core of the concept. This could also influence our take on what should be entailed in a welfare state model for the 'green economy'.

Kronsell, Annica, 2018. "Nordic Welfare States and the Care Economy: New Ways to Deal with Climate Change". Paper presented at the *Australian Political Economy Network Workshop*, Monash University, 8–9 February, 2018.

Main arguments

In this article Annica Kronsell seeks to improve the social underpinnings of the transition to a greener economy through the concept of care and feminist theory. Coming from the insight that the Nordic welfare states are better equipped to incorporate the caring aspects, she studies what a 'caring economy' may mean for the Nordic states.

Kronsell argues that care is often neglected, both as the 'care work' women often participate in, but also caring in a broader sense, i.e. caring for relations, society and the environment – essentially caring as a biosphere activity needs to more broadly recognized.

Contribution to analysis of green economy narratives

Kronsell offers good insights when adding an intersectional analysis. Acknowledging the prevalence and persistence of the 'economic man', the gendering order that has helped to shape the current environmental-economic discourse is of great importance. Coming from this rationale you realize the importance of adding dimensions that have previously not been addressed. This insight is particularly useful when constructing dimensions of 'inclusiveness' and 'welfare and prosperity', and illuminating aspects that have been hidden.

But it is not only the insightful feminist critique of the economic man that adds value, the picture of the Nordic welfare state as the state that can care, is also very useful to motivate our conceptualisation of a new approach, the welfare state. Kronsell describes the welfare state:

"A state that has the capacity to, through various policies and measures, care for its population whether it is the young, the elderly, the homeless or unemployed, parts of other populations, is built on principles of care. It is the welfare state's caring capability which provides the potential to deal with sustainability and climate concerns."