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## The loop from idealised to messy – Untangling ideational features of the circular economy and hybridity in its making

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### ABSTRACT

The circular economy (CE) has been one of the key environmental policy concepts of the last decade. Despite the growing number of CE policies, applications and research, we still lack a detailed understanding of what kind of policy idea we are referring to with the CE. Our purpose in this perspective is to untangle the ideational features of the CE by separating three dynamic dimensions from the idea: economic model, conceptual innovation and policy objectives. In addition, we propose the research of hybridity as a fitting theoretical discussion to understand the plural societal setup in which the idea of the CE has been implemented.

### 1. Introduction

The circular economy (CE) has arisen as one of the leading environmental policy ideas of the last decade (Luo and Leipold, 2022; Lazarevic and Valve, 2017), and, as such, it has already been the subject of vast amounts of research and lively debate. In broad terms, the CE is defined as ‘a closed loop economy’, which should replace the current linear model that is based on the wasteful ‘take–make–use–discard’ material flow (e.g. Nylén, 2019). In the Western context, the CE was not directly translated from research to policy; instead, think-tank actors, especially the Ellen MacArthur Foundation, have been prime designers of it as a policy idea (e.g. Lazarevic and Brandão, 2020). This policy idea has been promoted quite successfully onto policy agendas (European Commission, 2015; Leipold, 2021).

As an idea of change, the CE is both transformative and ambiguous. Thus far, research has provided diverse understandings of the CE, but what it lacks is a more detailed understanding of what type of policy idea the CE is. This is a serious deficiency because policies are essential for transformative changes (e.g. Stone, 2021; Lazarevic and Brandão, 2020). Therefore, the purpose of this perspective paper is to explore the ideational nature of the CE and to give a more detailed account of how it operates as an idea of change in the realm of policies. This should enrich analyses of CE policymaking. We note that the idea and its change propositions are not the only variables involved in making the change. To make better sense of change-making processes, we propose the research of hybridity (Johanson and Vakkuri, 2017) as a valuable

resource to disentangle messy societal realities in which the idea of the CE is implemented.

#### 1.1. The challenge of dispersing CE research

As the CE has gained ground in the policy sphere, it has simultaneously gathered a vast amount of research interest from various perspectives. For example, CE research has discussed different definitions of the CE (Kirchherr et al., 2017), criticised the idea (Corvellec et al., 2022; Korhonen et al., 2018), analysed its making (Nylén and Jokinen, 2022; Leipold, 2021; Simoens and Leipold, 2021; Nylén, 2019), explored sites of action (Winans et al., 2017; Ghisellini et al., 2016) and deepened the discursive, conceptual and material understanding of it (Calisto Friant et al., 2020; Korhonen et al., 2018; Reike et al., 2018; Blomsma and Brennan, 2017; Geissdoerfer et al., 2017; Murray et al., 2017; Sauvé et al., 2016). Diverse research indicates that ambiguity associated with the idea gives it interpretive flexibility, which inspires multiple avenues of enquiry. However, this is not seen only as a positive state of affairs in the research community.

The dispersion of CE research has also raised fears that dissenting views of the CE could result in unfulfilled change potential. Regarding this, Leipold et al. (2021) analysed 54 CE researchers’ perceptions of the CE as a potential changemaker. Their analysis revealed three ideal types of narratives within the research community of how researchers perceived CE policymaking: (1) the optimist narrative sees promise in the CE as a way to guide the development path to sustainability, but that

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changemaking needs ‘CE policies coordination across governance levels and monitoring’ (p. 7), while (2) the reformist narrative sees vested interests of the current economy as a major hurdle in the making of a sustainable CE and, finally, (3) the sceptical narrative argues the CE is not a transformative idea if it does not question economic growth and capitalism.

Some researchers have called the research community to work towards a consensus on conceptualising the CE (Reike et al., 2018; Corvellec et al., 2022; Prieto-Sandoval et al., 2018). However, this call could easily be labelled a pipe dream. A revealing example of why the consensus would be difficult to achieve is presented by Genovese and Pansera’s (2021) reasoning as to why they pursue an anti-capitalistic reformulation of the CE: ‘Instead of rejecting the CE concept (and creating a new, possibly marginal, discourse with uncertain effectiveness), we think it better to “contaminate” it with countervailing thinking’ (p. 13). Clearly, the CE is not only a popular policy idea geared towards sustainability transformation; it is also an arena of dispute regarding the different perceptions of how that transformation is best achieved. Consequently, there are suspicions that the CE is a potentially unstable policy idea (Blomsma and Brennan, 2017).

### 1.2. Toward ideational clarity with the CE

In our view, the above discussion shows that to understand the CE transformation processes more comprehensively, we need to make better sense of the ideational nature of the CE and the institutional setup in which the idea of the CE is being implemented. To do so, we have separated out three ideational dimensions from the CE: *economic model*, *conceptual innovation* and *policy objectives* (Fig. 1). We reflect these ideational features to the perspective of hybridity, which will help disentangle the plurality of what the implementation of the CE entails. Hybridity addresses the interplay between government, civil society and economy. It refers to goal-oriented activity in joint ownership, incongruent goals, parallel institutional logics, multiplicity in sources of financing and to the changing nature of financial and social control between these realms of activity (Johanson and Vakkuri, 2017). The notion of hybridity puts forward the institutional aspects of collective action. It points out that government, for-profit and voluntary activity can be mixed fruitfully to strive for the greater good, but it also demonstrates the necessity to reach compromises on the embraced values and requires legitimation effort among multiple audiences to root novel ideas and practices (Vakkuri and Johanson, 2020).

Overall, a better understanding of policymaking in relation to the CE is extremely valuable because it indicates whether the idea of the CE is potent enough to inform policies, how the wider range of societal actors and institutions take up the idea and whether the idea yields policy outcomes that are deemed effective (Stone, 2021; Vakkuri and Johanson, 2020; Meadowcroft and Fiorino, 2017; Evans, 2012).

## 2. Distinction of the ideational features of the CE

In the following subsections, we introduce and discuss three ideational features of the CE and how these perspectives link to and influence each other. The purpose of this exercise is to provide CE research with a greater understanding of policymaking realities where the CE is promoted and how CE-informed policy processes occur in hybrid

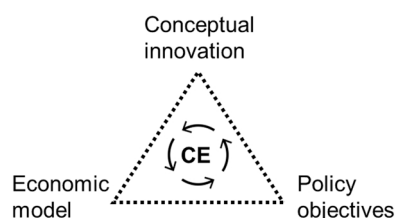


Fig. 1. Illustration of the ideational features of the CE as a policy idea.

settings in which the institutional infancy of novel practices requires the incorporation of multiple voices in its evolution, where it also implies ambiguity in goal setting and the values that different actors and institutions perceive in the CE (value creation logics).

Before going into detail, we need to define what we mean by the term policy idea. Mehta (2011) defines policy ideas as ‘...ideas of varying levels of generality that define how policymakers should act’ (p. 25). This implies that policy ideas inform and initiate policymaking and are used in its argumentation (e.g. Stone, 2021; Meadowcroft and Fiorino, 2017; Cox and Béland, 2013; Béland and Cox, 2011). In language, policy idea is usually in the form of one or two words, but what makes these words relevant is that they are compressed with meanings that have potential ramifications for policymaking (Nylén and Jokinen, 2022; Kovacic et al., 2020; Ifversen, 2011).

What does this formulation of a policy idea mean for how we understand the CE? First, it means that we anchor our work to the wording of the term. We do not comprehend earlier ideas like industrial ecology as prior versions of the CE; instead, we see such ideas as building blocks, which infuse the idea of CE with policy-relevant meanings. Thus far, various pieces of research have discussed the historical roots of the CE (Fitch-Roy et al., 2020; Reike et al., 2018; Blomsma and Brennan, 2017; Winans et al., 2017). Clearly, the ideational components from which the CE is generated guide the use of the idea in policymaking. However, as our untangling of ideational features will show in the following subsections, it is the other aspects and dynamics, and not just its roots and building components, that will determine the relevance of the idea of the CE in policymaking.

### 2.1. Model of economy

Mehta (2011) has divided policy ideas into problem definitions, policy solutions and public philosophy or zeitgeist, which refers to ‘a view ... about the appropriate role of government given certain assumptions about the market and society, whereas the zeitgeist is a disparate set of cultural, social, or economic assumptions that are overwhelmingly dominant in public discourse at a given moment in time’ (p. 40). When considering the CE as a model of economy in Mehta’s division, it then falls into the category of policy solutions. However, aspects of problem definitions and public philosophy or zeitgeist are essential in the construction of the CE as a policy solution. At this moment in time, environmental problems, which mostly result from the economic activities of humans (e.g. Smil, 2021), are recognised as a major societal thread across the political spectrum. Thus, the need for action is perceived as important (e.g. Anon, 2021). For this reason, environmental politics has generated multiple economic models to act as policy ideas, each of which tries to provide solutions to the problems of the economy and the environment (França et al., 2022). Other than the CE, these are, for example, the green economy, degrowth and the doughnut economy (Fiorino, 2017; Jackson, 2009; Raworth, 2017).

What is important to note when considering models of the economy as policy ideas is that each emphasises certain framings of problems and solutions with somewhat differing vocabularies (França et al., 2022). For example, the doughnut economy incorporates research on planetary boundaries and social welfare as essential components for exploring a safe and just operating space for humanity (Raworth, 2017). The green economy promotes a model of economy in which economic practices are transitioned to cause less ecological harm (Fiorino, 2017). Degrowth frames the problem to the pursuit of economic growth and proposes other, more socially and environmentally just conceptions of prosperity than GDP (Jackson, 2009).

However, perhaps the most important aspect of different economic models as environmental policy ideas is that they are not actual models per se (cf. Velis, 2017). Rather, they function like ‘sociotechnical imaginaries’ (Jasanoff and Kim, 2009), which are ‘understood as collectively shared visions of desirable societal and technological futures (Kovacic et al., 2020, p. 32). Fundamentally, economic models as

environmental policy ideas do not try to provide accurate information or understand how an alternative economy would work. Instead, their prime objective is to get on the policy agenda. To that end, it is important to utilise the enticing rhetoric of problems and solutions, as well as information, operating schematics and future images. These are designed to draw interest from different actors and institutions (i.e. hybrid societal settings), in addition to getting onto the policy agenda. This also means that these economic models are in competition with each other (França et al., 2022; Ruhrort, 2022). In addition to differing framings of problems and solutions, the competition between ideas derives from the fact that there are only limited opportunities for the ideas to be included in the policy agenda (e.g. Stone, 2021).

One of the ways in which the CE articulates its meaningfulness and value is that it utilises a counter-concept of *linear economy* ('take–make–use–discard') as its problem definition. The problem with the linear economy is its constant extraction of virgin natural resources and the production of waste. The CE would solve this by closing linear material flows in the current economy to become a closed loop. Ideally, in the CE, most of the resources circulate back to production after consumption. The proponents of the CE say this redirection of resource flows towards a closed loop would be possible with new circularity business models, technologies, practices, favourable policies and consumers' sustainability preferences (Lazarevic and Valve, 2017; Whalen and Whalen, 2020).

There are multiple levels at play when considering the CE as an economic model. At the macro level, there is the whole economy-wide idea of transforming the linear economy into the CE, and from there, the idea and its implications trickle down to single business models and practices. The unifying factor across the levels is the focus on the material throughput of the economy and, more importantly, the objective of bending the resource flows to a closed loop. Consequently, the CE is an ambiguous idea and leaves much room for interpretations of what it entails and for debates on what it should include (Nylén, 2019; Lazarevic and Brandão, 2020).

Thinking of the CE as an economic model is the point from which most of its criticism derives. Some of the criticisms discuss the thermodynamic constraints of the closed loop economy (Smil, 2021; Giampietro and Funtowicz, 2020; Korhonen et al., 2018). Furthermore, CE promotion focuses almost solely on technological and business aspects. In turn, sociocultural considerations are lacking, which of course are vital if the CE is to be considered as a new model of economy (Pal, 2022). Finally, it has been questioned whether some of the practices that have been labelled as applications of the CE actually produce more environmental harm than benefits – for example, 'take back and recycle' schemes or leasing of clothing (Corvellec et al., 2022; Levänen et al., 2021). There is also a disparity between CE rhetoric and turning those words into material reality. It is easy to say that waste should be turned into resources, but it is another matter completely to make that transformation viable (Greer et al., 2021; Nylén and Salminen, 2019; Velis, 2017). Power relations and vested interest associated with the CE and its making could also use more critical examinations (Barrie et al., 2022; Corvellec et al., 2022; Hobson, 2021; Hobson and Lynch, 2016).

Overall, as an economic model, the CE essentially focuses on the material throughput of the economy. It does not propose radical changes to, for example, private ownership, nor does it question the capitalistic market logic (e.g. Hobson and Lynch, 2016). Instead, it primarily suggests that the motors of change are new business models that are framed to provide value to all. The ones who would lose out in the CE transition are barely discussed (Lazarevic and Valve, 2017; cf. Vakkuri and Johanson, 2020).

## 2.2. Conceptual innovation

The lifeline of any policy idea is to become and remain relevant in policy and public discourse. Meadowcroft and Fiorino (2017) discuss this in their conceptual innovation framework. The authors see

institutional embedding as a key process; it refers to the diffusion of the concept, such as the CE, to policy documents of varying importance and the uptake of the concept by relevant actors. The uptake by actors examines whether the concept and the ideas it employs make actors orient their actions to some degree according to the change proposition of the concept. From an institutional embedding perspective, the CE has been highly successful, especially in Europe and China (Luo and Leipold, 2022; Leipold, 2021; McDowall et al., 2017).

Meadowcroft and Fiorino (2017) also discuss aspects of why some policy ideas are successful in policymaking. First, the idea must fulfil a perceived need, such as articulating a new problem or offering a novel solution (cf. Mehta, 2011). Second, 'it needs to be able to speak to multitude constituencies' (Meadowcroft and Fiorino, 2017, p. 11), and the ambiguity of the policy idea can be beneficial for this purpose (Stone, 2021; Cox and Béland, 2013). Finally, the concept 'should not be too alien to existing discursive patterns and dominant understanding of the way "the world works"' (Meadowcroft and Fiorino, 2017, p. 11).

Each of the abovementioned aspects is present in the CE discourse. First, the CE is an ambiguous concept because it speaks of the need for change at multiple sites and at various scales of production and consumption and thus to various actors and institutions. However, in turn, the value creation logics of the CE provide enticing links to various addresses in a hybrid setting; to public institutions, the CE can offer a nexus for sustainability policymaking (Kovacic et al., 2020). With the idea of the CE, businesses can gain genuine innovations that operate under a logic of doing well by doing 'good', which begins to be accepted as a proper form of business behaviour (Kreps and Monin, 2011). Here, the demarcation line between business and voluntary action is sometimes difficult to make, as witnessed, for instance, in the discussion of social enterprises (Kerlin, 2020). The spectrum of social enterprises operates in a field bordered by two dimensions: the strength of the intended social impact and the level of economic self-sufficiency (Krlev and Mildenerger, 2020; see Anheier et al., 2020; Lekan et al., 2021).

Second, the CE also formulates the problem and solution space in a novel way, at least in public discourse. The problem is encapsulated in the concept of the linear economy, and the solution is the closing of the loops, which the CE represents (Nylén, 2019). Finally, the common way in which the CE suggests combining environmental goods with economic goods is not too radical for how the 'the world works' (Lazarevic and Valve, 2017; Genovese and Pansera, 2021). The prevailing policymaking on solving environmental problems is dominated by the idea of decoupling, in which the aim is to decouple negative environmental impacts from economic growth. However, there is little evidence that this is actually occurring (Vadén et al., 2020). This might explain why public discourse and policies on the CE remain so quiet on decreasing amounts of consumption (Hobson and Lynch, 2016).

In addition to the above features, the CE is a policy idea of which the general objective (from linear to circular) adheres to other, more specific concepts – like reuse, recycle, eco-design, sustainable consumption, sharing economy – as a cluster (cf. umbrella concept, Blomsma and Brennan, 2017 and meta concept, Meadowcroft and Fiorino, 2017). This adhering of concepts as clusters gives the CE discourse ideas of what it could look like in certain fields, sectors of society and as practical solutions (Meadowcroft, 2007). For example, the CE-informed product design, in theory, would make products long lasting and easy to repair and recycle. In turn, adhering these more specific concepts together and among the 'solutions of the CE' probably gives them greater momentum to be a subject of promotion, at least if compared to a situation where they would operate without the support of a broader normative framework such as the CE (Nylén, 2019).

The key rule for being part of the set of CE solutions is whether they are perceived to close the linear resource flows of the economy as the CE (Nylén et al., 2021; Lazarevic and Brandão, 2020). Consequently, there is vagueness in what counts as the CE solution, but there is also vagueness in where 'the ideational authority' lies or who has it to certify what type of solutions the CE includes. For example, is waste

incineration a form of CE? What about alleged CE solutions that create demand for overproduced resources? Does the business model stop being a form of the CE when an overproduced resource is no longer overproduced (see Greer et al., 2021)?

Despite the potentially problematic division of what counts as the form of the CE and what does not, the key aspect of the conceptual innovation approach is the diffusion of the idea. If the idea succeeds in diffusing, as the CE has done quite well, then the idea travels to different sites (e.g. fields of industry and urban planning), where it is then fitted and adapted to the site's practices (Winans et al., 2017; Nylén et al., 2021). This implies that the setup where the idea of the CE is rooted is certainly hybrid because socio-technical practices involve actors and institutions from public, private and voluntary categories (Johanson and Vakkuri, 2017). An effective indicator of the diffusion of policy ideas is whether the idea makes its way to policy objectives and how it is formulated as such. In turn, successful diffusion of the concept makes it subject to criticism and reinterpretation at a growing rate (e.g. Genovese and Pansera, 2021).

### 2.3. Policy objectives

Perhaps the widest discrepancy between what the images and ideas of the CE are and what is actually done is revealed by the objectives of the CE policies. This is because policies, and what is expected of them, narrate what is valued, especially by those actors who are able to influence policy formulation and thus the direction in which the policies steer development (Stone, 2021). To us, this is essentially a process of hybridisation.

In the context of CE policymaking, hybridisation refers to a wide range of actors and institutions over multiple levels of governance. Crafting the CE policy objectives opens up manoeuvring space for hybrid action. First, there is the multilevel governance issue of jurisdictions between supra-institutional actors such as the EU, nation states and regions (Bache et al., 2016). In this sense, the CE is but one policy area that connects to the changing regulative and financial roles of political institutions, such as the EU. Second, international forums provide a platform for the global civic movement to raise its voice for ecological and environmental matters that combine both material claims and identity-based demands (Bringel and McKenna, 2020). Third, the industry and agricultural producers have a stake in policy development, but the influence of stakeholders varies according to their strengths and interests. One of the most divisive lines is the level of concentration of the cost and benefits of the policies (Wilson, 1984). The point in terms of policy implementation is that delegating costs can decrease opposition, and integrating benefits might induce a collaborative group effort in favour of the policy.

A good example of crafting the CE policy objectives in a hybrid setting is presented by Leipold's (2021) analysis of the EU's first CE package. The research discusses how and why this package was withdrawn and redrafted to give it a more de-regulative and market emphasis instead of the 'governance framework' of the first proposal, which would have promoted the CE more through regulative measures (framed as 'opportunities'). The withdrawn package was drafted in public-civic cooperation by the European Commission's Directorate-General for Environment and the Ellen MacArthur Foundation. However, it was perceived as too radical, and thus an influential business lobbyist, Business Europe, suggested withdrawing and re-tableting the package. The new commission, led by President Claude Juncker, did exactly that, and the redrafted CE package included more of the voice of businesses. Leipold's analysis was corroborated by Kovacic et al. (2020). However, the authors add that President Juncker's Commission aimed to frame the CE as more 'hybrid', meaning that it would be more attractive to various sectors of the economy than waste policy. President Juncker's Commission saw the CE's strong attachment to waste policy as problematic, especially because it tried to make the CE a new project for European political economy (see also Lazarevic and

Valve, 2017). According to Kovacic et al. (2020), the EU was in need of such potentially unifying projects, following the dents to the EU's legitimacy from the Euro crisis and Brexit.

The abovementioned example shows that the drafting of policy objectives from policy ideas can be conceptualised as a process of hybridisation. What is important to note in such processes is that when a policy idea enters into drafting processes, the idea most probably does not remain untouched or 'pure'. Instead, the idea is interpreted, argued over and dovetailed to the existing setup. This shows, for example, how the CE has begun to diffuse to urban policy and planning. The essential part of this process is to find suitable places for the CE in the setup of urban administrative structures and policies. In turn, the idea needs to be dovetailed with the city's other policy objectives and functions (Nylén et al., 2021).

One way to analyse how the CE is fitted as a policy objective is to analyse how the concept is combined with other ideas, institutions, knowledge, perspectives and political factors that derive from the context of the policy process. The CE has a greater tendency to combine with the factors mentioned above than some other policy ideas because it needs other concepts (solutions to the CE) to show what it would look at in specific places and contexts. However, combinations depend on the multiplicity and hybridity of audiences who are expected to be interested in the combination, what kind of combinatory elements are available in the policy process and, most importantly, whether the actors involved mediate the combinations and what they perceive the audiences to accept (Nylén and Jokinen, 2022; Béland and Cox, 2013; Carstensen, 2011).

The next step in following the policy objectives is implementation. This jump might sound straightforward, but it might not be, as an agreed-upon policy does not mean that politics stops (Stone, 2021). This makes the ideational features of the CE (Fig. 1) a subject of iterative motion, which depends on the diffusion of the idea and the outcomes of the policies. Essentially, this means that each ideational feature of the CE (Fig. 1) is subject to change: the CE as an economic model can be reinterpreted; policies can help the diffusion of the idea, or the lack of effective outcomes can hinder the diffusion and, as the policy process evolves, refined policy objectives will likely be needed. For example, the EU's CE promotion did not stop in the first package. The CE action plan was published in 2020 (Anon, 2020). In the end, the life cycle of a concept like the CE depends on how different types of actors and institutions engage with the idea and see its value (Corsi et al., 2020).

### 3. Conclusion

This perspective article attempts to provide CE research with a clearer understanding of what kind of policy idea the CE is and how it operates in a societal setting that is influenced by hybrid characteristics. Fig. 1 encapsulates our endeavour with three ideational features: 1) the CE is an economic model, and it represents how the idea is idealised; 2) the conceptual innovation perspective discusses the diffusion of the idea into policy agendas and 3) policy objectives discuss how the idea is translated to proposed actions, and they indicate that it cannot fully be determined in advance what kind of form the CE and its change propositions will take in the policy process. However, it is likely that when an idealised policy idea confronts material and policy-making realities, the implementation of the idealised idea becomes messy. However, this fact should not end in the conclusion that the CE is incapable of producing change. To do so, policy ideas must first and foremost remain relevant.

To conclude, our paper's analytical innovation sketches a broad avenue through which the CE is turned from a policy idea into practices via the policy agenda; the closer to the practices actualisation of the idea gets, the more pressing the hybrid reality of the societal setup becomes where the CE practices are fitted. Consequently, we see research on hybridity as a valuable framework for analysing the making of the CE. As the making of the CE is transcending boundaries of public and private, future research needs to understand the potential in such collaborative

forms of governance for CE policies but also the complex impacts of hybridity on the regulation, design and implementation of CE policies.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

No data was used for the research described in the article.

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