

Towards a cleaner, greener, and more competitive European Union:

**A study on the expected compliance of European Union Member States with the
Circular Economy Action Plan**

MASTER THESIS

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And we want to really make things different. We want to be the frontrunners in climate friendly industries, in clean technologies, in green financing. But we also have to be sure that no one is left behind. In other words: This transition will either be working for all and be just, or it will not work at all.

- Ursula von der Leyen (European Commission, 2019)

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Abstract

For years the European Union (EU) has been a global leader in the field of climate change. A big step in internal climate policy was taken in 2019, with the presentation of the European Green Deal (EGD). By committing to this plan, the EU strives to become the first climate-neutral continent. To make the EU more competitive, the Union strives to have a circular economy. To do so, the EU in March 2020 adopted the Circular Economy Action Plan (CEAP). This plan, as a part of the EGD, lays out the objectives, plan, and strategy for the EU to transit into a circular economy (CE). This research focuses on the expected compliance to this plan by the 27 EU MS. It does so through formulating a conceptual framework on compliance, based on theory and literature. The expected compliance is researched through the identification of the presence of two factors on the EU level, and seven factors on the member state level. The outcome of the analysis is visualized and color-coded in a table, indicating to what extent factors are identified as present. Results indicate that in general ambitions among EU MS to transition to a CE are high. However, there are factors that still are bumps on the road towards complete circularity, such as financial instability and lack of knowledge and awareness of citizens on climate change.

Keywords: **Compliance, European Union, Circular Economy Action Plan, circular economy, European Green Deal**

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Emma Louise Moll

Amsterdam, June 2021

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Abbreviations list

CE	Circular economy
COP	Conference of Parties
EC	European Commission
ECESP	European Circular Economy Stakeholder Platform
EESC	European Economic and Social Committee
EG	Environmental group(s)
EU	European Union
EGD	European Green Deal
CEAP	Circular Economy Action Plan
LE	Linear Economy
MS	Member state(s)
PA	Public administration
UNFCCC	United Nations Framework Conventions on Climate Change
WJP	World Justice Program

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1. Introduction

1.1 A brief European climate history

The European Union (EU) has for years taken a leading role tackling the issue of climate change. It is a focus area, both within and outside of its borders (Delreux & Ohler, 2019). At the end of the 1970s, the EU took the first steps in becoming a climate leader. By setting up research projects, the first investigations into the broad field of climate change were done. About 15 years later, the first strategy on climate change was adopted. This was a call by the EU institutions to its member states (MS) to stabilize emissions (Delreux & Ohler, 2019). The EU increasingly, and continuously, commits itself to tackling climate change (Siddi, 2020; Delbeke & Vis, 2015). However, all in all, EU climate policy before the 2000s mostly did not lead to successes (Wettestad, 2001). After the Kyoto protocols the EU increasingly saw achievements (Delreux & Ohler, 2019; Delbeke & Vis, 2019).

The United Nations Framework Conventions on Climate Change (UNFCCC) has organized several Conferences of Parties (COP), facilitating space for climate leaders from all over the world to discuss and take action on climate affairs. One of the most well-known is the 2015 Paris COP, where the Paris Climate Accords were signed. What is historic about these accords, is that on the 4th of October 2016 parliament gave the EU consent to ratify this agreement (European Parliament, n.d.). The Paris Climate Accords are the first universal binding global climate deal. As European Parliament President at the time Martin Schulz said about the vote: “The entry into force of the Paris agreement less than one year after its signature is a massive achievement, given that it took eight years for the Kyoto protocol. Today’s vote also means that the EU remains a climate leader” (European Parliament, 2016).

1.1.1 The European Green Deal

Europeans are concerned about the state of the planet they are living on. A 2021 survey by the European Commission (EC) showed that 93% of EU citizens think that climate change is a serious problem (EC, 2021b). Even though not all EU MS, interest groups, and industries always want to move in the same direction regarding climate policy, the EU is a ‘leader’ in adopting and promoting climate policy (Delreux & Ohler, 2019; Böhringer, 2014). Ursula von der Leyen, president of the EC, made it her top priority for the EU to be climate neutral in 2050 (Claeys et al., 2019). A big step in climate policy was taken in 2019, with the presentation of the European Green Deal (EGD). Through committing to this EGD, the EU strives to become the first climate-neutral continent (EC, 2021e). To mitigate climate change and environmental

challenges, the EU made the execution of the EGD one of their priorities for the years 2019 till 2024 (Sidi, 2020; Claeys et al., 2019). The Green Deal is laid out in a roadmap, which outlines when what steps should be taken (EC, 2019a; EC, 2019b). However, there are challenges that must be overcome to make the EGD a success in the whole union.

1.1.2 The Circular Economy Action Plan

This thesis will specifically focus on compliance with the Circular Economy Action Plan (CEAP), a plan which is part of the EGD. To move away from single-use consumption, the EU in March 2020 adopted the Circular Economy Action Plan (CEAP). This plan, as a part of the EGD, lays out the objectives, plan, and strategy for the EU to transit into a circular economy (CE). Implementing the CEAP has the aim to accelerate the transition from a linear economy (LE) towards a CE in Europe, and helps in establishing a shared vision, which boosts efforts to modernize the EU as well as ensure its global competitiveness (Ministry for the Environment, Energy and Enterprise of Malta, n.d.). In the action plan 35 steps are listed, which in the coming years are being executed by the EC. Moving towards a 100% CE is important, because it will help decouple economic growth from consumption (EC, 2020k). An important element in the EGD is the Just Transition Mechanism (JTM), which should ensure that the transition happens in a fair way, leaving no one behind (EC, 2020l).

On the 11th of March in 2020, the CEAP was adopted. The plan has the objective to make the European economy ready for a green future, protecting the European environment, and giving new rights to consumers. It aims at keeping resources in the Union as long as possible and wants to foster sustainable consumption and promote circularity (EC, 2020k). The plan introduced both legislative and non-legislative measures that target the issues needed and bring added value of the EU to the MS. This thesis focusses both on the legislative and non-legislative parts of the CEAP, since it is important that both are taken into account to measure overall compliance to the CEAP (EC, 2020k). The EGD and the CEAP are broad plans with ambitious goals, stretching over many sectors. To reach these goals, a comprehensive framework is required, moving beyond vague contours, and towards more structure (Claeys et al., 2019).

1.2 Research objectives and approach

1.2.1 Research objectives

This research has several objectives. Firstly, it contributes to the research on the implementation of EU policies in national context. Next to that, climate change is one of the most pressing issues the EU faces in the coming decades, which requires coordinated action. National implementation of the EGD goes beyond just national policy and is linked to larger geopolitical issues (Leonard et. al., 2021). This research aims at contributing to the improvement of implementation of the European Green Deal by determining the factors expected to influence successful implementation.

Considering the current gaps in literature and the scientific, social and policy relevance, the research question to be answered in this thesis is:

To what extent can the Circular Economy Action Plan as set out by the European Commission be expected to be implemented?

This thesis will focus on the EU as a whole and on the 27 MS in specific. It is important to do so because the combination is what determines the expected implementation of the CEAP. All EU countries see a different political, social, and economic reality, and thus all in their unique way contribute to the expectation of the CEAP in the Union as a whole.

In the following chapters the theoretical framework and literature review for this thesis is done. By doing so, factors influencing compliance on EU policy are identified. Through document analysis, the presence of the factors is studied.

The main research question is answered through the answering of sub-questions:

- SQ 1: Which factors influence national compliance to EU policy according to theory and literature?
- SQ 2: To what extent are the identified factors present in the 27 EU MS?

1.2.2. Research approach

This thesis will follow a method based on document analysis. Through a review of academic theory and literature a conceptual framework on compliance is developed. This framework entails certain factors, which are expected to influence compliance. The presence of these factors is researched through document analysis. Based on this research, expectations on the extent of compliance can be made. A number of data sources are used to test the conceptual

framework. Firstly, official policy documents of the EU on the CEAP and the EGD are used. Researches by the EC, Eurostat and the World Justice Project (WJP) are used. Furthermore, roadmaps and strategies on CE and sustainable development by European MS are analyzed.

1.3 Research Relevance

1.3.1 Scientific relevance

Many authors have researched the history and process of EU climate policy (see e.g., Böhringer, 2014; Claeys et al., 2019; Delreux & Ohler, 2019; Liobikienė & Butkus, 2017; Wettestad, 2001). Furthermore, the compliance with other EU directives and regulations, also specifically in EU climate policy, is extensively studied (see e.g., Börzel, 2000; Börzel & Sedelmeier, 2017; Hulme et al., 2009; Tallberg, 2002). However, since the Green Deal was only presented in 2019, research into its implementation process and on compliance of EU MS is still limited. Some researchers, such as Marco Siddi have researched the topic of Green Deal implementation, but the area is still relatively little researched (2020). Specifically, into the area of CE limited research is conducted. Furthermore, research on environmental policy and compliance in the EU is mostly theoretical, and does not look at (expected) practical implementation and compliance. Furthermore, not many studies in the field of environmental policy concern the new and innovative area of CE (Bondarouk & Mastenbroek, 2017).

Academic debate discusses several theories on explaining compliance and on comparing public policy (Tallberg, 2002; Treib, 2014). However, these discussions were held before the publication of the EGD, which is an ambitious plan that has never been seen before. It is therefore relevant for scientific purposes to study these concepts in the context of the European Green Deal, and specifically within the area of CE.

1.3.2 Social and policy relevance

According to the United Nations (UN), climate change is the ‘Biggest Threat Modern Humans Have Ever Faced’ (United Nations, 2011). The Green Deal by the EU is an ambitious plan, which has and will have a large influence on the lives of many Europeans. To reach set out goals, European citizens, companies and governments will have to make changes and adapt to a new reality. However, the pre-EGD realities among EU MS were already different from country to country. Keeping in mind the Just Transition Mechanism, ensuring that EU MS move in the same pace and direction, is important. Italy, Poland and the Netherlands are examples of EU countries with diverging realities regarding circularity and sustainability in general. To

achieve the EU's 2050 climate neutrality target and to halt biodiversity loss, it is crucial that MS take steps in implementing the CEAP.

As mentioned, not all EU MS have the same outlook on climate change and on the implementation of the Green Deal. This research contributes to research on compliance to EU policy and regulation by MS, and is thus of importance both for national civil servants as well as to civil servants working for the EC. In this research the focus lies on research what factors contribute to the successful implementation of the CEAP within the EGD. The findings of this research are thus relevant to society and policy makers since it helps them take into account the factors that determine a successful outcome.

1.4. Structure of the thesis

This thesis will after this introduction continue with an explanation of the theoretical framework used to answer the research question of this thesis. This framework is followed by a literature review, diving deeper into the topics of CE and empirical research on compliance. This theoretical and literature review is concluded with a conceptual framework consisting of factors that are expected to influence compliance. Afterwards the research design and methodology are explained. Then, in the analysis, the presence of the found factors influencing compliance is researched for the EU and per EU MS. The findings are discussed, after which conclusions are made about the expected implementation of the CEAP. Also, limitations and possibilities for further research are discussed.

2. Theoretical framework

Many studies have concluded that the EU is facing a compliance deficit, with mostly issues regarding practical implementation and enforcement (Börzel, 2010; Schmälter, 2017). This chapter will firstly discuss and define the concept of compliance in the EU and regarding the CEAP. Secondly, this chapter discusses factors that in theory influence compliance to EU policy.

2.1 Compliance

As Versluis (2005) writes, the EU is increasingly confronted with problems of compliance. Especially when policy areas are disputed, complex and demanding, compliance is an issue. The author points out that non-compliance to EU directives can lead to dangerous situations like accidents. Nicolaides and Oberg (2006) argue that the enlargement of the EU is a likely accelerator for non-compliance. Compliance is “(...) behavior which conforms to a predetermined set of regulatory measures” (Matthews, 1993: 2; Versluis, 2005). In the case of the EU, compliance is the extent to which MS act in line with the provisions of treaties, directives and other regulations of the EU (Versluis, 2005). Thus, correct compliance means that EU directives are incorporated into national legislation, policy or strategies in a way that is in line with EU objectives (Zhelyazkova et al., 2016).

It is important to distinguish between effectiveness or implementation and compliance. Effectiveness is defined by Neyer et al. as “the efficacy of a given regulation in solving the political problem” (2001: 4). MS can comply to a directive, yet the directive can still not be effective in practice. For example, the directive is not effective in solving the problem it aimed at solving. Implementation, which is putting (international) compliance into practice, does not necessarily need compliance. For example, when a new EU directive is already a reality in an EU member state, compliance is automatic, and implementation is not needed. Zhelyazkova and Thomann (2020) explain that legislative compliance does not capture the full process of how policy is translated into practice. They argue that “customization reflects the more fine-grained patterns of how countries use their discretion to adapt policies to local circumstances during transposition” (Zhelyazkova and Thomann, 2020, 430). Customization is related to the vertical policy changes on the implementation chain, which are necessary due to the different realities in different EU MS. This customization strongly determines how compliance will look in practice.

As article 4 of the Treaty on the Functioning of the EU (TFEU) describes, the EU and its members have shared competences in several areas (TFEU, 1957). Over the years, the EU sees an increase of competency areas (Börzel et al., 2012). Considering implementation of EU policy, it is important to recognize that the focus lies on the implementation of directives. That is because regulations are directly applied and implemented on the national level, and directives first have to be implemented into national law by national legislators. The latter is the case in the situation of the EGD (Falkner et al., 2004). What is interesting regarding the CEAP, being a plan within the EGD, is that the CEAP consists of both legislative and non-legislative measures (EC, n.d.). A legislative action is, according to article 289 of the TFEU, adopted under ordinary or special legislative procedure (TFEU, 1957, art. 289). A non-legislative act is a decision that is usually adopted by the EC, following up on a task delegated to them. In this case, the EGD is adopted as a legislative action; due to which some parts of the CEAP, as it is a part of the EGD, can be legislative and others non-legislative. These non-legislative parts facilitate the implementation of certain legislative acts of the EGD, yet are less specific with regards to for example a timeline or targets. A legislative act does have a specific time at which it should be enforced (EUR-Lex, n.d.). An example of this in the CEAP is that the plan sets out the key action of the development of ‘A sustainable product policy framework’. Within this key action there are several sub actions, such as the establishment of a legislative proposal for empowering citizens in the green transition, and a non-legislative proposal for measures establishing the right to repair. This means in practice that these parts are not equally enforceable by the commission, as the one is a legislative action and the other is not (World Business Council for Sustainable Development, 2020).

According to Falkner et al. (2007), misfits between the EU policy and national reality can lead to lacking compliance. Especially when an EU policy, as the CEAP, does not only consist legislative measures, the likelihood of non-compliance of the non-legislative measures increases. Especially when the distance between the goals and the reality in a member state are large. Schmälter (2017) adds onto this, that compliance is especially challenged when looking at practical implementation of EU policy into national law and reality. This first step, in which compliance can already be measured is what Haverland and Romeijn (2007) call *transposition*. They see this as the first step of implementing EU policy into national reality, which relates to both legislative and non-legislative measures. They call for importance of equal transposition since cross-national differences between EU members, puts companies and citizens in an unequal position (Haverland and Romeijn, 2007).

2.2 Defining compliance to CEAP

As mentioned above compliance is “(...) behavior which conforms to a predetermined set of regulatory measures” (Matthews, 1993: 2; Versluis, 2005). Thus, the extent to which MS act in line with the provisions of treaties, directives and other regulations of the EU (Versluis, 2005). However, since this thesis researches which factors are expected to influence compliance to the CEAP, and the CEAP concerns both legislative and non-legislative measures, it will go beyond only seeing compliance as confirming to regulatory measures. This is needed since the CEAP can only become a success when all EU members put in all effort to achieve the objectives and measures of the plan. Therefore, this research sees compliance to the CEAP as behavior of a member state which confirms to the key actions of the CEAP as set out by the EC. In total, the CEAP includes 35 actions which contribute to the overall objectives of the CEAP, being:

- make sustainable products the norm in the EU;
- empower consumers and public buyers;
- focus on the sectors that use most resources and where the potential for circularity is high such as: electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients;
- ensure less waste;
- make circularity work for people, regions and cities;
- lead global efforts on circular economy (EC, 2020k).

Within the 35 actions, there are thus non-legislative and legislative actions as explained in 2.1. The 2020 CEAP is an updated version from the 2015 version of the CEAP, and differs since the 2020 does contain legislative acts and the 2015 did not. The 2015 version only contained non-legislative actions. That is because the CEAP is a plan of the EGD, which by the commission is delegated to the commission as a legislative act. Therefore, the CEAP as a part of the EGD can be partly legislative, as the EC has this competence within EGD (eur-lex, n.d.). Therefore, to research the expected compliance to the CEAP, there is moved beyond merely considering legislative measures, but also considering non-legislative actions, as these taken together are essential in successfully complying to the CEAP and reaching its objectives.

2.3 Circular economy

Early humans lived in a society of scarcity, using all natural resources and existing objects in the best matter to survive (Stahel, 2019). Over time, a development of skills and capabilities to

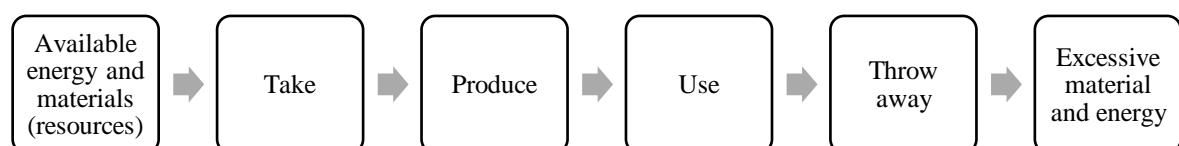
produce and increase efficiency allowed humankind to use more natural resources. Circularity was no longer a necessity. The industrial revolution made people overcome scarcities of food and goods, leading to a LE (Stahel, 2019). In a LE it is the producers who are in control, resources, manufacturing and distribution is becoming an increasingly (globalized) logistic process. The main goal of producers is in this is: maximizing profit and increasing production. Between 1990 and 2017, the extraction of raw materials more than doubled, and is expected by the OECD to double again by 2060. The world's population is expected to continue growing, which further increases the global demand for food, goods and resources (Ghosh and Gosh, 2021, chapter 1).

In the 1970s the thought process of the CE started (Ghosh and Ghosh, 2021, chapter 1). In a CE the goal is not maximalization of profit or production, it is about reusing and recovering products that are in the economy already, at their highest value. For example, prevention of waste is a part of more optimally using products in a CE. Focusing on the management of waste, and seeing waste as the final part of a good is a LE perspective on goods (Stahel, 2019).

Kate Raworth is an economist, focusing on social and ecological challenges of the 21th century. In the book *Donut Economics*, she explains an alternative model for the LE (Raworth, 2017). Raworth sees the LE as a degenerative form of economy, which will not be sustainable on the long run. She sees the LE as the caterpillar, which on the one end eats food (available energy), chews on it and processes it, and disposes the excesses on the other side (as illustrated below). In a caterpillar economy, all available energy is taken in, more than necessary, which leads to an overload of energy. Since this cannot be used up, it is thrown out. In the end this excessive material and energy goes to waste, because it is not used by the caterpillar (the economy). This model she argues, has made countries rich over time, but goes against our nature.

Figure 1.

The caterpillar (linear) economy

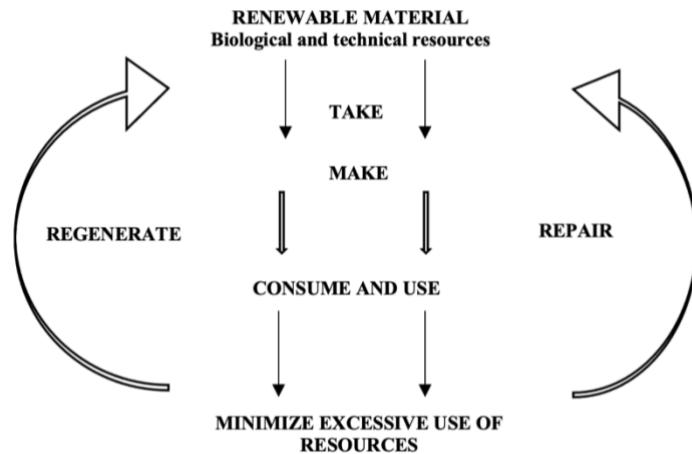


Adapted from Kate Raworth, 2017, 202.

According to Raworth, we should move from a caterpillar to a butterfly economy. In which we regenerate and repair. She, in line with Stahel emphasizes that the focus should not be on managing waste, but rather on preventing waste and enabling reparation and regeneration.

Figure 2.

The butterfly (circular) economy



Adapted from Kate Raworth, 2017, 209.

2.2.1 Making the shift

For many producers and policy makers, the shift from a LE to a CE is one that takes a big risk. It requires big investments in resources, knowledge and capabilities, it means that business have to rethink their product or service, and business model. According to Lacy et al., this can happen for example through partnering with local producers instead of outsourcing production to low-income countries, but also concerns shifting the company culture to stimulate employees to act more sustainably. Companies could for example engage in conferences or other platforms for likeminded producers, and find investments, new ideas and perspectives to keep boosting their circular initiatives (Lacy et al., 2020).

Even though sustainability and climate are increasingly important topics, many countries are still far away from becoming circular (Ghosh and Ghosh, 2021, chapter 1; Gregerson et al., 2015). In many developing countries the transition towards a circular more environmentally friendly economy is not happening fast enough, as other topics are prioritized. As United Nations Secretary General António Guterres said: “One overarching message is clear: while it is important to address the short-term challenges of today, policy makers must

remain steadfast in advancing a long-term development strategy to meet the economic, social and environmental goals of tomorrow." (United Nations, 2019). CE is an important way to achieve the climate and sustainability goals as set out by the UN in the Agenda 2030 (World Economic Forum, 2021a).

2.4 Theoretical factors influencing compliance

When researching compliance and non-compliance, it is important to realize that compliance is a relative concept and varies over time. Acceptable compliance differs per policy area, point in time, and situation (Chayes and Chayes, 1993). The EU for example, only keeps track of infringements of EU law, and not of compliance with EU measures and plans in general (Versluis, 2005). For example, in the case of the CEAP, the EU will keep track of the legislative aspects of the plan, but leave the rest up to the member state. However, the CEAP will only become a success for the Union if fully executed by all MS. Because: climate change does not stay within the borders of the countries not transitioning, and will not stay out of the boarders of countries putting in the hard work.

So, what explains compliance to EU policies and regulations? Different theoretical explanations have different reasons for this. Through several approaches this part of the research will lay out a theoretical framework of factors that influence compliance, which will in the end be illustrated with a figure.

2.4.1 The enforcement approach

The enforcement approach sees its roots in political economy and game theory (Tallberg, 2002). Börzel et al. argue that it is assumed that MS slack in compliance, when the costs are higher than the benefits of complying (2012). This argument is built on the initial argument of Keohane and Nye (1997) on power and independence. In this argument, states are assumed to be concerned of their reputation and costs, when they consider themselves as a weaker state. The more powerful a state considers itself to be, the more likely it is to not be dependent on cooperation and future good-will. In reality this would mean that a less powerful state is less likely to not follow the rules, since it cannot bear high costs of disobeying. From this it can then be expected that EU MS that are smaller or weaker, in whatever sense, are more likely to comply to policy since the costs of not complying are higher for them. "Even if a state may believe that signing a treaty is in its best interest, the political calculations associated with the subsequent decision actually to comply with international agreements are distinct and quite

different." (Haas, 1998, 19). Bigger states in the case of non-compliance remain an influential member of the EU, they can bear the costs of not complying, smaller states need their good behavior and attitude towards cooperation to be more influential in the EU (Börzel et al., 2012; Keohane and Nye, 1997). For example, if Germany, a big European power does not adhere to the rules it is less likely that it is heavily critiqued and it will influence its everyday work, then when this would be the case for a small country as Latvia.

Important is the *power of recalcitrance* (Garrett et al. 1998; Börzel et al., 2012; Keohane and Nye, 1977). When a state is powerful, this will play down in its relations with enforcement authorities. An enforcer will respond differently to a weak state than to a strong state in a case of non-compliance. Garrett et al. explain this through the principal-agent dilemma (1998). The powerful state (principal) has the power to punish the enforcement authority (agent), when the powerful state disagrees with the measures taken by the authority. Tallberg (2002) recognizes the importance of *collaboration* in this approach. If states collaborate, for example through an institution, they have a bigger incentive to follow up on their agreements and incentives. Tallberg refers to the argument of Downs, Rocke, and Barsoom on the *depth of cooperation*. In this argument it is said that the deeper a cooperation or agreement is, the larger consequences and punishments must be to have successful cooperation (Tallberg 2002; Downs, Rocke, and Barsoom, 1996). This is supported by Axelrod (1986), who argues that through punishment countries can impose *metanorms* on others and force them to internalize a certain norm. He argues that this norm often only is the norm because it benefits the biggest and most powerful. Axelrod argues that in this game of norms, states do not look ahead. They see their norm as winning strategy, and will only change their norm and strategy once they see a loss in their strategy. He proposes cooperation, for example through membership, as a solution to overcome this issue of competing norms (Axelrod, 1986). Tallberg argues that no matter what, collaboration remains an issue in international cooperation and in enforcement due to free riding which remains hard to overcome. A *bold* individual can still exploit the group (Tallberg, 2002). This is less likely to happen when the group is formed on a voluntary basis then when members are forced to join (Axelrod, 1986)

2.4.2 *The management approach*

Theorists from the managerial scope, argue that the likelihood of complying to international rules in general is high. Non-compliance happens out of limitations, not out of conscious non-compliance (Tallberg, 2002). Börzel et al. differentiated between *government autonomy* and *government capacity* (2010; Börzel et al., 2012). *Autonomy* is related to the

partisan and independent nature of a government. Does the government have autonomy on its grounds to push through reforms and policy? When it comes to EU law and regulations they argue, a state with lower autonomy within its borders are less likely to comply to EU plans (Börzel et al., 2012). *Capacity* has to do with three things: capacity within the state, ambiguous policy and time constraints. Chayes et al. (1998), in line with this approach, argue that this is based on three reasons for involuntary non-compliance. Firstly, capacity within the state concerns how many civil servants there are available to work on the issue. If this number is limited, an issue is less likely to be handled. It also concerns the financial capacity of a state. A more financially stable and wealthy state can more easily find resources to implement a policy. Furthermore, a country which is less financially stable, might have other priorities than implementing, in this case the CEAP. More immediately urgent issues as education and work are prioritized, and firstly financed and staffed. Thirdly, sometimes policy by the EU can remain vague and ambiguous. MS still have freedom in determining how to implement. This can lead to trouble implementing, and costs time since a country has to determine its own road and strategy. Zhelyazkova and Thomann add onto this, that when MS make policy denser, by including more rules, the intention of a policy can change (2021). They argue that more rules can lead to a failure of implementation. Lastly, sometimes MS are dealing with domestic issues that are of higher priority. There is then limited capacity and time to work on the implementation of the EU policy. Both government capacity and autonomy have to be strong, to be able to successfully comply with EU policy. States with a lower capacity and autonomy can be expected to less successfully comply to EU directives.

2.4.3 *The legitimacy approach*

A third factor in successful compliance is found in the *legitimacy approach*. This approach expects states to comply to international institutions out of normal and socialized belief. Checkel differentiates between how rationalists and constructivist's view compliance. Rationalists rely on a strong cost benefit system to make a decision on whether or not it is beneficial to comply. It is a consequence of a world view in which all actors are expected to think rationally and thus all act taking into account a similar cost benefit analysis (Checkel, 2001). Constructivists on the other hand, see compliance as a consequence of the state complying because this is logical to do in the social pathway and causal reality (Checkel, 2001). His study finds that the legitimacy approach to compliance is mostly a constructivist approach. States experience a sense of moral obligation towards the institution, not necessarily to the specific policy (Checkel, 2001). Legitimacy of the EU as a rule-setting institution can be

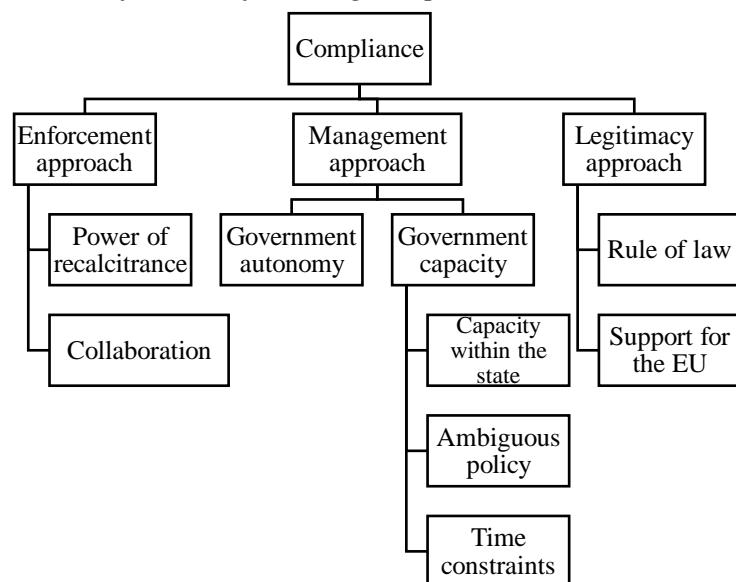
generated in two different ways as determined by Börzel et al. (2012). Firstly, it is important to consider the *rule of law* in a country; the lower the principle of the rule of law is valued the less likely the state is to comply with policy. The acceptance of a rule and the consequence of then complying to the rule should result in political order (Börzel et al., 2012). Furthermore, in the case of compliance to EU policy it is important that *support for the EU* is high. In countries where the EU as a rule-setting institution is not supported or trusted, it is less likely that there is high compliance (Hurrell, 1995; Börzel et al., 2012).

2.4 Conclusion

This chapter lays the theoretical foundation for this research, by providing clear definitions for compliance to the CEAP and the EGD and a visualization of theoretical factors influencing compliance. As the figure below illustrates, all approaches and their sub-topics together can be used to determine if states are expected to comply to the CEAP and the EGD. The visual below can be used to get a clearer and more visualized image of the theoretical framework.

Figure 3.

Visualization of theoretical factors influencing compliance



Source: As interpreted by the author from Börzel et al., 2012, Zhelyazkova and Thomann, 2017, and Tallberg, 2002

3. Literature review

3.1 Compliance and non-compliance to EU policy

How and if countries comply to EU policy is crucial for the functioning of the Union. With the EU having competences in many policy areas, the compliance in these different areas is intensely studied. Thomann and Zhelyazkova (2017) have conducted research on how European MS *customize* EU policy. Their research focusses on countries who *gold-plate* the EU policy, which means that they go beyond the required measures. This could mean extending the scope of the policy, providing enforcement mechanisms or implementing earlier than necessary (Thomann and Zhelyazkova, 2017). In their studies, the UK and Spain often literally comply to the policy, whereas the Netherlands and Germany often take the extra step. This customization is different from the compliance, “the tailoring of rules to local circumstances may occur within the scope of discretion granted by an EU rule (compliance), or outside (non-compliance).” (Thomann and Zhelyazkova, 2017, 1273). It is especially the EU policies that do not have clear enforcement measures or objectives, that may easily lead to non-compliant behavior. Cairney (2019) argues that another factor influencing how successful policy is transposed and complied to, is ambiguity of a policy. If there are many ways to interpret a policy and its goals, it is likely that the outcome also can be interpreted freely (Taylor, Zarb & Jeschke, 2021).

Taylor, Zarb and Jeschke, argue that there can be established a relationship between the perceived credibility of the institution making a policy, the policy they send out and the willingness of a local government to implement this policy. They argue that the more credible, supported or trusted an organization, the more likely it is that effort is put into making policy clear and overcome ambiguity. When the sender (EU) is considered more authoritative, the receiver (MS) is more likely to quickly follow up on the matter. In the case of the EU this could mean that countries with less authority in the EU are more likely to put effort into implementing the policy as the EU would like to see it, since they are submissive to the large institution (Zarb, Taylor and Jeschke, 2021).

Robert Axelrod (1986) researched if norm setting can be a solution to regulating conflict in groups, when there are more than two actors involved and no clear central authority is present. Axelrod defines a norm as existing “... in a given social setting to the extent that individuals usually act in a certain way and are often punished when seen not to be acting in this way.” (1986, 1097). An individual here, can be changed to a state or an actor. In his definition, he sees the norm from an *evolutionary approach*. This means that what (norm) works

best for a state or other player, is likely to be used again. This again relates back to the game theory basis of the enforcement approach, as discussed in the theoretical chapter. Axelrod shows in his research that in this approach, countries are likely to stick to strategies that worked before. The EU has an important role in formulating the punishments and consequences for not adhering to its norms, yet does not take up this role enough and can lose authority.

3.1.1 Time and capacity

Vink (2002) finds that when policies have the aim to correct issues on the common European Market, being re-regulatory, countries are more likely to go beyond the minimum. For policies that concern negative integration, the EU sets a clear maximum, an extent to which members are allowed to go. In the previous chapter the theoretical approaches of the enforcement and the management perspective on compliance were explained. Tallberg (2002) argues that a combination of these explanatory factors works best to explain successful compliance. In his research, it is shown that the strategies when used complementarily are the most effective in ensuring what he calls *rule conformance* (Tallberg, 2002). He argues that the two approaches are mutually enforcing, and help each other overcome the issues they face. This is illustrated by a two-level empirical study of the EU's supranational institutions and the decentralized national court system in European MS.

Based on this study, Tallberg discusses empirical sources for non-compliance with EU policies and rules (2002). He groups this into two broad categories. The first category concerns the failure to implement directives in the correct manner and at the right time. A second category is found in the application of EU rules, and the non-compliance to these rules by MS. Directives which are implemented must in practice be applied correctly, MS must change their behavior in line with these regulations and decisions. Research by Tallberg indicates that the earlier recognized factors of *defection incentives* and *capacity limitations* are main issues in compliance (2002, 626). He finds, in line with researcher Börzel, that the bigger adjustments are needed, the less likely an EU MS is to comply (Tallberg, 2002; Börzel, 2000). Literature mostly focusses on the positive effects that compliance brings a MS, however depending on the situation, implementation can have negative effects. High political, economic and social costs, can make it less attractive for a country to comply to the EU measure (Skjærseth, 2018). For example, for Southern EU countries who were economically hit hard during the 2007-2008 crisis, the consideration between maintaining a stable yet LE or investing in the CE is a complex decision. Some argue, that non-compliance has to do with the *Mediterranean syndrome*. This

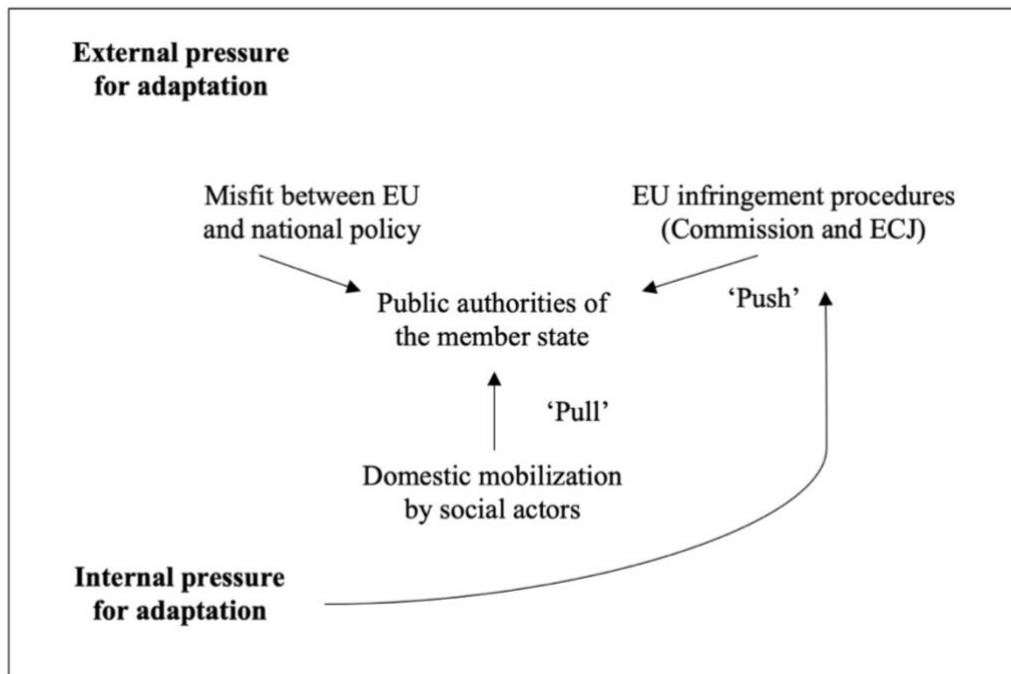
refers to the expectation that it mostly is southern European MS that have issues with compliance (Börzel, 2000).

3.1.2 The Mediterranean syndrome

Börzel researched if it can be argued that non-compliance is a bigger issue in the EU MS in the south of the Union. She argues that southern states are believed to not have the capacity to successfully implement policy of the EU. Policy making in these countries is often seen as a slow and ineffective system. A proactive approach is missing, fragmentation in their horizontal and vertical administrative structures is considered to be large (Pridham, 1996). For example, in the case of environmental policy, Börzel finds that the policy is made in a large range of ministries, making the process of change and implementation hard and complex. Also, economic development in southern EU MS is often behind the MS in the north. These economic differences, make that different expenditures and issues are prioritized per MS. The study by Börzel showed that this cannot be generally marked as a southern European problem. Numbers on compliance to European Climate directives show that compliance across Europe does not differ significantly between northern and southern MS. Börzel conducted an empirical case study based on directives in the field of EU environmental policies and their transposition in Germany and Spain specifically (2000). These directives were all far reaching, and put pressure on the national governments in the compliance process. For explaining this Börzel uses the pull-and-push model, which concerns internal and external pressure for adaptation. Domestic pressure for adaptation (pull) is executed in several ways. It can happen through a political party that rises concern on the implementation of a policy, environmental organizations can function as a watchdog, and the public opinion can enforce domestic pressure. Media influence and lobby groups can be influential domestic pull factors. If this domestic pull happens together with the EC pushing policy, compliance is likely. A government will in this case be stuck between the push (EC) and the pull (domestic actors), which is likely to lead to compliance by the country. As illustrated in the model below, she hypothesizes that “the higher the [external] pressure for adaptation and the lower the level of domestic mobilization the more likely it is that non-compliance will occur.” (Börzel, 2000, 149).

Figure 4.

The push-and-pull model



Adapted from Börzel, 2000, 149.

Her empirical case studies, in line with this push-and-pull-model and hypothesis, show that mobilization of domestic actors is an important factor in improving compliance (Börzel, 2000). Pressure from citizens will spark movement in the Commission and the ECJ. These forces together can enforce from above (EU) and below (citizens), which is likely to influence and enable compliance. Not all governments are equally accessible for their citizens, which can make the *pull* factor both weaker and stronger. Weaker, because the government is less likely to hear the voices of the public, and stronger because the public might accelerate into protests and other ways to get the attention from the government to act. A 2019 report of the European Economic and Social Council (EESC) argues that an increased inclusive approached will increase the likelihood of good governance (EESC, 2019).

3.1.3 The Eastern enlargement

When new members join the EU, this requires them to adopt a large amount of legislature. On May 1st 2004, eight former communist countries joined the EU, what we call the Eastern Enlargement. A few years later, in January 2007, 2 more former communist countries joined. The new members showed themselves as committed to transform their national governments and practices to EU standards and norms (Avdeyeva, 2015). Toshkov (2008) researched the actual compliance with EU directives of these post-communist countries after the Eastern

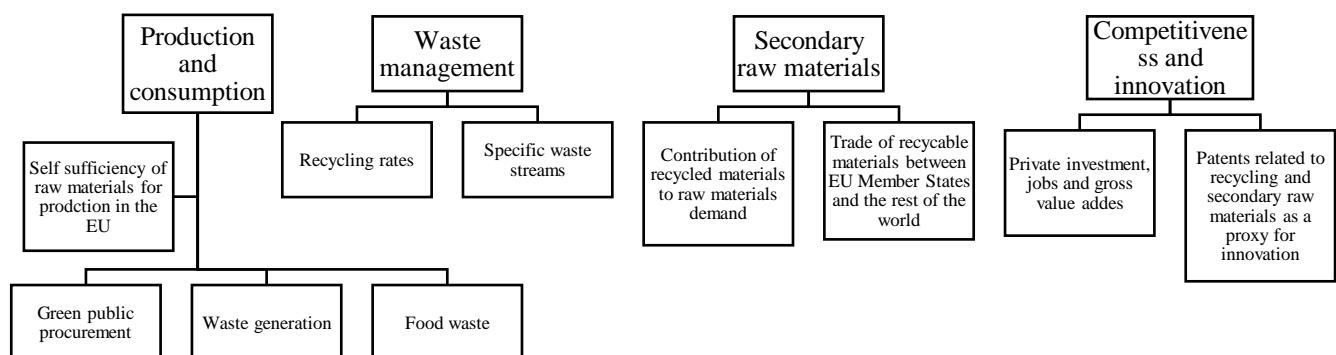
enlargement of the Union. In his research he focusses on the capability and the willingness to comply of these countries, which initially seemed to be high. He researched a data set of 119 directives, finding that political preferences and government capacity are of large influence on the likelihood of successful compliance to policy. Also, he finds that trade related directives were more likely to be prioritized, since the new MS will directly benefit from it on the European single market. In his research it shows that environmental policy is less likely to be complied to, since this usually does not benefit the new member on the short term, and thus is no key priority (Toshkov, 2008). Also, he finds that capacity overrules willingness. This means that even though the willingness to comply is there, capacity might not be there making the administrative and technical process difficult (Toshkov, 2008). In this case, he thus sees a relation between ambition and capacity. Currently, with the rise of the political right and Euroscepticism in Eastern Europe, it can be expected that compliance to EU policy will continuously decrease, especially in areas that bring little to no direct benefit to the MS.

3.2 Monitoring indicators

To objectively measure how countries are processing their transition towards a CE, the EC developed certain monitoring indicators. These indicators function as an objective way for measuring performance per MS.

Figure 5.

Monitoring indicators Circular Economy



Adapted from Eurostat, n.d.

Monitoring progress of the European MS is crucial to keep track of and act upon performance. Therefore, an important indicator for compliance is the distance between the goals of the CEAP

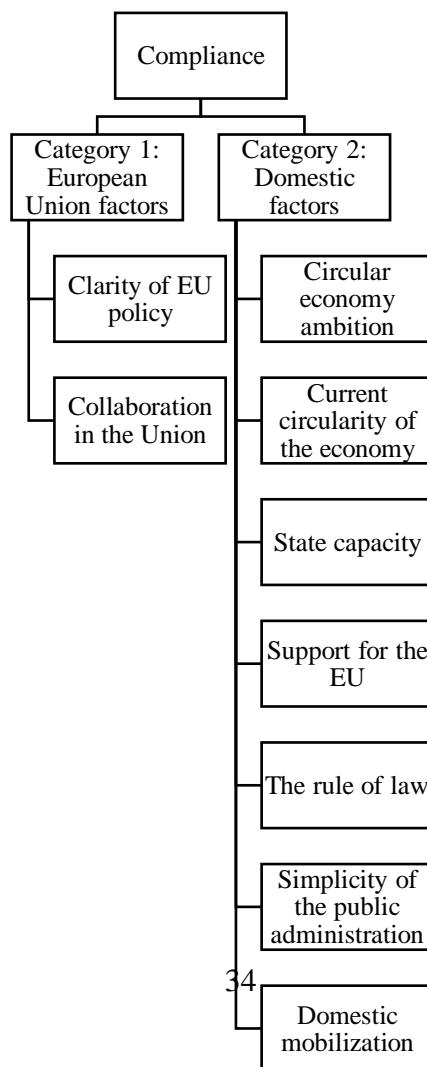
and the current circularity rate in EU MS. Pointed out in the previous chapter, misfits in compliance are more likely when there is a big difference between the goal and the current reality (Falkner et al., 2007; Schmälter, 2017). Explained in the management approach, for some countries, compliance to the CEAP might mean that they cannot fully execute development plans in other areas (Chayes et al., 1998). As Forrest and Feder (2011) write, one of the most crucial points in stimulating movement towards climate mitigation policy is education, the connection with local issues, and funding. They identify these factors as important for stimulating countries to stay motivated even though being behind on their peer group.

3.3 Conceptual model

Based on the theoretical framework in chapter 2 and on the literature review above, this thesis identified several factors divided in two categories that help determine to what extent EU MS are likely to comply to the CEAP.

Figure 6.

Conceptual model of factors influencing compliance



The first category considers EU factors influencing compliance. From theory and literature two factors are concluded. Firstly, clarity of policy by the Union shows to be of large influence in the past on compliance to policy. By researching how clear or ambiguous the CEAP and the EGD are, the likelihood of this influencing compliance can be determined. Secondly, the possibility for collaboration is an important determinant for successful compliance. If the Union facilitates possibilities for MS to collaborate, interact and learn from one another, compliance is more likely. Furthermore, this also entails the collaboration between the EU and the MS. Based on these two factors, it can be determined what the role of the EU is in successful compliance of its members. In this factor, the enforcement approach can be recognized, as the power of recalcitrance as well as the depth of cooperation will influence this.

The second category considers domestic factors influencing compliance. Firstly, EU MS have published ambitions, via strategies or roadmaps, of how they envision achieving the CE goals of the EGD. These plans are an indication of the level of ambition and willingness to comply, and give an insight into the priorities and motivations of EU MS. Secondly, the current circularity rate of EU MS. Since as theory teaches us, the larger the gap between the goal and the reality, the more difficult compliance is. Thirdly, there is looked at state capacity for compliance to the CEAP. This considers labor capacity of civil servants and financial capacity of a state. Support for the EU in general is important for making expectations on whether or not states are likely to comply. Fifthly, presence of the rule of law is important to how and if a MS complies to (EU) regulations and policy. This fourth and fifth factor reflect the legitimacy approach as explained in chapter 2. Sixthly, the complexity of the public administration is considered. As theory and literature have taught us that the more complex a country is governed, the harder it is to successfully comply. A more complex administration is likely to make civil engagement more difficult. Lastly, domestic mobilization, where it is looked at the percentage of citizens taking action in tackling climate change themselves, as well as if citizens actually see environmental groups as responsible for tackling climate change. A more detailed operationalization used for the research are explained in chapter four.

3.4 Conclusion

This chapter adds onto the previous chapter, by providing a literature review of empirical studies of compliance. From this literature review it can be concluded that several factors, such as government capacity and willingness, can frequently be recognized. Furthermore, combined

with findings from chapter two the conceptual framework for this research is presented. In the following chapter the research design and methodology is further explained.

4. Methodology

4.1 Research design

A case study is used to explore a research situation in-depth and extensively, through providing extensive information (Yin, 2009). This study can be categorized as a small-N study, since the number of countries studied is relatively small. An advantage of a small-N case study selection, is that it provides the possibility to conduct an in-depth study of the empirical case and the theoretical expectations (Blatter and Haverland, 2012). As the topic of this thesis is the expected compliance in the EU as a whole, analyzing the whole Union is a logic consequence. This case study is researched through a method of document analysis (Hsieh and Shannon, 2005).

As mentioned in chapter 2, the definition for compliance to the CEAP and EGD as researched in this thesis is: compliance to the CEAP is successful when behavior of MS shows behavior confirming the movement towards the objectives and regulatory measures of the CEAP and the EGD as set out by the EC. The conceptual framework as provided in chapter 3 forms the foundation for the research design. This thesis will therefore conduct the research on the extent to which MS are likely to comply to the CEAP in two steps:

STEP 1 Document analysis category 1: European Union factors

STEP 2 Document analysis category 2: Domestic factors

4.2 Case selection

For this case study it is decided to focus on the EU, as this is the research topic. In this framework there is a category one (European Union factors) and a category two (Domestic factors). For a thorough analysis of expectation of the compliance to the CEAP, both categories are important to analyze. The first category is important since it considers cooperation within the union, and ambiguity in general. The second category is important since all members of the Union have a different political, economic and social reality. No country is exactly the same as another, also not in regards to development of a (national) CE. Therefore, researching just two or three countries does not say much about the extent to which the CEAP can be expected to be implemented in the Union as a whole.

As Ulriksen and Dadalauri (2014) write, in-depth case studies are popular in social science research. This kind of case studies allows for theories to be applied and tested, and for expectations to be made. They argue that case studies can contribute to the testing of theoretical frameworks, which can lead to constructive conclusions to be used. In this case, due to the topic

selection of the EU, it is decided to study the presence of the factors in all EU MS. This is a purposive selection as this case (the EU) is necessary to confirm or not-confirm the presence of found factors (Gerring, 2007). The EU as a whole, is influenced by the factors present or not present in each member state, and therefore is a valid case to research.

4.3 Country division

To make the analysis more comprehensive, the MS of the EU are categorized in to three country groups (table 1). This is done on the basis of expectations of the presence of factors in certain MS. Furthermore, as explained in chapter 3.1.1 till 3.1.3, there are certain expectations for country groups and how they deal with EU policy. For example, MS Hungary and Poland have for years been criticized for a concerning state of their rule of law (World Justice Project, 2022). It could therefore be expected that the factors in a similar way can be identified in these MS, they can thus be grouped together the table below illustrates the country groups, with characteristics per group.

Table 1.

Country group division

Country Group	Member states	Characteristics	Sources
<i>A: The front runners</i>	Austria	Front runner in the CE transition	Eurostat, n.d.; European Union, 2021
	Belgium	Sustainability and CE as priority	
	Denmark	Post-industrial economy	
	Finland		
	France		
	Germany		
	Ireland		
	Luxembourg		
	Malta		
	Netherlands		
<i>B: The developers</i>	Portugal		
	Sweden		
	Bulgaria	Industrial economy	Toshkov, 2008; WJP, 2021; Tallberg, 2002
	Croatia	Rule of law concerns	
	Czech Republic	Sustainability and CE not a priority	
	Hungary		
<i>C: The financially dependent</i>	Poland		
	Romania		
	Cyprus	Fragile state of the state finances	Börzel, 2000; Tallberg, 2002
	Estonia		
	Greece		

Italy	Relatively dependent on EU funds and budgets
Latvia	Ambitions for sustainable growth are there (yet with limitation)
Lithuania	
Slovakia	
Slovenia	
Spain	

4.3 Operationalization

The conceptual model as established in chapter 3 needs to be operationalized before using it for the content analysis. A more detailed explanation of when a factor is identified as present can be found in table 8 (appendix B).

Table 2.

Operationalization

Factor	Variable	Indicator	Source
<i>Category</i>	<i>I:</i>		
<i>European Union factors</i>			
Clarity of EU policy	Targets	Target formulation by the EU	EC, 2020k
	Timeline	Timeline for the CEAP made by the EU	EC 2020j
	Accountability	Presence of an accountability system for EU MS (e.g., through sanctions, fines or other consequences)	EC, 2020k
Collaboration in the Union	Platform	Provision of platforms for MS to discuss, cooperate and learn from one another on CEAP topics (e.g., conferences)	European Union, n.d.

	Financial support	Financial support from the EU to MS in efforts to comply to the CEAP	EC, 2020k
<i>Category 2:</i>			
<i>Domestic factors</i>			
Circular economy ambition	CE Ambition	Ambition as expressed in the roadmap or strategy of the member state, extent of moving beyond EU goals, or trends shown by the monitoring indicators as measured by Eurostat	Roadmaps of the EC, 2020k Eurostat, n.d.
Current circularity of the economy	Circularity rate	Percentage of circular material use rate in the MS of the EU, indicating the circularity of an economy	Eurostat, 2011-2020
State capacity	Civil servants	Number of civil servants working in the public administration (in % of total population)	EC, 2018
Support for the EU	Financial condition	Central government debt (% of GDP) and general government deficit/surplus (% of GDP)	Eurostat, 2021a; Eurostat, 2021b
	Citizen trust in the EU	Percentage of citizens that trust the EU as an authoritative, regulatory and legislative organization	EC 2021c
Rule of Law	Rule of law	Index 0-1 based on the four principles for the rule of law by the WJP	World Justice Project, 2021

Simplicity of the public administration	Number of ministries	Total number of ministries in a country	EC, 2018
Domestic mobilization	Citizens taking action	Percentage of civilians who take action themselves in tackling climate change	European Union, 2021
Responsibility of environmental groups (EG)	Percentage of EU citizens who see EG as responsible for tackling climate change		European Union, 2021

4.4 Data selection and sources

Since this thesis focusses specifically on the compliance to the CEAP, Document 52020DC0098; this document is crucial in the analysis (EC, 2020K). Also, it will use other documents issued by the EC on its webpage for background information, as indicated in table 3.

Table 3.

Data selection CEAP

Issuing organization	Document	Source
EC	A new Circular Economy Action Plan For a cleaner and more competitive Europe - ANNEX	EC, 2020j
EC	A new Circular Economy Action Plan For a cleaner and more competitive Europe	EC, 2020k
EC	Factsheet: Circular Economy Action Plan The European Green Deal	EC, Directorate-General for Communication, 2020

Since in this thesis all EU MS are studied, it requires data from all countries, in table 7, appendix a, an overview of the roadmaps and strategies can be found. Most publications are

available in English; however, some are only available in the native language of the country. Furthermore, category two also researches factors that are measured by Eurostat. These are for example the number of civil servants employed in a country, as well as EU trust. Furthermore, the CEAP monitoring indicators are also measured by Eurostat. These statistical sources are retrieved from different sections of Eurostat: <https://ec.europa.eu/eurostat>. Also, this thesis largely relies on other data sources provided by the EU. For example, studies of the public administration in the EU as well as studies on the perception of climate change of EU citizens (EC, 2018; European Union, 2021). For studying the rule of law, reports and data of the World Justice Project (WJP) is used (WJP, 2021). The WJP reports on the status of the global rule of law, and does so through four universal principles of the rule of law. These are accountability of the government, just law, open government and accessible and impartial justice. Within these four principles it researches eight factors being, constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice (World Justice Project, 2021). The rule of law is expressed in an index score between 0 and 1, where 1 indicates the strongest rule of law.

4.5 Validity and reliability

4.5.1 Validity

Blatter and Haverland explain validity as achieved when “the (predicted) observation express the meaning of the abstract conceptualization in an accurate manner” (2012, 66). We can distinguish between internal and external validity.

In the document analysis, validity is ensured through gathering evidence from a range of sources and through different methods. As this thesis engages in document analysis, research data sources, and news sources, the range of data is broad. Furthermore, in document analysis it is important that data is interpreted in a non-biased way. It is important that the writer is aware of her own biases, which can limit the research. Furthermore, through the engagement with other researchers in the field, through literature and theory analysis, this can be overcome. Lastly, in line with this, the researcher in document analysis faces the difficulty of translating theoretical expectations into practical testable variables. This demands a concretization through the formulation of observable prediction and makes it necessary to concretize variables and the measurement as concrete as possible (Blatter and Haverland, 2012).

In the case of this study validity is ensured through the establishment of a conceptual framework based on findings in theory and empirical studies. Furthermore, the

operationalization is done on the basis of findings in theory and empirical studies as well, identifying the variables of largest influence on the factor. What must be kept in mind, is that this research is desk research, which limits the access to certain data. For example, with regards to domestic mobilization, the availability of data on activity of environmental groups is limited. Also, data on which ministries exactly work on CE is not available, making it hard to determine how many are specifically involved. Yet, it has been aimed at throughout the thesis to measure compliance and operationalize the factors as objectively and thorough as possible. Also, in the operationalization there is relied on trustworthy academic sources and publications. Furthermore, as this study is looking at factors expected to influence compliance, it could also in the end be concluded that some factors are of larger influence than others. The operationalization has been done thoroughly, and forms a valid framework to make expectations on the compliance with the CEAP. Lastly, this thesis aims at formulating expectations for the compliance with the CEAP, it must thus be kept in mind that reality can differ from these findings.

4.5.2 Reliability

Kellstedt and Whitten (2018) see a study as reliable when the same results are expected to come out when the research would be conducted by different researchers. This means that research must be repeatable as well as consistent. All factors with keywords and specifications are elaborated on in the operationalization above. Also, through the clear formulation of a conceptual framework with factors and variables makes the research clear. Through mentioning this explicitly, and operationalizing them to be measurable, reliability is safeguarded (Blatter and Haverland, 2012; Levy, 2008). Furthermore, by providing a clear explanation and overview of the data selection, there is transparency on the used sources for this research. The reliability of this research can thus be held by assuring an overview of the researched factors and variables responding, the sources and the used methods.

5. Analysis

This chapter studies the second sub-question *to what extent are the identified factors present in the 27 EU member states?*. Through document analysis the presence of the identified factors of the conceptual framework is researched. The analysis begins with researching the presence of factors in category 1: European Union factors. Following, it will research the presence of the category 2: Domestic factors in the 27 EU MSs.

5.1 Category 1: European Union Factors

As identified in theory and literature, there are not just influential factors on the MS level, also on the EU level. This first step of the analysis focusses on 2 factors, the clarity of EU policy and collaboration in the Union. As explained in the operationalisation, the factors are divided into several variables.

5.1.1 Clarity of EU policy

The first factor researched is the presence of clarity in EU policy. As written in chapter 2, and as Chayes et al. (1998) and Zhelyazkova and Thomann (2021) have argued, vagueness of EU policy can have far reaching consequences for its success. This factor applies to the CEAP in general, and is thus applicable to all MSs working on the compliance with this plan.

5.1.1.1 Targets

The CEAP is a broad plan, with many contents focus points, as could be seen in the monitoring indicators (Eurostat, n.d.-a). From plastic recycling and food waste reduction to empowering consumers to tackling waste export from the Union. However, concrete targets are not presented in the plan itself. For example, page 2 states results of recent studies regarding the effects of implementing a CE in the EU (EC, 2020i, 2). However, there are no targets set for MSs based on this. The EC is monitoring the framework of the CE, through the monitoring indicators, where it relies on statistics, measuring how the transition in the EU MS is going (EC, 2020i; EC, 2020l; Eurostat, n.d.). These indicators look at certain focus areas, and on the interlinkages between circularity and general zero pollution ambitions of the EGD. More concrete targets are expected to be further developed in the further implementation and concretization of the CEAP and the EGD, however are momentarily not clear and present. In the CEAP it is for example stated that “To drive policy reforms, the Commission will organize high-level exchanges on the circular economy and waste and step-up cooperation with Member States, regions and cities in

making the best use of EU funds. Where necessary, the Commission will also use its enforcement powers.” (EC, 2020k, 13). When the Commission deems it necessary to use enforcement powers is not elaborated upon.

The CEAP mostly sticks to vague words and ambitions rather than straight forward targets, and as explained in the managerial approach – this can lead to an implementation deficit on the MS level (Thomann & Zhelyazkova, 2017). The EU does set targets for itself to develop certain directives that should contribute to a more CE, such as a new Batteries Directive, however, this firstly lies with the EU and not with the MS (EC, 2020k, 8).

5.1.1.2 Timeline

Another variable is the presence of a timeline. If the EU can provide its members with deadlines, it is easier to motivate them to work on the issue, as well as easier to see who is behind and who is not. The commission in the Annex of the CEAP provided a timeline for the implementation of the parts of the CEAP (EC 2020j). This timeline however, is not detailed. It does entail specific actions; for example, “Legislative proposal for a sustainable product policy initiative” with a broad date; 2021 (EC 2020j, 1). For all actions on the timeline, one or two years (e.g., 2021/2022) are set as a deadline. The timeline for implementation remains ambiguous.

5.1.1.3 Accountability

Accountability gained significant attention in the last decades, being closely linked to democracy and transparency (Harlow, 2002). In the case of accountability within the EU, the conception of it is based on the views of the MS on trust, cooperation and common interest. If all MSs want to move forward towards an ever closer, or at least an improving EU, an accountability system is crucial and necessary (Harlow, 2002; Ziller, 2000).

The accountability of the CEAP can be found in the monitoring plans of the EC. In line with the EGD and the 2020 growth strategy, the monitoring of national plans and measures to accelerate and move to a CE is done. All in all, the commission in the CEAP says to be monitoring the plan in three ways. Firstly, it reinforces the monitoring of national plans to accelerate the transition from a LE to a CE. Furthermore, it updates and monitors the Monitoring Framework for the CE. Here it looks merely at statistics, and how countries are objectively improving their circularity (Eurostat, n.d.).

Besides these monitoring indicators there are no consequences or actions attached to the non-compliance of the CEAP. Therefore, a strong accountability system is lacking – which

could lead to non- or incomplete compliance. Especially when in the case of an EU country being ‘behind’ in the transition at the start –goals are harder to achieve, which can be demotivating and decrease the success of the CEAP. A stronger accountability mechanism could improve this, since it raises the incentive to not defect. This is in line with the expectation of Axelrod (1986), who in the *enforcement approach* argued that in cooperation and an accountability setting defection is less likely.

5.1.2 Collaboration in the Union

For the second factor influencing the policy in general, we look at the possibilities for collaboration within the Union. As described in chapter 2, specifically within the *enforcement approach* of Axelrod (1986), defection can be overcome through deep cooperation. Due to this increased dependence and feeling of belonging through membership, the power of recalcitrance is likely to decrease. In this section it is researched if the factor of collaboration in the Union can be identified, through the variables of platform, and support by the EU to MS.

5.1.2.1 Platform

After the first 2015 EU CEAP, the EC together with the EESC in 2017 established the European CE Stakeholder Platform (ECESP). The two initiating institutions are working together in promoting the platform as a space for MS to exchange ideas, good- and bad-case practices. They see the platform as a way to benefit all, and accelerate the change from a LE to a CE. In the period 2017-2020 the ECESP is valued as a great success (European Commission, n.d.). With the renewed CEAP of 2020, the platform continues to focus on supporting all members in a successful implementation of the CEAP. The platform has a multilevel structure, and does not only bring together EU MSs, but also companies, organizations, groups and unions from civil society. Furthermore, knowledge and research from thinktanks and universities is used to broaden the knowledge of all in the union for example through conferences. Lastly, the ECESP administers a website that can be used by all members of the platform to share knowledge. On this website, strategies, roadmaps and other knowledge can be found. Furthermore, through this platform, many other, 166 in total, platforms or partnerships are formed (EU, n.d.).

5.1.2.2 Financial support

Besides providing MSs and others the opportunity to come together on platforms, other forms of support can be needed to achieve successful compliance. For example, as explained in the

management approach in chapter 2, the *financial capacity* of a state, can limit its ability to comply (Chayes, 1998).

In the case of finances, the EC published a plan for investing in the CE. Especially in the aftermath of the covid-crisis, the EC sees it as important to recover Europe in a green and circular manner. Through Next Generation EU, the recovery and resilience plan of the EC, it aims at boosting the circular transition. Under this plan, there is a 750-billion-euro investment capacity available with a reinforced EU budget focused on the long term. Investing financially in its MS benefits both the EU and its members. Furthermore, the EU plans on funding the CEAP through EU cohesion funds, European Regional Development funds, Horizon Europe and the LIFE programs (EC, 2020i). However, it is important to keep in mind current developments in the war in Ukraine, which are likely to cause financial instability and unrest. While the war on the one hand drives up the increased investment by the EU in green initiatives to become less dependent on Russia, it on the other hand could cause a financial crisis leaving limited financial capacity for the execution of climate plans or increase the use of coal to replace Russian gas (EC, 2022a; European External Action Service, 2022; Greene, 2022; Ministerie van Economische Zaken en Klimaat, 2022; Tollefson, 2022).

5.1.3 Conclusion category 1: European Union factors

Having studied the presence of the factors clarity of EU policy and cooperation in the Union, it can be argued that there are improvements to be made to increase the presence of the factors. Regarding clarity, there are large steps to take for the Union, to make the policy more likely to succeed. The lack of clear targets, a timeline and an accountability system make it more difficult on the one hand for countries to comply to the policy, as well as for the EU to act upon making the policy a success. Especially countries that do not have the intrinsic motivation to be front runners in the CE, could be argued to potentially need more support and motivation coming from the Union. Regarding collaboration, the Union facilitates many platforms for countries to come together and discuss the development of their CE. Also, many funds and financing systems are available to stimulate countries to make the transition to a CE. Yet, as noted above, external factors and crises, could potentially shift the focus in the EU from the long to the short term, and overlook CE to maintain stability and peace in the EU region.

5.2 Category 2: Domestic Factors

Secondly, presence of domestic factors in the 27 MSs is researched through document analysis. Per MS the presence of the category 2 factors is studied. Not all factors and its variables as operationalized are identified in all MSs, this is discussed after the analysis. As explained in chapter three, the EU MS are divided into three country groups based on characteristics. After the study of the identification of category 2 factors, the results are visualized in a table, signaling the presence or non-presence of the factors. The following chapter, dives deeper into the expected consequences of the (non-)presence on the expected compliance to the CEAP.

5.2.1 Circular economy ambition

The first factor to be identified in the EU MS is the extent of circular economy ambitions. Here is looked at how ambitious plans and strategies published by MS for the transisiton to a CE are.

5.2.1.1 A: The front runners

As discussed in the managerial approach in chapter 2, the capacity of a government to implement a policy in the right way can be limited if the policy is ambiguous. Thus, with EU plans being ambiguous, MS are more inclined to make ambitious less concrete. An example of this can be found in the Belgian strategy which argues “to set priorities that create awareness and inspire other stakeholders to become active in the circular economy” (EESC, 2019, 33), remaining a vague ambition. Overall, the Belgian plan is seen as one of the most ambitious plans in the Union. The Belgian government has a federal level on top and a regional level below. The regions include the Flemish Region, Brussel-Capital Region and Walloon Region. Regarding the CE, Belgium has a national plan, and each region within the country has its own plan for CE transition. The ambitions of these plans all have a core drive of wanting to be a leading country in Europe regarding CE (De Vlaamse Overheid, 2021; Government of the Brussels-Capital Region, 2016; Overheid van België et al., 2014; Service Public de Wallonie, 2021). In achieving plans, Belgium has a tight cooperation with its neighbor the Netherlands (Ministerie van Buitenlandse Zaken, 2022; Vos, 2022). The Netherlands is a frontrunner in the field of the CE. The Netherlands aims to have a completely CE by 2050, a journey which already commenced in 2016 with the first Dutch strategy for complete circularity. By 2030 there should be a 50% reduction of raw materials consumption (Ministerie van Infrastructuur en Waterstaat, 2021c). The Netherlands strongly values international cooperation (Ministerie van Infrastructuur en Waterstaat, 2021a; Ministerie van Infrastructuur en Waterstaat, 2021b).

The ambitions formulated in the strategy are high and concrete, the Netherlands has shown in the past years that it is capable of a rapid and thorough transition if it is determined to do so (EC, 2020e; Ministerie van Infrastructuur en Waterstaat, 2021a). One reason for increased attention to and prioritization of the issues of sustainability are a number of court cases against the Dutch government by NGOs and social organizations, for not reaching their climate targets. After having lost these cases, the Dutch government increasingly put effort into achieving these goals (EC, 2020e; Urgenda, 2019).

The Austrian strategic plan for the CE, *die österreichische Kreislaufwirtschaft*, is elaborate and consists of a clear vision, strategic framework and has focus points for the transition of the Austrian economy. Austria already for a longer time focuses on circularity and sustainability, and was in June 2019 the first country to issue its own Circularity Gap Report (CE Europe, n.d.; Austrian Federal Chancellery, 2021; Midgley, 2022). In 2016 neighbor Germany launched its ambitious “Climate Action Plan 2050”, with clear goals on how to tackle climate change (Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz, 2016; Facts about Germany, n.d.). Only recently the plan specifically for the German transition to the CE was announced. Germany will in 2022 be the president of the G7, and wants circularity to be high on the agenda (Hugo & EUWID, 2022). Currently, Germany does have plans for resource efficiency and waste management, but not a strategy for a transition. (Eurostat, n.d.). Malta is one of the EU members that generates the most waste per capita (Ministry for the Environment, Energy and Enterprise of Malta, n.d.). Malta is ambitious to transform its economy, and sets high objectives, and says to value the influence of citizens and other actors. Specifically for the reduction of landfill and municipal waste Malta sets ambitious goals for itself, requiring a different way of living and consuming for all (Ministry for the Environment, Climate Change and Planning, 2020; Eurostat, n.d.).

Portugal was for long one of the top-performers in the EU regarding transitioning to the CE (EC, 2020e). With the action plan for a CE from 2017-2020, Portugal took a leading position in the Union. However, after this plan, the policy landscape has shifted its focus to other parts of sustainability, and not developed a new circular plan (EC, 2020e).

The CE plan of Ireland is an elaborate and detailed strategy, concrete plans and regulations are presented (Environmental Protection Agency, 2021). A focus in the plan is behavioral change of consumers, which should happen through the influencing of sustainable choices. France also sees failing mobilization as its biggest threat to failing the transition, especially in regional inclusion. Its strategy is therefore focused on learning from other countries on showing citizens and companies good case practices and inspire to change. Within

its strategy, there is a clear timeline and methodology for implementing the roadmap. France sees the largest number of local municipalities of all EU MSs, which increases the involvement of citizens in decision making and governance (EC, 2018). Compared to France, Luxembourg is a small country yet rich country. It has many labor and financial resources to invest in the transition to the CE (EC, 2018; EC, 2020b).

The Danish plan for a transition is comprehensive and includes clear ideas to move forward with. For example, regarding recycling, the plan proposes specific plans for local authorities and municipalities (Ministry of Environment and Food & Ministry of Industry, Business and Financial Affairs, 2019; Ministry of Environment and Food & Ministry of Industry, Business and Financial Affairs, 2019, table 1). Denmark is also one of the only EU MS suggesting hard measures by for example establishing funds to handle regulatory barriers to the CE and liberalize handling of electronic waste (EESC, 2019). Important is that OECD expects that for Denmark to maintain a frontrunner position in the CE transition, it should prepare for impactful macroeconomic challenges and changes on the long term to make a CE sustainable (OECD, 2021d). The core vision of the Swedish CE strategy is: “A society in which resources are used efficiently in toxin-free circular flows, replacing new materials.” (Government Offices of Sweden, 2020, 6). The EC reports that Sweden has proven that it is possible to continue growing the economy, while at the same time decreasing the carbon footprint of a country. Furthermore, Sweden is the first EU MS to meet the renewable energy targets that were set for 2020 (EC, 2020i). Based on this, Sweden has set itself a target for becoming net-zero regarding GHG emissions by 2045 (Government Offices of Sweden, 2020; EC, 2020i). Concluding with the last Nordic country, Finland, who is a front runner in the transition to a CE, and was the first country in the world to make a strategy for the transition to a CE (World Economic Forum, 2021b). Its strategic action for transitioning to a CE is ambitious and has clear objectives. The goals are however not yet measurable, and stay limited to ambitions as ‘lowering carbon emission’ (Finnish Government, 2021).

5.2.1.2 B: The developers

Bulgaria, Croatia, the Czech Republic, Hungary and Poland are all newer members to the European Union. All five countries are economically dependent on industry. Therefore, some of them do not have development plans for the CE (yet). Bulgaria for example, has the National Development Program Bulgaria 2030, Romania has the Sustainable Development Strategy. In these plans, the countries aim at evaluating the current state of the country, as well as look into what the EU has brought them so far, and brings them in the future. Both strategies

do not go beyond merely mentioning the topic of CE (Romanian Government, 2018; Ministry of Finance, 2020). In July 2021, Romania implemented the Single Use Plastics directive of the EC, which was a big milestone in its journey to CE. Romania sees a poor policy framework for sustainability and an absence of a framework for circularity. There is a lack of environmental awareness and education of the citizens of Romania, as well as incentives by politicians or businesses (Romanian Government, 2018; EC, 2020f). A part of the strategy on economic development of Bulgaria is focused on reduction of carbon emission and establishing a CE, however concrete actions are missing (Ministry of Finance, 2020, p. 16-19). According to the EC, Bulgaria is last in the Union in terms of taking action on ecological innovation, which comprises all transitions towards a more sustainable future. An important reason for this is the state of the Bulgarian economy, which compared to other EU countries still is dependent on brown energy and heavy industry (Zhechkov et al., 2019; Ministry of Finance, 2020; Ministry of Environment and Water, Bulgaria, n.d.). Croatia has to make big and rigorous changes if it wants to reach the goals of the CEAP, and the EGD in general, and for this relies on expertise from Austria (Umweltbundesamt Environmental Agency Austria, 2021). Currently, a clear policy towards transitioning to a CE is missing. A big issue is that no specific government agency or ministry is responsible for the organization of the CE (Government of the Republic of Croatia, 2021; The World Bank Group, 2021). The Czech ministry of Environment has developed a vision for the transition to the CE in Czechia, *Circular Czechia 2040*. Before this strategy was published in 2022, the Czech Republic, being a highly industrialized country, did not pay much attention to circularity nor sustainability (Institute for CE et al., 2021). This issue can also be found in Poland; who in general is a strong critic of EU climate policy (Jankowska, 2016; Skjærseth, 2018). One of the reasons for this is that Poland in 2016 still for 80% of its energy production relied on coal (International Energy Agency, 2016; Ministry of Foreign Affairs & Netherlands Enterprise Agency, 2021). Considering the monitoring indicator however, most indicators show a positive trend in development, yet there still is a long way to go (Eurostat, n.d.; Ministry of Foreign Affairs & Netherlands Enterprise Agency, 2021) Hungary momentarily does not have a strategy specifically for the transition to a CE, but it does have a plan for overall national reform (Government of Hungary, 2020; EC, 2019a).

5.2.1.3 C: The financially dependent

In group C there are diverging realities regarding the CE. Italy was an early adopter for putting CE high on the agenda early on, making Italy a good performer also considering the monitoring indicators measuring recycling and waste management (Eurostat, n.d.). In October 2017 Italy

adopted a more general strategy for sustainable development, a little later in the year, the strategy specifically for the transition to the CE was published (Working group of the Network and of the Sustainable Development Foundation & Circular Economy Network, 2019; Eurostat, n.d.). On the Island nation Cyprus, there are three ministries responsible for the in 2021 published report Cyprus Action Plan for the transition to a CE 2021-2027. However, currently the reality shows that Cyprus is behind on other EU MS in the transition to a CE and in the implementation of circular initiatives (Eurostat, n.d.). Estonia is also still looking for ways to implement the CEAP objectives in its legislation, and had the vision to publish a strategy in 2021, yet still has not succeeded in doing so (personal correspondence, 9 May 2022). The EC recognizes this, and sees that even though Estonia currently is behind on many other members, there is economic and political momentum, due to a stable economy and good functioning governance system, to accelerate the transition (EC, 2020).

In August 2018, the ministry of Environment and Energy of the Hellenic republic, published their strategy (2018). The plan is concrete, and includes not only an evaluation of the current state, but also presents the legislative and regulatory actions to be taken. Taking the monitoring indicator into consideration, as well as the strategy, it can be said that Greece is taking big steps in the development of their CE (Eurostat, n.d.). Lithuania and Latvia are the EU members with the highest strategic capacity, and are usually strong in successfully implementing policies (EC, 2018). In the case of CE however, Lithuania still has quite some development to do. In the overall ecological innovation index (eco-index) of the EC, Lithuania is leading the other countries who are catching up with the sustainable development (EC, 2020a). Latvia does not have a plan (yet) for the transition to the CE. In the *National Development Plan of Latvia for 2021-2027* there is only one mention of the CE, which is vague and says that one of the objectives is “Applying circular economy principle, achieving waste free production” (Government of Latvia, 2021, 8). CE is gaining influence and recognition; however, it is not one of the top priorities. This is partly due to a lack of guidance on the policy making level to develop and implement strategies and plans for transitioning the economy.

When Slovakia had Council presidency in 2016 it launched the Bratislava Transition to a Green Economy during an international conference (Ministry of Environment of the Slovak Environment, n.d.). Since then, circularity is on the political agenda in Slovakia, and led to the development and publication of the *Strategy of the Environmental Policy of the Slovak Republic until 2030* in 2019 (Ministry of Environment of the Republic of Slovakia, 2019). Despite these initiatives, Slovakia is still lagging behind on other EU countries regarding the actual development of the CE (Eurostat, n.d.). A similar situation can be seen in Slovenia. Since 2016,

Slovenia has increasingly emphasized the importance of cooperation and the possibility to learn from others moving through the same transition and changes (Ministry of Environment and Spatial Planning, 2018; EC, 2020g). With the ratification of the Spanish strategy for the CE, the Spanish government has committed to move to a model of sustainable economic growth (FuturEnviro, 2020; Ministry of Environment et al., 2020). According to the EC, this strategy together with other regulatory frameworks for sustainability makes Spain one of most ambitious EU MS (EC, 2020h). (Eurostat, n.d).

5.2.2 Current circularity of the economy

Considering the circularity rate, it could be argued that the further a member state is away from becoming a fully circular economy, the harder it is for a member state to achieve the plans of the CEAP. The circularity rate is the percentage of resources used in an EU MS that are circular (Eurostat, 2021c). For example, Bulgaria still sees an industrialized economy, relying on non-renewable energy sources and a LE. As table 4 illustrates, most economies in the EU still are far from being completely circular (Eurostat, 2011–2020). The Netherlands is a clear outlier, with in 2020 already reaching a circularity rate of 30%. Many countries however, especially in country group B and C, still have a circularity rate of below 10%, with not much change since 2010. Considering the Just Transition Mechanism, and the aim of Von Der Leyen and Timmermans to leave no one behind in the transition, this could lead to issues within the united transition of the Union (EC, 2020l).

Table 4.

Circularity rate of the economies of EU MS (%)

	2011	2014	2017	2020
Austria	6.8	9.8	11.4	12
Belgium	14	17.6	18.5	23
Denmark	7	9	7.9	7.6
Finland	17	7.3	5.6	6.3
France	16.8	17.8	18.8	20
Germany	10.8	11.3	11.8	12.9
Ireland	2.1	2	1.7	1.6
Luxembourg	20.7	11.3	10.6	10.5
Malta	4.5	6.4	6.5	7.7
Netherlands	25	26.6	29.7	30
Portugal	1.7	2.4	2	2.3
Sweden	7.6	6.4	6.7	6.5

Bulgaria	1.8	2.7	3.5	2.6
Croatia	2.4	4.8	5.2	5.2
Czech Republic	5.4	6.8	9.1	11.3
Hungary	5.4	5.4	6.9	7.3
Poland	9.2	12.6	9.9	10.3
Romania	2.5	2.1	1.7	1.3
Cyprus	1.9	2.2	2.4	2.9
Estonia	14.2	10.9	12.4	15.6
Greece	2.2	1.4	2.8	4.1
Italy	11.6	16.1	18.4	19.5
Latvia	2.9	5.3	5.4	4.3
Lithuania	3.6	3.7	4.5	3.9
Slovakia	4.8	4.8	5	6.4
Slovenia	7.6	8.5	9.8	11.4
Spain	9.8	7.7	8.8	9.6

5.2.2.1 A: The frontrunners

The Netherlands is an overall outlier, also within its own country group. As described in the factor of the ambition, the Netherlands aims at being completely circular in 2050. The performance of the other countries in group A strongly fluctuates.

5.2.2.2 B: The developers

Overall country group B scores low with regards to where they currently stand in the transition to a circular economy. Especially Romania, having the lowest score in the EU, has a long way to go. Czech Republic is an outlier in its group, with a circularity rate of 11.3%.

5.2.2.3 C: The financially dependent

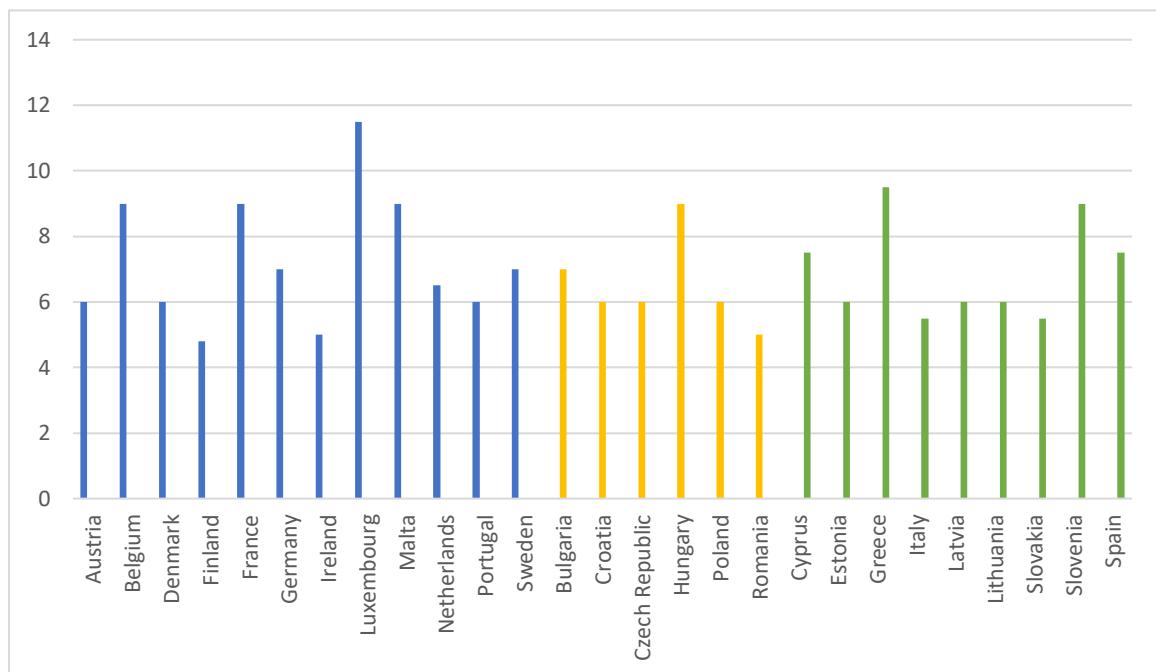
Estonia, Italy and Slovenia see relatively high circularity rates compared to their country groups. The other countries in group C, like many in group B, still see a long way to go towards achieving full circularity.

5.2.3 State capacity

As explained, state capacity is identified by looking at the number of citizens working in the public administration as percentage of the total population and the financial condition of a state. As graph 1 below illustrates, there are no big discrepancies between the percentage of civilians employed in the public administration. One of the exceptions is Luxembourg, which compared to the other EU countries has a large public administration.

Graph 1.

Citizens working in the public administration (as % of population)

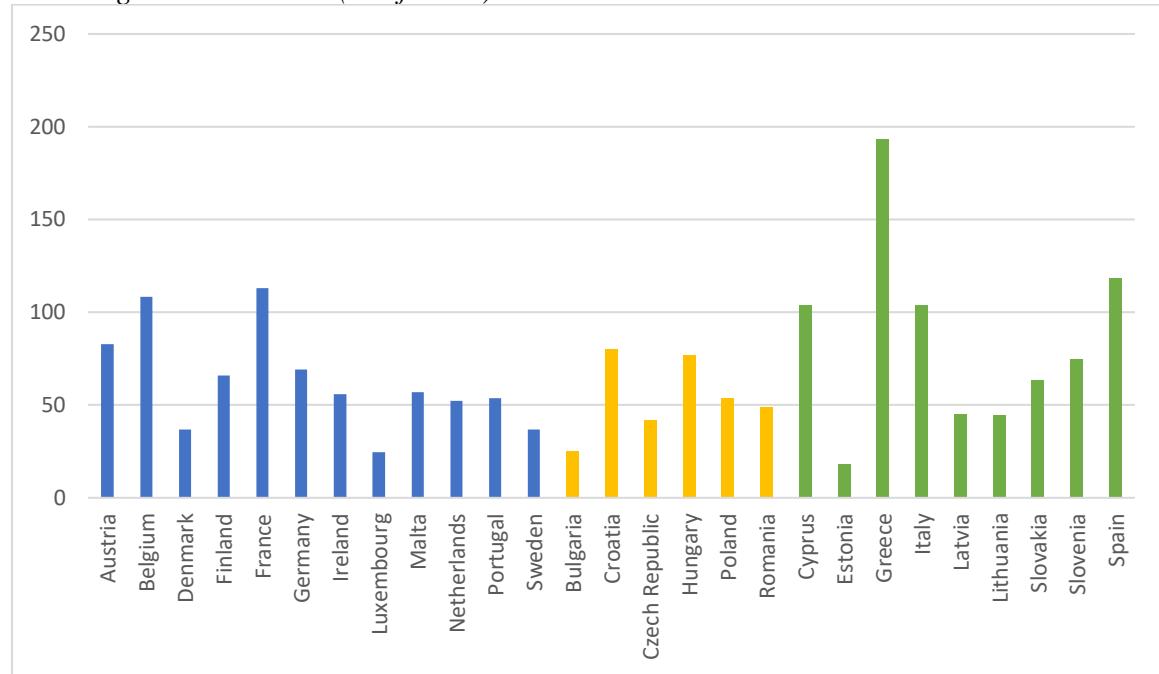


Source: European Commission, 2018

Regarding financial conditions, there is a large diversity in stability and debts throughout the union. Considering government debt, there is an EU average of 88.1% debt of the national GDP in 2021, which is an increase. Greece, Italy, Portugal and Spain are outliers in this, and see high government debts. Also, in the government debt percentages an increase can, be seen. The most important reason for this is the covid-pandemic. Officially a countries government deficit should not exceed more than 3%, currently this is exceeded in many MS (Eurostat, n.d.-b).

Graph 2.

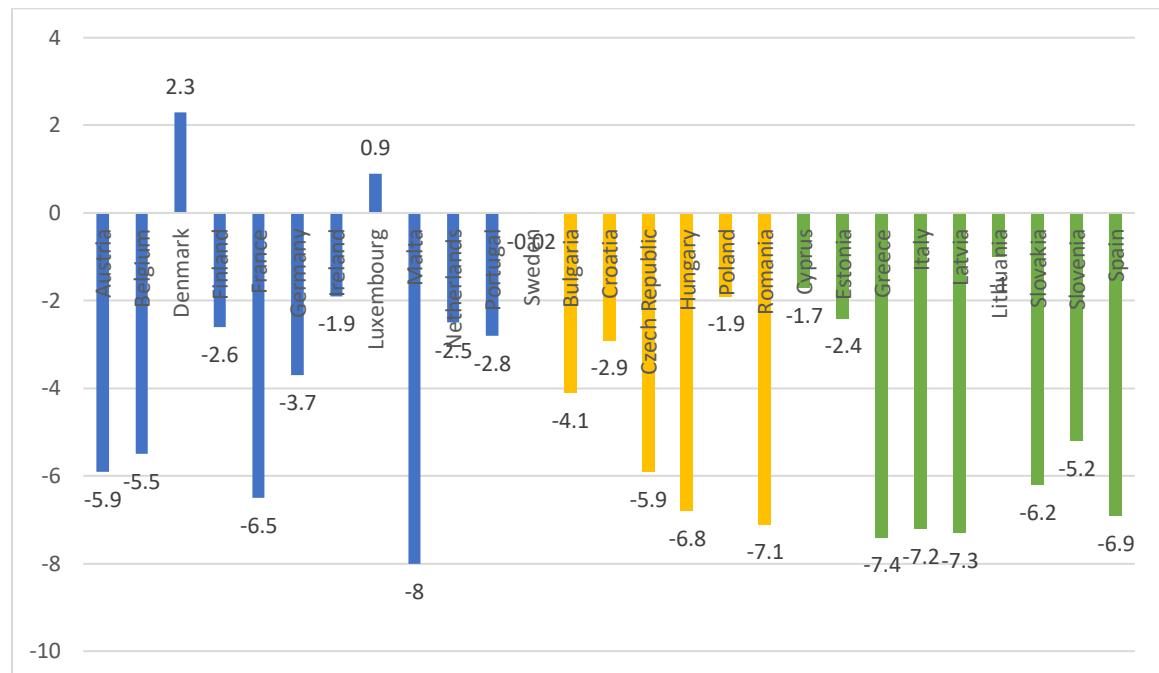
Central government debt (% of GDP) in 2021



Adapted from Eurostat, 2021b

Graph 3.

General government deficit/surplus (% of GDP) in 2021



Adapted from Eurostat, 2021a

5.2.3.1 A: The front runners

Among the front runners, and in the union as a whole, Luxembourg is an outlier regarding percentage of people working for the public administration. Overall, the countries in group A have a strong capacity of the state. The Austrian GDP for example, is expected to grow in 2023 by about 2.5%, and recover after the covid crisis (EC, 2022; OECD, 2021a). In general, the economies of the countries in group A are strong, and are stable enough to carry a government deficit. However, it is of course questionable to what extent current crises will influence their economies (KBC Bank & Verzekering, 2021; OECD, 2021a; OECD, 2021b; The World Bank Group, n.d.; European Union European Social Fund Operational Programme Employment, 2020; EC, 2020c).

5.2.3.2 B: The developers

Czechia can be characterized as a motivated MS, who wants to transition, but still sees trouble in putting plans and ideas into action. As can be seen in graph 3, all countries have a large government deficit, but not more outstanding than the other country groups. The biggest issue here is not necessarily found in the missing capacity to invest in the CE, but in the willingness to invest in this and the prioritizing of other issues by the MS. Lithuania, Slovakia, and Poland see a dependence on the EU funds for development. If they want to transition to a CE, they have to make a big transition from being a mostly industrial economy, which requires large investments (Government of Lithuania, 2021; EC, 2020a; Government of Lithuania, 2021; OECD, 2021g; OECD, 2022).

5.2.3.3 C: The financially dependent

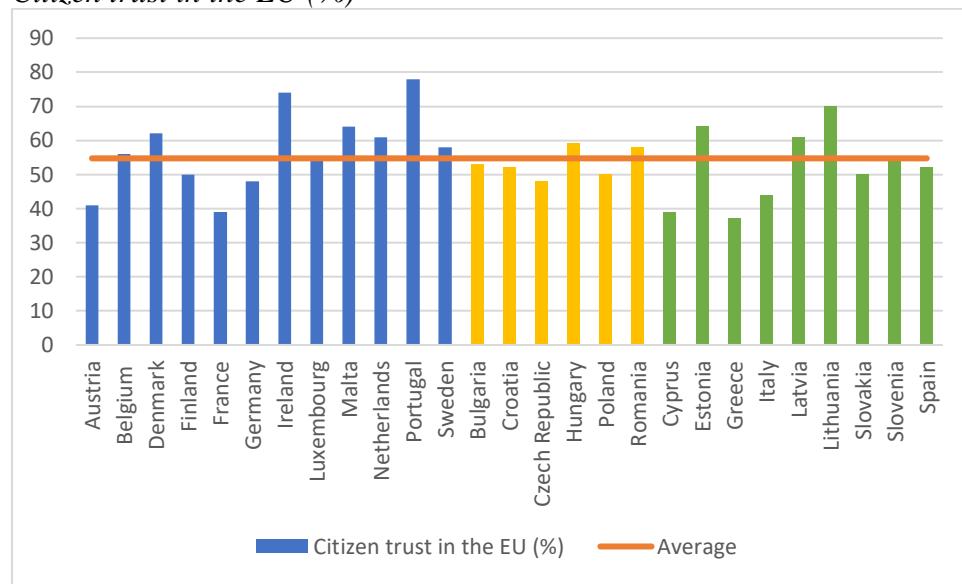
As expected, countries in group C see financial issues. There is a big reliance on EU funds for transitioning due to a poor state of government finances (Angelis-Dimakis et al., 2022; Charalampous, 2018; EC, 2018; OECD, 2021c). In the aftermath of the 2007-2008 financial crisis in the Union, Greece saw a big sovereign debt crisis arise. Due to chronic mismatch and misuse of government budget, the country was on the edge of complete bankruptcy (McBride, 2017). Furthermore, the economy, which also is largely depends on tourism, was affected by the covid crisis. Greece is still much reliant on EU funding (OECD, 2021e). Italy still sees a relatively strong dependence` on the EU and the IMF for financial support (EC, 2018). This weaker financial state of Italy is also reflected in its strategy mostly focusing on normative actions such as establishing behavioral change of citizens through education, which do not

require large amounts of financing (EESC, 2019). Furthermore, the OECD in its latest economic report on Italy calls for structural reforms of the taxation and governance system to optimize the financial situation in Italy (OECD, 2021f). Latvia has a stable yet not rich financial situation and sees dependency on Europe funds to boost its economy (EC, 2020a; OECD, 2021h).

5.2.4 Support for the EU

A factor influencing the willingness of a government to follow policies and laws of the EU, is the support citizens have in the EU. An indicator for the support for the plans by the EU is the trust citizens have in the EU. As the horizontal line below illustrates, citizen trust in the EU averages at 54.7%.

Graph 4.
Citizen trust in the EU (%)



Adapted from European Commission, 2021c

5.2.4.1 A: The front runners

Austria, France and Germany see a below average trust of citizens in the EU, but as discussed earlier do have ambitious and concrete plans for the transition to the CE. In Belgium overall, the trust in the EU is a little above average, at about 56%. Within the country, the Flemish (60%) have more trust in the EU than the Walloons (52%) (Departement Buitenlandse Zaken, 2021).

5.2.4.2 B: The developers

In this group the trust in the EU is a little over or a little under the EU average. This is remarkable, since some of these countries, as Hungary and Poland for example, do see a ruling political power that is strongly Eurosceptical (Lázár, 2015).

5.2.4.3 C: The financially dependent

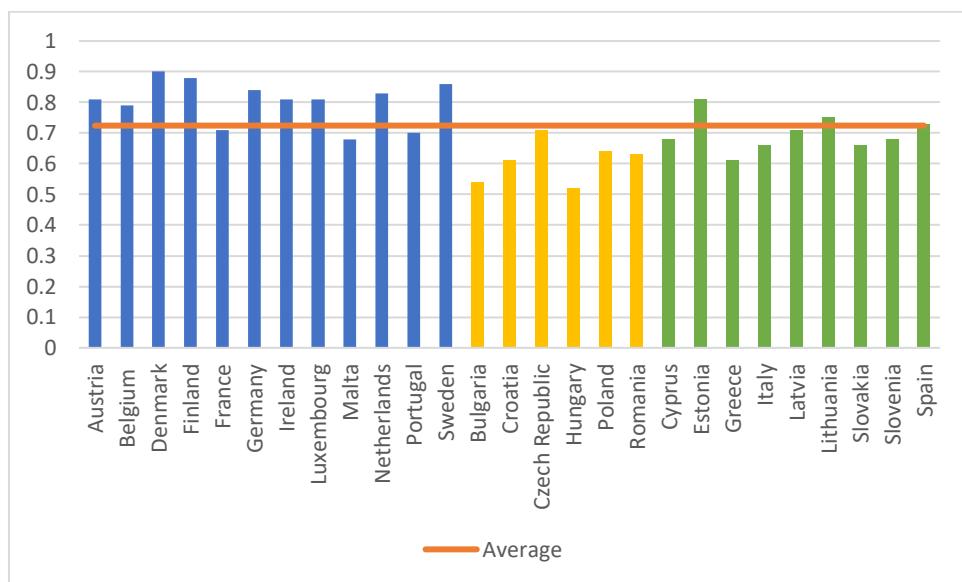
Italy and Greece are strong outliers regarding trust in the EU. This can largely be explained by the financial crisis in 2007-2008 which hit these MS hard financially. The impact of the crisis in these countries was immense, with many people losing their jobs and worse. Due to this, citizens have lost trust in European leaders (Balfour, 2019).

5.2.5 *The rule of law*

Currently Denmark, Norway, Finland Sweden and Germany form the global top 5 regarding rule of law. A score of 0.75 and higher can be characterized as a strong rule of law. Between 0.75 and 0.5 there is required extra attention to maintain a strong rule of law. Below 0.5 there is a weak and more critical situation regarding the rule of law. The lowest EU score is found in Hungary (0.52), being at a critical level compared to the other EU MS (World Justice Project, 2021).

Graph 5.

Rule of Law (in index 0-1)



Adapted from World Justice Programme, 2021

5.2.5.1 A: The front runners

As graph 5 shows, almost all countries in group A score above average or average on the rule of law index. Historically the rule of law in Germany is strong, the term *Rechtsstaat* was even developed in Germany in the 19th century, and was influenced by many influential scholars and philosophers as Immanuel Kant (Bekkers & Scholten, 2018; Council of Europe, 2019). Malta is the lowest scorer, with an index of 0.68. The biggest improvements in Malta can be made in the areas of regulatory enforcement, civil justice, and the openness of the government. Also, Portugal scores a bit below the average, but with a score of 0.70 still has a relatively good rule of law in general (World Justice Project, 2021).

5.2.5.2 B: The developers

Considering group B, all countries score below the EU average index score of the rule of law. Bulgaria, Romania, Croatia, Hungary, and Poland are under heavy critique for violating the rule of law, corruption, justice and issues with press freedom (World Justice Project, n.d.; Dimitrova, 2020; Strupczewski, 2020). Bulgaria is under surveillance and attention of the EU, and closely being watched in its democratic developments. The EC has raised questions and attention to the Croatian judicial system, the situation of corruption, and the low-quality governance (EC, 2021a; EC, 2021d; World Justice Project, n.d.). The Hungarian government is under scrutiny and critique by the EU for violating the rule of law for a few years now, especially under the leadership of Viktor Orban (World Justice Project, n.d.). In April 2022, the EC even triggered a special rule of law procedure against Hungary, over the violation of European Law (World Justice Project, n.d.; Deutsche Welle, n.d.; Transparency International, 2021; Eder & Klingert, 2021). Hungary faces a large implementation deficit, which is largely caused by to a mismatch between EU policy and national politics (Leventon, 2014). Poland is under much critique for violating the rule of law (EC, 2019a; Deutsche Welle, 2021; World Justice Project, 2022; World Justice Project, n.d.). Also, in Romania the rule of law is under pressure and increasingly being monitored (World Justice Project, n.d.). What is remarkable, is that compared to its country group, the Czech Republic sees an average rule of law compared to other EU MS (World Justice Project, n.d.).

5.2.5.3 C: The financially dependent

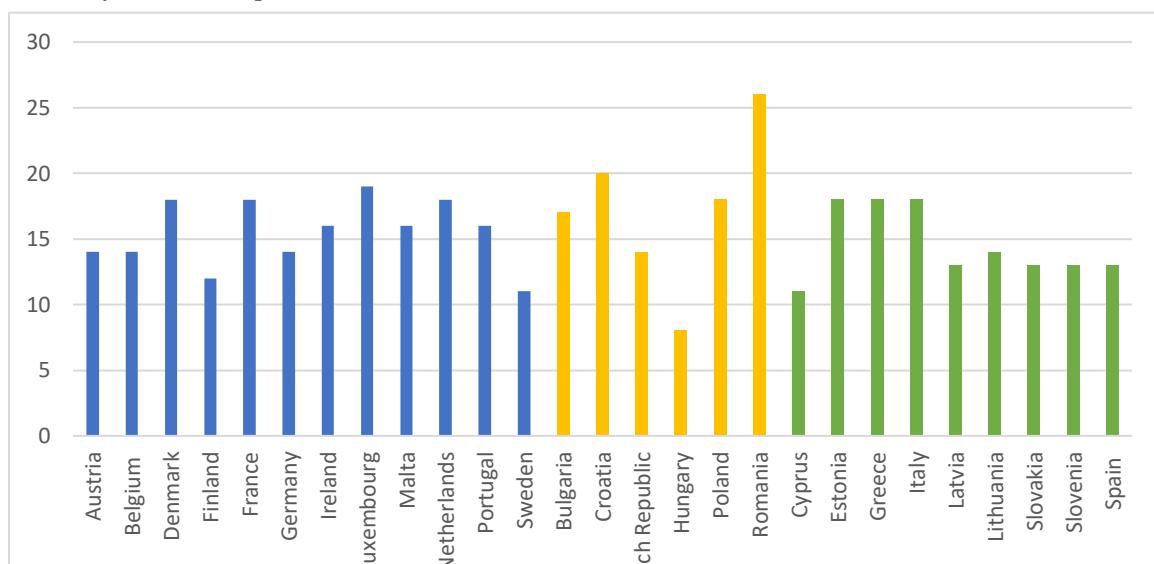
In this group the rule of law index is fluctuating. Whereas Estonia relatively sees a stronger than average rule of law, Greece scores below average. With a score of only 0.61, which is predominantly due to issues with corruption and regulatory enforcement (World Justice Project, 2021).

5.2.6 Simplicity of the public administration

Due to limited available data, this factor will not be analyzed per country group. Within the EU, there is a large variety in the number of ministries per MS. Romania is an outlier with 26 ministries, and Hungary goes much below average with only 8 ministries. Both countries however, do not have a well laid out plan for the implementation of the CEAP in their country. The more ministries a country has, the harder it becomes to navigate and know where to go for what. In the Netherlands for example, there is one ministry responsible for the transition for the policy around the transition to the CE. This country is for years the European front runner in the circular transition. Romania and Hungary, it is unclear who should take the responsibility, which makes that no ministry specifically feels the urge to take up the responsibility. What furthermore is interesting to note, is that it differs per EU member state to what extent there are local and regional strategies for a CE. In more decentralized countries as Belgium and Spain, there can be found early documents concerning the circular transition, from as early as 2014 (EESC, 2019). The average of ministries in the EU MS is 15.6 ministries.

Graph 6.

Number of ministries per MS (total)



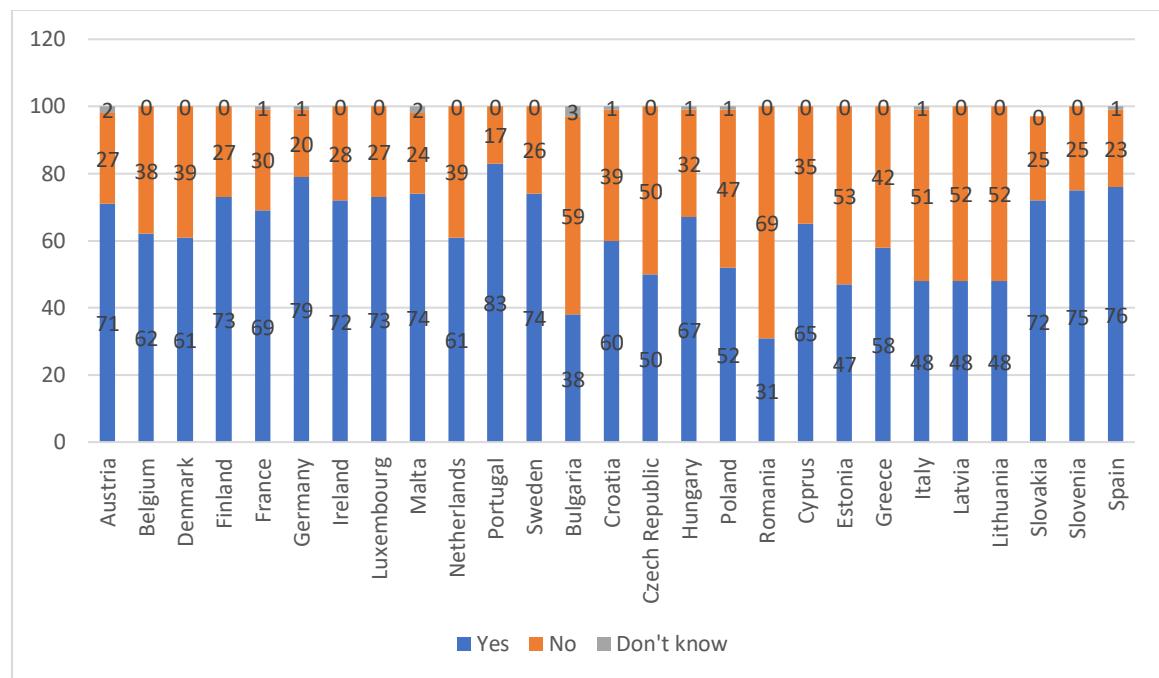
Adapted from EESC, 2019

5.2.7 Domestic mobilization

In most EU MS, citizens and other external parties are seen to limited be involved in the strategy making for the CE (EESC, 2019). According to the Ellen McArthur foundation, citizens and public organizations can act as mediators and can support a society wide paradigm shift (2017). Good governance requires the activation of citizens, public accountability, transparency and adaptability is essential for achieving climate goals (Davoudi & Cowie, 2015). Research has shown that usually participation of citizens and public organizations is higher during the implementation process than during the strategizing of policies. About six in 10 Europeans say to cut down consumption of disposable items, and 42% says to cut down their energy consumption 75% of the respondents to the Eurobarometer survey on Climate Action in 2021 say to try to reduce their waste and recycle (EESC, 2019; European Union, 2021).

Graph 7.

Citizens who between November 2020 and April 2021 have taken climate action



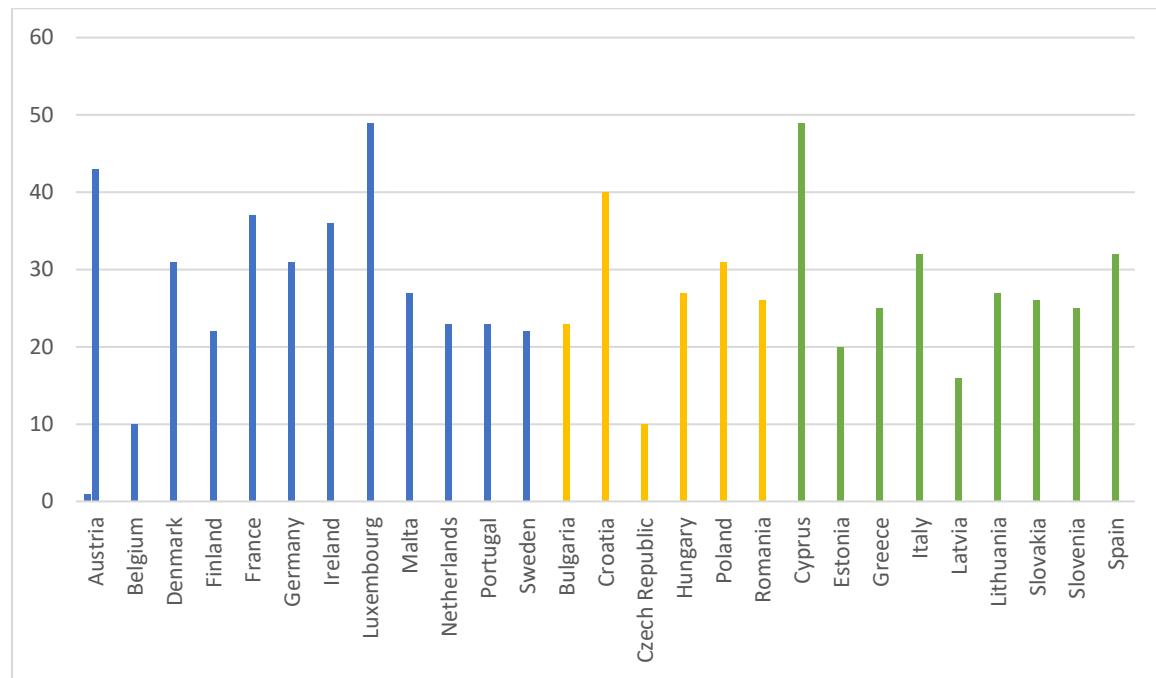
Adapted from European Union, 2021

According to Partelow et al. (2020) EG since the 1980s have increasingly gained presence and influence mostly in the implementation part of tackling climate change. In their research they published an index of structural power of environmental NGOs per region in the world. In this index, it also came forward that EG in Europe more than in other parts of the world are heterogenous, and on average have medium structural power in influencing policy makers. An

important factor in this is the financial capacity as well as human resources that an organization has. As many organizations are non-profit or voluntary initiatives, this can negatively influence their ability to mobilize (Partelow et al., 2020).

Graph 8.

Citizens who see environmental groups as responsible for tackling climate change (in %)



Adapted from European Union, 2021

5.2.7.1 The frontrunners

Among the front runners there is diversity in percentage of citizens who see environmental groups as responsible in tackling climate change. In all countries more than 50% of the citizens says to have taken climate action in the past 6 months, signaling that climate change is deemed important. Based on research by the EESC, Finland is the EU MS who has involved the most local citizens and organizations in the drafting of the strategy for the CE (EESC, 2019; Finnish Government, 202; OECD, 2021d). In Sweden, the Netherlands, Denmark, Ireland, and Finland, climate change is by citizens considered as the biggest threat to the planet (EC, 2021b; European Union, 2021).

5.2.7.2 The developers

In country group B, an overall lack of knowledge of CE be signaled among citizens as well as enterprises, with governments mostly taking advice from mandarins and other experts (EC, 2018; EC, 2020d). Croatia sees a larger trust than the other countries in group B, in environmental groups as responsible for tackling climate change. In most countries at least 50% of the citizens say to have acted to tackle climate change in the past six months. Bulgaria and Romania are outliers however, with much less citizens having acted.

5.2.7.3 The financially dependent

Estonian, Italia, Latvian and Lithuanian citizens are exceptions among their country group, scoring lower than average on acting on climate change. It is interesting that citizens of the other countries in the group score themselves relatively higher, even though the reality of for example the circularity rate does not necessarily reflect this (table 4). Furthermore, it is interesting to see that, in specific in Cyprus, but also in the other countries, environmental groups are seen as relatively important (graph 8).

5.2.8 Conclusion category 2: domestic factors

Based on the analysis of the presence of the variables in the 27 MS, table 6 provides an overview of the findings. It is important to note that from this there cannot be made conclusions about the influence on the expected compliance to the CEAP. There can only be concluded if a factor, as expected from literature and theory is also present in the member state. In chapter 3.3 there is briefly explained per factor when it is present or not, the exact numbers and explanations behind the color-coding of table 5 per variable can be found in table 8 in appendix B.

Table 5: Legenda conclusion country analysis

Color	Explanation
Green	The factor is strongly identified
Light Green	The factor is identified
Yellow	The factor is moderately identified
Red	The factor is not identified

Table 6: Conclusion country analysis

Sweden	Green	Red	Green	Green	Green	Green	Green	Green	Green
<i>B: The developers</i>									
Bulgaria	Red	Red	Green	Green	Green	Red	Yellow	Red	Green
Croatia	Red	Red	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow
Czech Republic	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Green
Hungary	Red	Yellow	Green	Red	Green	Red	Green	Green	Green
Poland	Red	Yellow	Green	Green	Green	Red	Green	Yellow	Green
Romania	Red	Red	Green	Yellow	Green	Red	Red	Red	Yellow
<i>C: The financially dependent</i>									
Cyprus	Green	Red	Green	Red	Red	Yellow	Green	Green	Green
Estonia	Green	Green	Green	Green	Green	Yellow	Red	Green	Green
Greece	Green	Red	Green	Red	Red	Yellow	Yellow	Yellow	Green
Italy	Green	Green	Green	Red	Red	Yellow	Yellow	Green	Green
Latvia	Yellow	Red	Green	Green	Green	Yellow	Red	Green	Green
Lithuania	Yellow	Red	Green	Green	Green	Green	Red	Yellow	Yellow
Slovakia	Yellow	Red	Green	Yellow	Green	Yellow	Green	Green	Yellow
Slovenia	Yellow	Green	Green	Yellow	Green	Yellow	Green	Green	Green
Spain	Green	Green	Green	Red	Yellow	Green	Green	Green	Green

5.2.8.1 A: The frontrunners

Looking at the table, most factors have been (dominantly) identified in group A. The biggest differences can be found in the circularity rate, which also in this group is divergent; however, this is not reflected in the ambitions of the countries. Throughout the countries, ambitions are high; yet in many cases could still improve and be even more concrete. What furthermore is interesting to note, is that in Belgium, the Netherlands and Denmark the percentage of citizens who say that they contribute to tackling climate change, is lower than would be expected in countries that score high in other areas. Also, even though this group is called the frontrunners, this is mostly seen in their ambitious plans. The circularity rate however, in some of the MS is still on the level of the other two groups. Overall, most factors can to a large extent in group A be identified.

5.2.8.2 B: The developers

Regarding the findings of group B, Czechia is a clear outlier of the rest of the group. Albeit characterized with EU skepticism, the country compared to its group, sees a presence of most factors expected to positively influence compliance. The other MS in the group, see many orange or red colored cells, mostly in the ambition, circularity rate, rule of law, and citizens taking action. Furthermore, not all countries with a troublesome rule of law, also see lower trust of the citizens in the EU. Considering this, for many countries in group B, the extent to which the factors can be identified is limited and very divergent.

5.2.8.3 C: The financially dependent

This group is formed on the characteristic of being financially dependent on the EU. It is interesting to see that the countries in this group who do not see the factor of financial stability identified do see a relatively ambitious CEAP plan, and vice versa. Examples of this are Cyprus, Greece and Italy, who all have a weak financial state, yet do see ambitious plans (table 6). Furthermore, Estonia is an outlier in the group, with many factors identified. This also counts for Spain, being mostly affected by the consequences of the financial crisis, which can be seen in the trust of citizens in the EU as well as general financial stability. Also, it can be seen that most countries in this group, that do not have an ambitious CE plan, also score low(er) with regards to current circularity rate. Furthermore, the rule of law is also under (some) pressure in most MS in this group.

5.3 Conclusion

This chapter researched the second sub-question *to what extent are the identified factors present in the 27 EU member states?* Through document analysis, it aimed at identifying the factors in the 27 EU MS as well as in the EU as a whole. Above conclusions per country group were drawn. What is most striking: is that in no MS, all factors have been identified. The following chapter will dive deeper into a discussion on the consequences of the (non)presence of factors for the compliance with the CEAP.

6. Conclusion

In this final chapter the sub-questions and the main research questions are answered. Lastly, the limitations to this study as well as recommendation for further research on the topic are discussed.

6.1 Discussion of the findings

This thesis has aimed at identifying an answer to the main research question: *To what extent can the Circular Economy Action Plan as set out by the EC be expected to be implemented?* It has done so through finding answers to two sub-questions. The answers to the research questions is discussed below. In 6.1.1 sub-question 1 will be discussed, and in 6.1.2 sub-question 2 will be discussed.

6.1.1 Sub-question 1: Which factors influence national compliance to EU policy according to theory and literature?

This thesis started off in chapter two with laying out a theoretical framework of factors influencing compliance, which was supplemented in chapter three with factors found in literature. In the theory three approaches were identified influencing national compliance to EU policy, being the *enforcement approach*, *management approach* and *legitimacy approach*. In chapter three, the research dove deeper into literature on empirical studies on the compliance to EU policy, identifying similar and more factors. Taking all findings together, the conceptual model of factors influencing compliance was presented in section 3.1.1.

In both literature and theory ambiguity of policy is identified as a factor influencing the success and likelihood of compliance (Thomann and Zhelyazkova, 2017; Cairney, 2019). As with other EU policy, and thus also in the case of the CEAP, policy is made by the European Union. MS are of course engaged in this through their participation in the parliament and council, however in the end it is the Union as an institution that makes the policy. In both theory and literature, it was identified that the deeper cooperation, the less likely countries are to defect on the common goal. Axelrod (1986) in the enforcement approach argues that depth of cooperation is the most important to prevent countries from defecting. In this case, deeper cooperation can be enabled through the facilitation of platforms to exchange knowledge and establish (green) partnerships, for which a responsibility lies with the EU. These two factors, the clarity of EU policy and the collaboration in the Union influence national compliance, they are important to identify. These are factors that are equal for all MS, and thus fall in the category

1, EU factors. Also, in this research ambiguity of the policy could be argued to have a larger influence on the successful compliance to the CEAP than cooperative platforms. Because: also, countries who still have to take big leaps to make the transition, who could ‘benefit’ from the ambiguity of the policy, but who are also deeply dependent on the EU through funds and participate in cooperative platforms, still are likely to defect on CE policy as their domestic priorities lay in other policy areas. This goes against arguments by Tallberg (2002) arguing that the deeper cooperation, the less likely countries are to defect. As this thesis focusses on the expected compliance, it does not look at the process leading up to the making of the policy in the Union.

The conceptual model then moves on to identify factors that differ per member state, the category 2 factors. Here six factors are identified, that are expected to influence national compliance to EU policy. These factors are the ambitions of EU MS, the current circularity rate of EU MS, the capacity of the state, support for the EU by the MS citizens, the rule of law in a country, the simplicity of the public administration in a country, and lastly the domestic mobilization.

What is important to note, is that these are factors that in literature and theory in general are proven to influence compliance to EU policy, to what extent this is expected to be the case in CEAP is discussed in 6.2.

6.1.2 Sub-question 2: To what extent are the identified factors present in the 27 EU MS?

Chapter 5 has identified to what extent the factors as presented in the conceptual model are present in the 27 EU MS. It started off with discussing the category 1 factors, being the factors on the EU level. Here it concluded that especially in the field of clarity there are big steps to take for the CEAP. What is interesting here, is that as mentioned above as well, MS are the ones in the EU accepting the final version of the CEAP. Furthermore, it is interesting that the presence of collaboration in the union on the topic can be identified. While there on the one hand is a rise of Euroscepticism in the Union, there are increasingly initiatives for cooperation on CE in the EU. Interestingly the EU puts much effort into keeping all MS onboard of the transition through extensive facilitation of financial support to MS to make the transition to the CE and for general sustainability developments.

As discussed, the EU MS are divided into three groups for research purposes. These three country categories were largely based on expectation for seeing similarities in the country groups. However, as table 6 indicates, not for all factors there is a similarity throughout the country groups.

Considering country group, A, the frontrunners, most cells are colored a shade of green, signaling that factor are present. As explained in chapter 3, the distance between set goals by the union and the current state of the MS very much influences the extent of compliance. Based on this, as well as the identified presence, it could be expected that in country group A compliance to policy as the CEAP is likely. In group B, there are many red and orange cells. Furthermore, these countries are still relatively dependent on brown energy and industry. They are large emitters, have a developed economy than the countries in group A. This could be expected to bring different priorities, making sustainability in general and CE in specific being set lower on the agenda. This can also be seen in the absence of plans for a CE in some of these countries. What is interesting to note, is that the Just Transisiton Mechanism of the EC specifically is set in place to prevent this wedge from happening. Even though the EU through funds and platforms tries to stimulate the MS who are behind, these efforts do not seem to close the gap. Looking for example at country group C, which is characterized as a group being hit hard during the 2007-2008 financial crisis, the presence of the financial stability does not necessarily lead to the presence of ambitious CE plans. Currently, in the aftermath of the covid-crisis, many EU MS see a too large deficit, however, this does for example not limit the Netherlands and Germany too much to invest in the circular economy. These economies have the general development and stability to still be able to invest in long term projects, more than industrial economies for whom it requires bigger investments and changes to become circular.

The answer to sub-question two is therefore not singular, as the extent to which the factors are present varies largely among the MS, and also within the countries in group B and C specifically.

6.2 Conclusion

Based on the research and analysis conducted in this thesis, it can be concluded that the extent to which the Circular Economy Action Plan as set out by the EC can be expected to be implemented is highly fragmented throughout the European Union. In the countries that in this research formed the front runners, it can be expected that the CEAP to a very large extent is implemented in national strategies and policies in the coming years. In these countries sustainability is high on the agenda, society is concerned about the future of the planet, and the financial resources are there to invest in transitioning to a CE. Regarding country groups B and C, expectations are lower and more doubtful. It must be acknowledged that there are very big differences between the economies of the EU MS, which makes it close to impossible to

guarantee a just transition throughout the union. Especially the countries in group B have to deal with other, more immediate pressing issues, as a very critical rule of law, as well as poverty and other development issues. In group C there are generally issues with the stability and the independence of the economy, which must be addressed while or before transitioning to a CE. Overall, the results as visualized in table 6 show good prospects for implementation in most EU MS.

Coming back to the question central in this thesis; *To what extent can the Circular Economy Action Plan as set out by the European Commission be expected to be implemented?* there are several conclusions that can be made. As this thesis sees successful compliance as behavior of MS shows confirmation and movement towards the objectives and regulatory measures of the CEAP and the EGD as set out by the EC, ambitions are important to consider. Firstly, the extent to which the CEAP can be expected to be implemented is strongly dependent on the extent of match or mismatch between the national reality and the EU policy and goals strived towards (Leventon, 2014). It will be interesting in the coming years to see to what extent the ambitious plans of many member states, positively influence the development of circularity in their economies. Secondly, it is interesting to see that in most EU MS citizens see an important role for environmental groups in tackling climate change. What is interesting to note however, is that most reports until now do not report about the involvement of environmental groups in policy making on the circular economy, or say this participation is very limited (EESC, 2019). It could thus be said that are opportunities here for MS in complying with the CEAP, through involving environmental groups more and better enable domestic mobilization. Lastly, factors as the rule of law and financial capacity, on which the group division was largely based, in the analysis have shown to not influence all countries in the country group in the same way. For example, Estonia and Czechia were both outliers in their country group in many areas. So therefore, it can be expected that the extent to which the CEAP will be implemented will vary largely throughout the Union. It remains questionable for all countries, frontrunners, developers and the financially unstable if the CEAP in the end will be a success, as all ambitious plans and goals of course still have to be turned into actions.

6.3 Limitations and future research recommendations

To conclude this research, some limitations regarding this research as well as some recommendations for future research are made.

6.3.1 Limitations

Regarding limitations, it is first and foremost important to note that this research discussed the extent to which a policy is expected to be implemented. Therefore, reality can be different from the expectations set out in this thesis, that are solely based on expectations based on the conceptual framework. It falls prey to becoming speculative which can cause a distraction from the purely expectative nature of the study. Another limitation can be found in the case study. As this thesis has aimed at examining the compliance to the CEAP in the EU as a whole, this has required 27 case studies. A possible consequence of this, is that the research stays more on the surface, and cannot go deep as with a case study of three or four countries. Thirdly, a limitation can be found in the sources available for the study. Because of the scope of the master thesis, there is for this study relied on journal articles, reports, and other secondary sources. However, measuring for example the sense the actual willingness of citizens to transisiton or motivation of civil servants to work on the CE, is more difficult. If this study would have been able to conduct interviews with citizens, civil servants, policy makers and other important persons regarding the CE transition on both the National and EU level, it could have moved beyond merely text. Also, a limitation can be found in the reasoning behind the color-coding scheme used to identify when a factor is or is not present.

The last limitation is a more general limitation to research in the field of climate and sustainability policy. Fact is that reality and developments go faster than research, new techniques and geopolitics change faster than this thesis was written. When on the 24th of February Russia invaded Ukraine, Europe was shaken. For the first time in decades there is war on the European continent, which besides the terrible harm in Ukraine, has many other consequences globally. One of the big challenges that is currently being faced in the EU is a gas crisis, since the EU has a large dependence on Russian gas. Due to this, the need for independency is rising, which could be seen as a boost for increased focus on green developments. With the REPowerEU plan presented on the 18th of May 2022, the Commission launches the plan to end the EUs dependence on Russian fossil fuels as well as contribute to tackling the climate crisis. The plan contains measures to amongst others, invest in renewable energies and further contributes to the Just Transisiton Mechanism by putting an emphasis on the countries who still see a stronger dependency (EC, 2022c). Most measures so far are seen in the energy sector, some can be linked to the transisiton to a CE. Only the future will tell us what positive climate consequences might come out of the current situation. Because as Winston Churchill said shortly after the WWII: “Never let a good crisis go to waste!” (Organization for Economic Cooperation and Development, 2019).

6.3.2 Future research

Based on the expectations by this thesis as well as the limitations presented above, there are certain recommendations for further research. Continuing with the last limitation mentioned, future research is recommended to study the influence of current crises on the extent to which the CE transisiton happens and the CEAP is implemented. It could be expected that not only wars but also natural crisis, showing the increased severity of climate change, will influence the extent to which countries are committed to transitioning to a CE. Furthermore, it is interesting to dive deeper into the factors presented in this thesis, and the consequences of the presence or non-presence in the context of the CE on the longer term. For example, what are the consequences for the overall cohesion in the Union? Following up on this, regarding cohesion, the effectivity of platforms to facilitate cooperation of CE in the union could be further researched. This thesis has focused on the presence of these platforms, but it would be interesting to dive deeper into the more concrete practicalities of these platforms. Lastly, it is interesting to continuously keep monitoring the presence of the identified factors, and over time measure the importance per factor. Based on this, the EU can adjust its strategy to ensure successful policy implementation and compliance throughout the union in the future.

7. *Bibliography*

7.1 Academic literature

Angelis-Dimakis, A., Arampatzis, G., Alexopoulos, A., Pantazopoulos, A., Vyrides, I., Chourdakis, N., & Angelis, V. (2022). Waste Management and the Circular Economy in Cyprus—The Case of the SWAN Project. *Environments*, 9(2), 16. <https://doi.org/10.3390/environments9020016>

Avdeyeva, O. A. (2016). *Defending Women's Rights in Europe: Gender Equality and EU Enlargement (SUNY Press Open Access)* (Illustrated ed.). State University of New York Press.

Axelrod, R. (1986). An Evolutionary Approach to Norms. *American Political Science Review*, 80(4), 1095–1111. <https://doi.org/10.2307/1960858>.

Balfour, R. L. R. (2019, July 23). *Why Did Italy Fall Out of Love with Europe?* IAI Istituto Affari Internazionali. Retrieved June 1, 2022, from <https://www.iai.it/en/pubblicazioni/why-did-italy-fall-out-love-europe>

Blatter, J., & Haverland, M. (2012). *Designing Case Studies: Explanatory Approaches in Small-N Research (ECPR Research Methods)* (1st ed. 2012 ed.). Palgrave Macmillan.

Bondarouk, E., & Mastenbroek, E. (2017). Reconsidering EU Compliance: Implementation performance in the field of environmental policy. *Environmental Policy and Governance*, 28(1), 15–27. <https://doi.org/10.1002/eet.1761>

Börzel, T. A. (2000). Why there is no “southern problem”. On environmental leaders and laggards in the European Union. *Journal of European Public Policy*, 7(1), 141–162. <https://doi.org/10.1080/135017600343313>

Börzel, T. A., Hofmann, T., & Panke, D. (2012). Caving in or sitting it out? Longitudinal patterns of non-compliance in the European Union. *Journal of European Public Policy*, 19(4), 454–471. <https://doi.org/10.1080/13501763.2011.607338>

Börzel, T. A., Hofmann, T., Panke, D., & Sprungk, C. (2010). Obstinate and Inefficient: Why Member States Do Not Comply With European Law. *Comparative Political Studies*, 43(11), 1363–1390. <https://doi.org/10.1177/0010414010376910>

Börzel, T. A., & Sedelmeier, U. (2017). Larger and more law abiding? The impact of enlargement on compliance in the European Union. *Journal of European Public Policy*, 24(2), 197–215. <https://doi.org/10.1080/13501763.2016.1265575>

Checkel, J. T. (2001). Why Comply? Social Learning and European Identity Change. *International Organization*, 55(3), 553–588. [mhttps://doi.org/10.1162/00208180152507551](https://doi.org/10.1162/00208180152507551)

Claeys, G., Tagliapietra, S., & Zachmann, G. (2019). How to make the European Green Deal work. *Policy Contribution*, 13. <https://www.jstor.org/stable/pdf/resrep28626.pdf>

Davoudi, S., & Cowie, P. (2015). Guiding principles of ‘good’ territorial governance. In P. Schmitt & L. van Well (Eds.), *Territorial Governance Across Europe: Pathways, Practices and Prospects* (p. Part I). Routledge.

Delbeke, J., & Vis, P. (2015). *EU Climate Policy Explained* (1st ed.). Routledge.

Delbeke, J., & Vis, P. (2019). *Towards a Climate-Neutral Europe* (1st ed.). Routledge.

Delreux, T., & Ohler, F. (2019). Climate Policy in European Union Politics. *Oxford Research Encyclopedia of Politics*. <https://doi.org/10.1093/acrefore/9780190228637.013.1097>

Dimitrova, A. (2020). https://www.montesquieu-instituut.nl/id/vld2fsmjg8si/nieuws/europese_politici_let_op_bulgaarse. *De Hofvijver*, 10(112).

Downs, G. W., Rocke, D. M., & Barsoom, P. N. (1996). Is the good news about compliance good news about cooperation? *International Organization*, 50(3), 379–406. <https://doi.org/10.1017/s0020818300033427>

Falkner, G., Hartlapp, M., & Treib, O. (2007). Worlds of compliance: Why leading approaches to European Union implementation are only sometimes-true theories? *European Journal of Political Research*, 46(3), 395–416. <https://doi.org/10.1111/j.1475-6765.2007.00703.x>

Gerring, J. (2007). *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press.

Ghosh, S. K., & Ghosh, S. K. (2021). *Circular Economy: Recent Trends in Global Perspective*. Springer.

Haas, P. M. (1998). Compliance with EU directives: insights from international relations and comparative politics. *Journal of European Public Policy*, 5(1), 17–37.
<https://doi.org/10.1080/13501768880000021>

Haverland, M., & Romeijn, M. (2007). Do member states make European policies work? Analysing the EU transposition deficit. *Public Administration*, 85(3), 757–778.
<https://doi.org/10.1111/j.1467-9299.2007.00670.x>

Hsieh, H. F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288.
<https://doi.org/10.1177/1049732305276687>

Hugo, P. & EUWID. (2022, March 30). *Lemke kündigt Strategie zur Kreislaufwirtschaft an*. EUWID - Europäischer Wirtschaftsdienst GmbH. Retrieved May 16, 2022, from <https://www.euwid-recycling.de/news/politik/lemke-kuendigt-strategie-zur-kreislaufwirtschaft-an-050422/>

Hulme, M., Neufeldt, H., Colyer, H., & Ritchie, A. (2009). *Adaptation and Mitigation Strategies: Supporting European Climate Policy*. Tyndall Centre for Climate Change Research, University of East Anglia, Norwich, UK. https://www.tep-energy.ch/docs/2009_HulmeEtAl_FinalReportADAMProject.pdf

Hurrell, A., & Woods, N. (1995). Globalisation and Inequality. *Millennium: Journal of International Studies*, 24(3), 447–470.
<https://doi.org/10.1177/03058298950240031001>

Jankowska, K. (2016). Poland's clash over energy and climate policy. In R. K. W. Würzel, J. Connelly, & D. Liefferink (Eds.), *The European Union in international climate change politics: still taking a lead?* (pp. 145–158). Oxford: Routledge.

Kellstedt, P. M., & Whitten, G. D. (2018). *The Fundamentals of Political Science Research* (3rd ed.) [E-book]. Cambridge University Press.

Keohane, R. O., & Nye Jr., J. S. (1997). *Power and Interdependence* (Fourth edition). Pearson.

Lacy, P., Long, J., & Spindler, W. (2020). *The Circular Economy Handbook: Realizing the Circular Advantage* (1st ed. 2020 ed.). Palgrave Macmillan.

Lázár, N. (2015). Euroscepticism in Hungary and Poland: A Comparative Analysis of Jobbik and the Law and Justice Parties. *Politeja*, 12(1 (33)), 215–233.
<https://doi.org/10.12797/politeja.12.2015.33.11>

Leonard, M., Pisani-Ferry, J., Shapiro, J., Tagliapietra, S., & Wolf, G. (2021). The geopolitics of the European Green Deal. *International Organisations Research Journal*, 16(2), 204–235. <https://doi.org/10.17323/1996-7845-2021-02-10>

Leventon, J. (2014). Explaining implementation deficits through multi-level governance in the EU's new member states: EU limits for arsenic in drinking water in Hungary. *Journal of Environmental Planning and Management*, 58(7), 1137–1153.
<https://doi.org/10.1080/09640568.2014.916611>

Levy, J. S. (2008). Case Studies: Types, Designs, and Logics of Inference. *Conflict Management and Peace Science*, 25(1), 1–18.
<https://doi.org/10.1080/07388940701860318>

Liobikienė, G., & Butkus, M. (2017). The European Union possibilities to achieve targets of Europe 2020 and Paris agreement climate policy. *Renewable Energy*, 106, 298–309.
<https://doi.org/10.1016/j.renene.2017.01.036>

Neyer, J., Zürn, M., & Institut für Interkulturelle und Internationale Studien. (2001). Compliance in Comparative Perspective : The EU and Other International Institutions. *Compliance in Comparative Perspective : The EU and Other International Institutions*.
https://www.researchgate.net/publication/279651928_Compliance_in_Comparative_Perspective_The_EU_and_Other_International_Institutions

Nicolaides, P., & Oberg, H. (2006). The Compliance Problem in the European Union. *The Compliance Problem in the European Union*, 1.
http://aei.pitt.edu/6371/1/Scop06_1_2.pdf

Balfour, R. L. R. (2019, July 23). *Why Did Italy Fall Out of Love with Europe?* IAI Istituto Affari Internazionali. Retrieved June 1, 2022, from
<https://www.iai.it/en/pubblicazioni/why-did-italy-fall-out-love-europe>

Partelow, S., Winkler, K. J., & Thaler, G. M. (2020). Environmental non-governmental organizations and global environmental discourse. *PLOS ONE*, 15(5), e0232945. <https://doi.org/10.1371/journal.pone.0232945>

Pridham, G. (1996). Environmental policies and problems of European legislation in Southern Europe. *South European Society and Politics*, 1(1), 47–73. <https://doi.org/10.1080/13608749608454716>

Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (Illustrated ed.). Chelsea Green Publishing.

Schmälter, J. (2017). Willing and able? A two-level theory on compliance with civil liberties in the EU. *Journal of European Public Policy*, 25(4), 506–525. <https://doi.org/10.1080/13501763.2016.1268192>

Siddi, M. (2020). The European Green Deal: Assessing Its Current State and Future Implementation. *Finish Institute of International Affairs*.

Skjærseth, J. B. (2018). Implementing EU climate and energy policies in Poland: policy feedback and reform. *Environmental Politics*, 27(3), 498–518. <https://doi.org/10.1080/09644016.2018.1429046>

Stahel, W. R. (2019). *The Circular Economy: A User's Guide* (1st ed.). Routledge.

Tallberg, J. (2002). Paths to Compliance: Enforcement, Management, and the European Union. *International Organization*, 56(3), 609–643. <https://doi.org/10.1162/002081802760199908>

Thomann, E., & Zhelyazkova, A. (2017). Moving beyond (non-)compliance: the customization of European Union policies in 27 countries. *Journal of European Public Policy*, 24(9), 1269–1288. <https://doi.org/10.1080/13501763.2017.1314536>

Toshkov, D. (2008). Embracing European Law. *European Union Politics*, 9(3), 379–402. <https://doi.org/10.1177/1465116508093490>

Treib, O. (2014). Implementing and complying with EU governance outputs. *Living Reviews in European Governance*, 9. <https://doi.org/10.12942/lreg-2014-1>

Ulriksen, M. S., & Dadalauri, N. (2014). Single case studies and theory-testing: the knots and dots of the process-tracing method. *International Journal of Social Research Methodology*, 19(2), 223–239. <https://doi.org/10.1080/13645579.2014.979718>

Versluis, E. (in press). Compliance Problems in the EU What potential role for agencies in securing compliance? *3rd ECPR General Conference*.

Wettestad, J. (2001). The Ambiguous Prospects for Eu Climate Policy — A Summary of Options. *Energy & Environment*, 12(2–3), 139–165.
<https://doi.org/10.1260/0958305011500670>

Yin, R. K. (2011). Case Study Research: Design and Methods by YIN, ROBERT K. *The Modern Language Journal*, 95(3), 474–475. https://doi.org/10.1111/j.1540-4781.2011.01212_17.x

Zhechkov, R., European Commission, & Technopolis Group Belgium. (2019). *Eco-Innovation Observatory Country Profile 2018–2019: Bulgaria*. European Commission.
https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_bulgaria.pdf

Zhelyazkova, A., Kaya, C., & Schrama, R. (2016). Decoupling practical and legal compliance: Analysis of member states' implementation of EU policy. *European Journal of Political Research*, 55(4), 827–846. <https://doi.org/10.1111/1475-6765.12154>

Zhelyazkova, A., & Thomann, E. (2021). 'I did it my way': customisation and practical compliance with EU policies. *Journal of European Public Policy*, 29(3), 427–447.
<https://doi.org/10.1080/13501763.2020.1859599>

7.2 Policy documents

Austrian Federal Chancellery. (2021). *Die Österreichische Kreislaufwirtschaft: Österreich auf dem Weg zu einer nachhaltigen und zirkulären Gesellschaft*.
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiP3eaI-8f3AhUDy4UKHfXBC7cQFnoECA8QAw&url=https%3A%2F%2Fwww.bmk.gv.at>

%2Fdam%2Fjcr%3Accbbe6aa-d0eb-4dbb-ae50-cab89e251cd5%2FKreislaufwirtschaftsstrategie_Begutachtungsentwurf.pdf&usg=AOvVaw2AfQDaL0Uhee77-uXmFz-a

Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz. (2016, November). *Climate Action Plan 2050 - Principles and goals of the German government's climate policy*. <https://www.bmuv.de/en/publication/climate-action-plan-2050-en>

Cyprus Circular Economy Network. (2021, August 26). *Presentation of the Cyprus Action Plan for the transition to a circular economy*. Cyprus Circular Economy Network. Retrieved May 14, 2022, from <https://cypruscircular.org.cy/cyprus-action-plan-circular-economy/>

Departement Buitenlandse Zaken. (2021). *De meerderheid van de Vlamingen heeft vertrouwen in de Europese instellingen*. Retrieved May 25, 2020, from <https://flandersineu.be/nl/de-meerderheid-van-de-vlamingen-heeft-vertrouwen-in-de-europese-instellingen>

De Vlaamse Overheid. (2021). *Vlaanderen Circulair: Samen naar een circulaire economie*. <https://vlaanderen-circulair.be/nl/kennis/publicaties>

Der Circular Economy Initiative & Bundesministeriums für Bildung und Forschung (BMBF). (2021). *Circular Economy Roadmap for Germany*. Der Circular Economy Initiative. <https://www.circular-economy-initiative.de/publikationen>

Estonian Government. (2020). *Estonia 2035 (draft)*. Estonian Government. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiYwO3G_sf3AhUkxIUKHQhJBjwQFnoECAUQAQ&url=https%3A%2F%2Fwww.valitsus.ee%2Fen%2Fmedia%2F3926%2Fdownload&usg=AOvVaw1Q4ZfR63lypUVey9OVzE_E

Government of Hungary. (2020). *2021 National Reform Plan of Hungary*. https://ec.europa.eu/info/sites/default/files/nrp_2021_hungary_en.pdf

Government of Latvia. (2021). *National Development Plan of Latvia for 2021–2027*. <https://pkc.gov.lv/sites/default/files/inline->

files/Summary_Latvian%20National%20Development%20Plan%202021-2027_final_pdf.pdf

Government of Lithuania. (2021). *Roadmap for Lithuania's industrial transition to a Circular Economy.*

https://mita.lrv.lt/uploads/mita/documents/files/Žiedinės%20ekonomikos%20konferencija/HIA%20-%20CE%20for%20LT%20Industry%20-%20Final%20Conference_Richard%20Harding.pdf

Government of the Brussels-Capital Region. (2016). *GEWESTELIJK PROGRAMMA VOOR CIRCULAIRE ECONOMIE 2016 – 2020 De hulpbronnen mobiliseren en de verloren rijkdommen tot een minimum beperken: Voor een vernieuwende gewestelijke economie.*
https://www.circulareconomy.brussels/wp-content/uploads/2019/04/GIREC_Brussels-report_Final.pdf

Government of the Republic of Croatia. (2021). *National Development Strategy Croatia 2030.*
<https://digital-skills-jobs.europa.eu/en/actions/national-initiatives/national-strategies/croatia-national-development-strategy-2030>

Government Offices of Sweden. (2020). *Circular Economy – Strategy for the transition in Sweden.*

<https://www.government.se/4ad42c/contentassets/d5ab250cf59a47b38feb8239eca1f6ab/circular-economy--strategy-for-the-transition-in-sweden>

International Energy Agency. (2016). *Energy policies of IEA countries: Poland, 2016 review.* IEA. <https://www.iea.org/reports/energy-policies-of-iea-countries-poland-2016-review>
Italy, Ministry for the Environment, Land and Sea Ministry of Economic Development. (2019). *National / European Circular Economy Stakeholder Platform.* Towards a Model of Circular Economy for Italy - Overview and Strategic Framework.
<https://circulareconomy.europa.eu/platform/en/strategy-level/national>

Ministerie van Infrastructuur en Waterstaat. (2021a). *Uitvoeringsprogramma Circulaire Economie 2021–2023.* Koninkrijk der Nederlanden

<https://www.rijksoverheid.nl/documenten/rapporten/2021/09/30/uitvoeringsprogramma-circulaire-economie-2021-2023>

Ministère de l’Economie, Ministère de l’Énergie et de la Aménagement du territoire, & Ministère de l’Environnement, du Climat et du Développement Durable. (2021). *Circular Economy Strategy Luxembourg: Strategie Kreeslafwirtschaft Lëtzebuerg.* Le Gouvernement Du Grand-Duché de Luxembourg. <https://gouvernement.lu/dam-assets/documents/actualites/2021/02-fevrier/08-strategie-economie-circulaire/Strategy-circular-economy-Luxembourg-022021.pdf>

Ministerie van Algemene Zaken. (2021, December 14). *Duurzame energie.* Rijksoverheid. <https://www.rijksoverheid.nl/onderwerpen/duurzame-energie>

Ministerie van Buitenlandse Zaken. (2022, May 16). *Nederland zoekt samenwerking met België op het gebied van duurzame infrastructuur en circulaire bouw* [Press release]. <https://www.rijksoverheid.nl/actueel/nieuws/2022/05/16/nederland-zoekt-samenwerking-met-belgie-op-het-gebied-van-duurzame-infrastructuur-en-circulaire-bouw>

Ministerie van Economische Zaken en Klimaat. (2020, May 29). *Gas blijft scherpunkt in de energietransitie.* Nieuwsbericht Klimaatakkoord. <https://www.klimaatakkoord.nl/actueel/nieuws/2020/05/28/gas-blijft-scherpunkt-in-de-energietransitie>

Ministerie van Economische Zaken en Klimaat. (2022, May 31). *Beslisnota bij Kamerbrief aankondiging technische wijziging Wet verbod op kolen bij elektriciteitsproductie* [Press release]. <https://www.rijksoverheid.nl/documenten/beleidsnotas/2022/03/29/beslisnota-aankondiging-technische-wijziging-wet-verbod-op-kolen-inzake-de-productiebeperking>

Ministerie van Infrastructuur en Waterstaat. (2021b, April 19). *World Circular Economy Forum + Climate, 15–16 April 2021 - WCEF+Climate.* World Circular Economy Forum. Retrieved May 18, 2022, from <https://www.wcefplusclimate.com>

Ministerie van Infrastructuur en Waterstaat. (2021c, December 23). *Circular Dutch economy by 2050.* Circular Economy | Government.Nl. <https://www.government.nl/topics/circular-economy/circular-dutch-economy-by-2050>

Ministry for Ecological and Solidary Transition. (2020). *Circular Economy roadmap of France: 50 measures for a 100% circular economy*. Gouvernement. <https://circulareconomy.europa.eu/platform/en/strategies/circular-economy-roadmap-france-50-measures-100-circular-economy>

Ministry for the Environment, Climate Change and Planning. (2020). *Towards a Circular Economy 2020–2030*. Government of Malta. <https://cemalta.gov.mt/strategy/>

Ministry for the Environment, Energy and Enterprise of Malta. (n.d.). *Circular Economy Malta*. Circular Economy Malta. Retrieved May 18, 2022, from <https://cemalta.gov.mt/circular-economy/>

Ministry for the Environment, Land and Sea & Ministry of Economic Development. (2017). *Towards a Model of Circular Economy for Italy - Overview and Strategic Framework*. Government of Italy. <http://consultazione-economiacircolare.minambiente.it/il-documento>

Ministry of Economic Affairs and Employment & Ministry of the Environment. (2021). *Government Resolution on the Strategic Programme for Circular Economy*. Finnish Government. <https://valtioneuvosto.fi/en/-/1410903/circular-economy-programme-sets-targets-to-curb-overconsumption-of-natural-resources>

Ministry of Environment and Water, Bulgaria. (n.d.). *Ministry of Environment and Water / MOEW*. Retrieved May 14, 2022, from <https://www.moew.government.bg/en/>

Ministry of Environment of the Slovak Environment. (n.d.). *Green and Circular Economy*. Retrieved May 18, 2022, from <https://www.minzp.sk/en/areas/green-circular-economy/>

Ministry of Environment and Energy. (2018). *National Circular Economy Strategy*. Hellenic Republic.

https://circulareconomy.europa.eu/platform/sites/default/files/national_circular_economy_strategy.pdf

Ministry of Environment and Food & Ministry of Industry, Business and Financial Affairs. (2019). *Strategy for Circular Economy More value and better environment through design, consumption, and recycling*. The Danish Government. <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahU>

KEwiAvpmj_sf3AhXogs4BHUIIAi0QFnoECAQQAQ&url=https%3A%2F%2Fcirculareconomy.europa.eu%2Fplatform%2Fen%2Fstrategies%2Fdanish-strategy-circular-economy&usg=AOvVaw1IeMHT_RYKt2Q2R4vLFtmU

Ministry of Environment and Spatial Planning. (2018). *Roadmap towards the circular economy in Slovenia*. Republic of Slovenia.

https://circulareconomy.europa.eu/platform/sites/default/files/roadmap_towards_the_circular_economy_in_slovenia.pdf

Ministry of Environment, Ministry of Science and Innovation, Ministry of Agriculture, Fisheries and Food, Ministry of Industry, Trade and Tourism, & Ministry of Consumer Affairs. (2020). *Espana Circular: Circular Economy Spanish Strategy*. Government of Spain.

https://circulareconomy.europa.eu/platform/sites/default/files/espana_circular_2030_executive_summary_en.pdf

Ministry of Environment of the Republic of Slovakia. (2019). *Greener Slovakia Strategy of the Environmental Policy of the Slovak Republic until 2030*. Slovak Republic.
https://www.minzp.sk/files/iep/greener_slovakia-strategy_of_the_environmental_policy_of_the_slovak_republic_until_2030.pdf

Ministry of Finance. (2020). *Bulgaria 2030: Development Program*. Republic of Bulgaria.
<https://www.minfin.bg/en/1394>

Ministry of Foreign Affairs & Netherlands Enterprise Agency. (2021). *Circular Business Opportunities in Poland Commissioned by the Netherlands Enterprise Agency*. Ministry of Foreign Affairs of the Kingdom of the Netherlands.
<https://www.rvo.nl/sites/default/files/2021/04/Circular-opportunities-in-Poland-2.pdf>

Ministry of the Environment. (2020). *State Environmental Policy of the Czech Republic 2030 with outlook to 2050*. Czech Republic.

Republic of Cyprus. (2021). *Cyprus Action Plan for the transition to a circular economy 2021–2027*.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahKEwiqntK5_cf3AhWR4YUKHSLeATYQFnoECAUQQAQ&url=https%3A%2F%2Fcypr

uscircular.org.cy%2Fcyprus-action-plan-circular-economy%2F&usg=AOvVaw1RjK00eXRRKr0A0aHwhxtB

Républica Portuguesa. (2018). *Leading the transition: Action plan for circular economy in Portugal 2017:2020.*

https://circulareconomy.europa.eu/platform/sites/default/files/strategy_portuguese_action_plan_paec_en_version_3.pdf

Romanian Government. (2018). *Romania's Sustainable Development Strategy 2030.*
<http://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2019/03/Romanias-Sustainable-Development-Strategy-2030.pdf>

Republic of Cyprus. (2021). *Cyprus Action Plan for the transition to a circular economy 2021–2027.*

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiqntK5_cf3AhWR4YUKHSLeATYQFnoECAUQAAQ&url=https%3A%2F%2Fcypruscircular.org.cy%2Fcyprus-action-plan-circular-economy%2F&usg=AOvVaw1RjK00eXRRKr0A0aHwhxtB

Républica Portuguesa. (2018). *Leading the transition: Action plan for circular economy in Portugal 2017:2020.*

https://circulareconomy.europa.eu/platform/sites/default/files/strategy_portuguese_action_plan_paec_en_version_3.pdf

Romanian Government. (2018). *Romania's Sustainable Development Strategy 2030.*
<http://dezvoltaredurabila.gov.ro/web/wp-content/uploads/2019/03/Romanias-Sustainable-Development-Strategy-2030.pdf>

Environmental Protection Agency. (2021). *The Circular Economy Programme 2021–2027: The Driving Force for Ireland's Move to a Circular Economy.* Government of Ireland.
<https://www.epa.ie/publications/circular-economy/resources/the-circular-economy-programme-2021-2027.php>

Polish Government. (2019). *Poland's Circular Economy Roadmap | European Circular Economy Stakeholder Platform.* Poland's Circular Economy Roadmap.

<https://circulareconomy.europa.eu/platform/en/strategies/polands-circular-economy-roadmap>

Overheid van België, Ministerie van Volksgezondheid, & Ministerie van Economie.

(2014). *België als voortrekker van de circulaire economie*. Overheid van België.

<https://economie.fgov.be/fr/publicaties/vers-une-belgique-pionniere-de>

Service Public de Wallonie. (2021). *Circular Wallonia: Deployment Strategy of the Circular Economy in Wallonia*.

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwls34ul->

8f3AhUa_RoKHQufAO0QFnoECAcQAw&url=https%3A%2F%2Fcirculareconomy.europa.eu%2Fplatform%2Fsites%2Fdefault%2Ffiles%2Fresume_de_la_politique_wallonne_en_v1_1.pdf&usg=AOvVaw0eBGKT6_pCp4CtMj2mN1ZE

7.3 Other: blogs, newspapers, reports, press releases, websites

Deutsche Welle. (n.d.). *How does the EU's rule-of-law mechanism work?* DW.COM.

Retrieved May 17, 2022, from <https://www.dw.com/en/what-impact-does-the-eus-rule-of-law-mechanism-have/a-61367149>

Deutsche Welle. (2021, December 22). *EU launches new legal action against Poland*.

DW.COM. Retrieved May 18, 2022, from <https://www.dw.com/en/eu-starts-new-legal-action-against-poland-over-rule-of-law/a-60220102>

Eder, F., & Klingert, L. (2021, July 20). *EU report to rebuke Hungary over corruption, press freedom concerns*. POLITICO. Retrieved May 17, 2022, from <https://www.politico.eu/article/eu-report-to-blast-hungary-over-corruption-media-freedom-concerns/>

Ellen MacArthur Foundation. (n.d.). *France's Anti-waste and Circular Economy Law*.

Retrieved May 15, 2022, from <https://ellenmacarthurfoundation.org/frances-anti-waste-and-circular-economy-law>

EUR-Lex. (n.d.). *EUR-Lex – legislative-acts - EN - EUR-Lex*. Retrieved June 24, 2022, from <https://eur-lex.europa.eu/EN/legal-content/glossary/legislative-acts.html>

European Commission. (n.d.). *About the Platform / European Circular Economy Stakeholder Platform*. European Circular Economy Stakeholder Platform. Retrieved June 27, 2022, from <https://circularconomy.europa.eu/platform/en/about-platform>

European Commission. (2018). *A comparative overview of public administration characteristics and performance in EU28*. <https://op.europa.eu/en/publication-detail/-/publication/3e89d981-48fc-11e8-be1d-01aa75ed71a1/language-en>

European Commission. (2019a, April 3). *Rule of Law: European Commission launches infringement procedure to protect judges in Poland from political control*. European Commission - European Commission. Retrieved May 18, 2022, from https://ec.europa.eu/commission/presscorner/detail/es/IP_19_1957

European Commission. (2019b, June 24). *Circular Economy - Virtuous Circle Tour in Hungary*. Retrieved May 17, 2022, from https://ec.europa.eu/info/events/circular-economy-virtuous-circle-tour/virtuous-circles-hungary-2019-jun-24_en

European Commission. (2019c, December). *Annex to the Communication from the Commission to the European Parliament, the European Council, The Council, The European Economic and Social Committee and the Committee of the Regions The European Green Deal*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1596443911913&uri=CELEX:52019DC0640#document2>

European Commission. (2019d, December 11). *Press corner*. European Commission - European Commission. https://ec.europa.eu/commission/presscorner/detail/en/ip_19_6691

European Commission. (2020a). *Eco-innovation in Lithuania Country Profile 2018–2019*. https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_lithuania.pdf

European Commission. (2020b). *Eco-innovation in Luxembourg*. https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_luxembourg.pdf

European Commission. (2020c). *Eco-innovation in Malta.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_malta.pdf

European Commission. (2020d). *Eco-innovation in Poland.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_poland.pdf

European Commission. (2020e). *Eco-innovation in Portugal.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_portugal.pdf

European Commission. (2020f). *Eco-innovation in Romania.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_romania.pdf

European Commission. (2020g). *Eco-innovation in Slovenia.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_slovenia.pdf

European Commission. (2020h). *Eco-innovation in Spain.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_spain.pdf

European Commission. (2020i). *Eco-innovation in Sweden.*

https://ec.europa.eu/environment/ecoap/sites/default/files/field/field-country-files/eio_country_profile_2018-2019_sweden.pdf

European Commission. (2020j, March). *A new Circular Economy Action Plan For a cleaner and more competitive Europe - ANNEX* (Document 52020DC0098). https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

European Commission. (2020k, March). *Circular Economy Action Plan: For a cleaner and more competitive Europe* (Document 52020DC0098). https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

European Commission. (2020l, March 6). *The Just Transition Mechanism: making sure no one is left behind*. Retrieved May 25, 2022, from

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en

European Commission. (2021a). *2021 Rule of Law Report Country Chapter on the rule of law situation in Croatia*. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021SC0713&from=EN>

European Commission. (2021b). *Citizen support for climate action*. Retrieved May 25, 2022, from https://ec.europa.eu/clima/citizens/citizen-support-climate-action_en

European Commission. (2021c). *Eurobarometer*. Eurobarometer. Retrieved May 26, 2022, from <https://europa.eu/eurobarometer/screen/home>

European Commission. (2021d, July). *The rule of law situation in the European Union: Country Chapter on the rule of law situation in Croatia* (Document 52021SC0713).

European Commission. (2022a, May). *REPowerEU Plan* (Document 52022DC0230).
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A230%3AFIN&qid=1653033742483>

European Commission, Directorate-General for Communication. *Circular Economy Action Plan : the European Green Deal*. Publications Office, 2020,
<https://data.europa.eu/doi/10.2775/458852>

European External Action Service. (2022, May 16). *Russia's invasion of Ukraine puts the global economy at risk / EEAS Website* [Press release].
https://www.eeas.europa.eu/eeas/russia%E2%80%99s-invasion-ukraine-puts-global-economy-risk_en

European Economic and Social Committee. (2019). *Circular economy strategies and roadmaps in Europe: Identifying synergies and the potential for cooperation and alliance building*. <https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/circular-economy-strategies-and-roadmaps-europe-study>

European Parliament. (n.d.). *Interactive timeline: a guide to climate change negotiations*.

https://www.europarl.europa.eu/infographic/climate-negotiations-timeline/index_en.html

European Parliament. (2016, October 4). *MEPs green light for Paris climate agreement to trigger its entry into force / News / European Parliament*. Retrieved February 17, 2022, from <https://www.europarl.europa.eu/news/en/press-room/20160930IPR44535/>

European Union. (2021, March). *Special Eurobarometer 513: Climate Change*. https://ec.europa.eu/clima/system/files/2021-07/report_2021_en.pdf

Eurostat. (n.d.). *Monitoring framework - Circular economy*. Retrieved May 14, 2022, from <https://ec.europa.eu/eurostat/web/circular-economy/indicators/monitoring-framework>

Eurostat. (2011–2020). *Circular material use rate* [Dataset]. European Commission. https://ec.europa.eu/eurostat/databrowser/view/env_ac_cur/default/table?lang=en

FuturEnviro. (2020, September 28). *The recovery in Spain will be circular*. FuturENVIRO - Revista Técnica Bilingüe de Medio Ambiente | Proyectos, Tecnología y Actualidad Medioambiental. Retrieved May 18, 2022, from <https://futurenviro.es/en/the-recovery-in-spain-will-be-circular/>

Facts about Germany. (n.d.). *A Pioneer in Climate Policy*. Retrieved June 28, 2022, from <https://www.tatsachen-ueber-deutschland.de/en/germany-glance/pioneer-climate-policy>

Greene, M. (2022, March 16). The EU must decide how to fund its Ukraine crisis response. *Financial Times*. Retrieved May 26, 2022, from <https://www.ft.com/content/ee3c6188-1097-4883-8b2a-afadd15d7ff1>

Institute for Circular Economy, Direct People, INCIEN, & Embassy of the Kingdom of the Netherlands in the Czech Republic. (2021). *CIRCULAR CZECHIA A circular economy as an opportunity for successful innovations of Czech firms*. INCIEN.

KBC Bank & Verzekering. (2021, October 6). *De budgettaire toestand van België baart zorgen, niet alleen op het federale niveau maar ook in de deelstaten. Door de pandemie ging de begroting van de regio's zwaar in het rood en liep hun schuld fors op. Vooral in Brussel zijn de financiën er erg aan toe en verslechterde de situatie al vóór de crisis.*

Ook de vooruitzichten stemmen niet vrolijk. Brussel, Vlaanderen en Wallonië staan de komende jaren voor zware inspanningen. Belangrijk daarbij is dat wordt gesnoeid in niet-essentiële uitgaven. De sanering vereist ook een betere begrotingscoördinatie tussen de federale overheid en de deelstaten, met verantwoordelijkheid t.a.v. het globale Belgische begrotingsplaatje. KBC. Retrieved May 25, 2022, from <https://www.kbc.com/nl/economics/publicaties/regionale-overheidsfinanci%C3%ABn-in-belgie-op-onhoudbaar-pad.html>

McBride, J. (2017, May 1). *Greece's Debt Crisis Timeline*. Council on Foreign Relations. Retrieved May 17, 2022, from <https://www.cfr.org/timeline/greeces-debt-crisis-timeline>

Midgley, E. (2022, May 20). Today in Austria: A roundup of the latest news on Friday. *The Local Austria*. Retrieved May 25, 2022, from <https://www.thelocal.at/20220520/today-in-austria-the-latest-news-on-friday/>

Organization for Economic Cooperation and Development. (2021a). *Economic Forecast Summary France (December 2021)*. <https://www.oecd.org/economy/france-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021b). *Economic Forecast Summary Austria (December 2021)*. <https://www.oecd.org/economy/austria-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021c). *Economic Forecast Summary Czech Republic (December 2021)*. <https://www.oecd.org/economy/czech-republic-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021d). *Economic Forecast Summary Estonia (December 2021)*. <https://www.oecd.org/economy/estonia-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021e). *Economic Forecast Summary Greece (December 2021)*. <https://www.oecd.org/economy/greece-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021f). *Economic Forecast Summary Italy (December 2021)*. <https://www.oecd.org/economy/italy-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021g). *Economic Forecast Summary Poland (December 2021)*. <https://www.oecd.org/economy/poland-economic-snapshot/>

Organization for Economic Cooperation and Development. (2021h). *Economic Survey of Denmark (December 2021)*.

Organization for Economic Cooperation and Development. (2022). *Economic Survey of the Slovak Republic (January 2022)*. <https://www.oecd.org/economy/slovak-republic-economic-snapshot/>

Tollefson, J. (2022, April 5). *What the war in Ukraine means for energy, climate and food*. Nature. Retrieved May 26, 2022, from https://www.nature.com/articles/d41586-022-00969-9?error=cookies_not_supported&code=8f4297f4-495c-4606-971d-335df826041b

Transparency International. (2021, June 15). *Hungarian society deeply divided over corruption - Blog*. Retrieved May 17, 2022, from <https://www.transparency.org/en/blog/gcb-eu-2021-corruption-survey-hungary-polarisation>

United Nations. (2011, February 23). *Climate Change 'Biggest Threat Modern Humans Have Ever Faced', World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation / Meetings Coverage and Press Releases*. Retrieved February 17, 2022, from <https://www.un.org/press/en/2021/sc14445.doc.htm>

United Nations. (2019). *World Economic Situation and Prospects 2019*. United Nations.

Urgenda. (2019, December 22). *Climate Case Explained*. Retrieved May 18, 2022, from <https://www.urgenda.nl/en/themas/climate-case/climate-case-explained/>

Ursula von der Leyen. (2019, December 11). *Press remarks by President von der Leyen on the occasion of the adoption of the European Green Deal Communication* [Press release]. https://ec.europa.eu/commission/presscorner/detail/de/SPEECH_19_6749

Umweltbundesamt Environmental Agency Austria. (2021, September 14). *Jumpstarting the circular economy in Croatia*. Retrieved May 14, 2022, from <https://www.umweltbundesamt.at/en/news210914en>

Strupczewski, J. (2020, October 8). EU parliament chastises Bulgaria for rule of law deficiencies. *U.S.* Retrieved May 25, 2022, from <https://www.reuters.com/article/us-bulgaria-eu-ruleoflaw-idUSKBN26T2Y9>

The World Bank Group. (n.d.). *GDP (current US\$) - Germany / Data*. Retrieved May 17, 2022, from <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=DE>

The World Bank Group. (2021, January). *National Development Strategy Croatia 2030: Croatia 2030: Roadmap for a Better Future*.

Vos, G. (2022, May 18). *Samenwerking Nederland België duurzame infrastructuur circulaire bouw*. Bouw en Uitvoering. Retrieved May 25, 2022, from https://bouwenuitvoering.nl/politiek_en_economie/samenwerking-nederland-belgie-duurzame-infrastructuur-circulaire-bouw/

Working group of the Network and of the Sustainable Development Foundation & Circular Economy Network. (2019). *Report on Circular Economy in Italy - 10 Proposals and Research Summary*. Circular Economy Network.

<https://circulareconomynetwork.it/wp-content/uploads/2019/04/Proposals-and-Research-Summary-Report-on-circular-economy-in-Italy-2019.pdf>

World Economic Forum. (2021a, April 20). *The developing world must get ready to adapt its trade to climate change*. <https://www.weforum.org/agenda/2021/03/protecting-trade-will-protect-developing-countries-from-climate-change/>

World Economic Forum. (2021b, August 2). *3 lessons from Finland on transitioning to a circular economy*. Retrieved May 15, 2022, from <https://www.weforum.org/agenda/2021/06/transition-to-a-circular-economy-the-right-roadmap-can-help-sitra/>

World Justice Project. (n.d.). *WJP Rule of Law Index*. Retrieved May 14, 2022, from <https://worldjusticeproject.org/rule-of-law-index/country/2020/Bulgaria/>

World Justice Project. (2021). *World Justice Project Rule of Law Index 2021*.

<https://worldjusticeproject.org/sites/default/files/documents/WJP-INDEX-21.pdf>

World Justice Project. (2022, February 16). *European Union's Top Court Rules Against Hungary and Poland in Rule of Law Showdown*. Retrieved May 18, 2022, from <https://worldjusticeproject.org/news/european-union%20%99s-top-court-rules-against-hungary-and-poland-rule-law-showdown>

Appendix

Appendix A

Table 7.

Roadmaps and strategies of the 27 EU MS

Member state	Title
Austria	Die österreichische Kreislaufwirtschaft: Österreich auf dem Weg zu einer nachhaltigen und zirkulären Gesellschaft
Belgium (Federal)	België als voortrekker van de circulaire economie
Belgium (Brussels-Capital- Region)	Gewestelijk Programma voor Circulaire Economie 2016 – 2020 De hulpbronnen mobiliseren en de verloren rijkdommen tot een minimum beperken: Voor een vernieuwende gewestelijke economie
Belgium (Flanders)	Vlaanderen Circulair: Samen naar een circulaire economie
Belgium (Wallonia)	Circular Wallonia: Deployment Strategy of the Circular Economy in Wallonia
Bulgaria	Bulgaria 2030: Development Program
Croatia	National Development Strategy Croatia 2030 Croatia 2030: Roadmap for a Better Future
Cyprus	Cyprus Action Plan for the transition to a circular economy 2021-2027
Czech Republic	State Environmental Policy of the Czech Republic 2030 with outlook to 2050
Denmark	Strategy for Circular Economy: More value and better environment through design, consumption, and recycling
Estonia	Strategic document and Action Plan for a Circular Estonia
Finland	Government Resolution on the Strategic Programme for Circular Economy
France	50 measures for a 100% circular economy
Germany	Circular Economy Roadmap for Germany
Greece	National Circular Economy Strategy

Hungary	2021 National Reform Plan of Hungary
Ireland	The Circular Economy Programme 2021-2027: The Driving Force for Ireland's Move to a Circular Economy
Italy	Towards a Model of Circular Economy for Italy - Overview and Strategic Framework
Latvia	National Development Plan of Latvia for 2021-2027
Lithuania	Roadmap for Lithuania's industrial transition to a Circular Economy
Luxembourg	Circular Economy Strategy Luxembourg: Strategie Kreeslafwirtschaft Lëtzebuerg
Malta	Towards a Circular Economy 2020-2030
Netherlands	Uitvoeringsprogramma Circulaire Economie 2021-2023
Poland	Roadmap towards the Transition to Circular Economy
Portugal	Leading the transition: Action plan for circular economy in Portugal 2017:2020
Romania	Romania's Sustainable Development Strategy 2030
Slovakia	Circular Economy: Future of the Development of Slovakia
Slovenia	Roadmap towards the circular economy in Slovenia
Spain	Circular Economy Spanish Strategy
Sweden	Circular Economy – Strategy for the transition in Sweden

Appendix B

Table 8.

Explanation of the color-coding in table 6

Factor				
CE Ambition	The plans are strongly ambitious	The plans are ambitious	The plans are not very ambitious	The plans are not ambitious/there are no plans
Circularity rate (EU average 12,8%)	>12.8%	12. 7 % < > 6.8 %	6.7 %< > 3.8%	< 3.7%
Civil servants (EU average 6,79%)	> 8%	8% < > 6%	5.9% < > 3.9%	< 3.8%
Financial condition	Central government debt: < 48.36 %	Central government debt: 48.36% > < 68.36%	Central government debt: 68.30% > < 88,36	Central government debt: > 88,36%
	Surplus/deficit: > 0%	Surplus/deficit: 0% > < -3%	Surplus/deficit: > - 3%	Surplus/deficit: > - 6%
Citizen trust in the EU (EU average 54,7%)	>54,7%	54,6 % < > 49,7%	49,6% < > 44,7%	> 44,6%
Rule of Law	> 0.75	0.74 < > 0.65	0.65 < > 0.5	> 0.49
Number of ministries (EU average 15.6)	12 = <	13 < > 16	17 < > 21	= > 22
Citizens taking action (EU average 63,%)	> 63%	63% < > 48%	47,9% < > 42%	< 42%
Responsibility of environmental groups (EU average 28%)	> 28%	27.9% < > 22%	21.9% < > 16%	< 16%

