

Lene Mari Hamre Halvorsen

## Alternative economic models and their impact on the SDGs.

A study on the impact of Doughnut Economy and The CEROI toolkit on economic growth and sustainable consumption

Master's thesis in MSc in Globalisation and Sustainable Development

Supervisor: Elizabeth Barron

May 2023



Lene Mari Hamre Halvorsen

# **Alternative economic models and their impact on the SDGs.**

A study on the impact of Doughnut Economy and The CEROI toolkit on economic growth and sustainable consumption

Master's thesis in MSc in Globalisation and Sustainable Development  
Supervisor: Elizabeth Barron  
May 2023

Norwegian University of Science and Technology  
Faculty of Social and Educational Sciences  
Department of Geography





## **Abstract**

This thesis uses policy analysis to investigate how the implementation of alternative economic models, hereunder, the Doughnut Economy Framework and Community Economies Return on Investment (CEROI) tool, can help offer solutions to some of the critiques the Sustainable Development Goals (SDGs) are experiencing. More specifically, the analysis research how the implementation of these alternative economic models can help offer solutions to critiques regarding:

- Inconsistency between the goals
- The lack of concrete action plans within the SDG framework
- Problems with collecting and quantifying data

The study has been carried out through a feminist methodology, focusing on transition and transformation theory. SDG goal 8 – Decent work and Economic growth – has been the key goal for the analysis.

The discussion in the thesis suggests that the solution to these critiques lies in changing from a top-down to a bottom-up, place-based perspective instead of a top-down, globally focused framework. It suggests a transition from a focus on economic growth and increased GDP to thriving within the doughnut, where growth in production and consumption is repositioned to fit within the means of absolute decoupling.

The thesis argues for these changes to be made through deliberate transformation, focusing on change in both the personal, political, and practical spheres through collective action, social learning, and consensus building.



## **Acknowledgement**

Writing this thesis has been a challenge on multiple levels, and I am very proud of myself for all the hard work I have put into this thesis.

There are several people who deserve a thank you. First, and most importantly, my supervisor Dr Elizabeth Barron. Thank you for answering questions and pulling me out of rabbit holes. Without Dr Barron, I would never have discovered the broad network of amazing feminist and environmental economic thinkers who have inspired this thesis. I will forever be grateful for that.

I would also like to thank Dr Kelly Dombroski, who kindly accepted me into her research as an internship student. Thank you for your input and suggestions regarding my work. I would also thank her family for being so welcoming. I had such an amazing time in Aotearoa, New Zealand – thank you for contributing to that.

Thank you also to the amazing people at the Green Lab in Christchurch for being so kind and inclusive. A special thanks to Khye for being the kind and genuine person they are.

There have been many frustrations during these past months. I am very grateful to my peers with whom I have studied for the past two years. Thank you for helping me, suggesting solutions, sending me articles, and sharing your time and knowledge. I would also like to mention my friends outside the reading room. Thank you for allowing me to be frustrated and busy. A special thanks to Lila Laird, voice noting me across time and space (literally) all the way from Christchurch. Thank you for giving me space to ventilate and ponder.

Last but by no means least, I have to thank the people always being there for me, even when it takes me weeks to call them, just to be frustrated and annoyed on the phone. To my family – I love you with all my heart. Thank you for always having my back and supporting me in everything I do. A special thank you to my parents, Astri and Geir, for raising no quitter.

Lene Mari Hamre Halvorsen (Moi)





**Table of contents**

**Abstract** ..... i

**Acknowledgement** .....iii

**List of Abbreviations**.....v

**List of Figures**.....v

**1. Introduction** ..... 1

**1.1. Background and Motivation of the Study** ..... 2

**1.3. About the Study** ..... 4

**1.4. Research challenge and research questions** ..... 4

**1.5. The Organisation of the Thesis** ..... 5

**2. Theoretical Framework** ..... 6

**2.1. The SDGs**..... 6

**2.1.1. Critique of the SDGs** ..... 8

**2.2. Alternative Economies** ..... 10

**2.3. Doughnut Economy** ..... 12

**2.3.1. Using the Doughnut – a case study** ..... 14

**2.4. Community Economics** ..... 17

**2.4.1. The Community Economies Return on Investment (The CEROI)**..... 18

**2.4.2. Case Studies** ..... 19

**2.5. Terms of Transformation** ..... 22

**2.6. Summary of theory chapter**..... 25

**3. Research Design and Method**..... 26

**3.1. Research Design**..... 26

**3.2. Methodological Approach**..... 27

**3.3. Method**..... 28

**3.4. Methodological Limitations** ..... 29

**3.5. Ethical Considerations** ..... 30

**3.6. Reflections on Positionality** ..... 30

**3.7. Summary of Methods and Ethics** ..... 31

**4. Analysis**..... 33

**4.1. Implementing alternative economic models on Goal 8** ..... 33

**4.1.1. The four lenses of decision making.** ..... 34

**4.2. Implementing alternative economic models to target 8.1.** ..... 36

<b>4.3. Implementing alternative economic models to target 8.4.</b> .....	37
<b>5. Discussion</b> .....	41
<b>6. Conclusion</b> .....	47
<b>7. Sources</b> .....	49

## List of Abbreviations

SDGs	Sustainable Development Goals
UN	The United Nations
GDP	Gross Domestic Product
CEROI	Community Economies Return on Investment
DT	Deliberate transformation
UNEP	The United Nations Environment Program

## List of Figures

<b>Figure 1:</b> Goal 8 and targets 8.1 and 8.4. Source: (The United Nations, 2023b) .....	7
<b>Figure 2:</b> The Doughnut model. Source: Copyright (Raworth, 2017, p. 44).....	12
<b>Figure 3:</b> The CEROI tool kit. Source: Copyright (Gibson-Graham et al., 2013, p. 178) .....	19
<b>Figure 4:</b> The three spheres of change. Source: Copyright (Cchange, 2023).....	24
<b>Figure 5:</b> Target 8.1. Source: (The United Nations, 2023b).....	36
<b>Figure 6:</b> Target 8.4. Source: (The United Nations, 2023b).....	38



## 1. Introduction

Economic growth is fundamentally intertwined with mainstream economic models, meaning that a healthy economy is often pictured by GDP growth. In other words – a healthy economy is a growing economy. Growth has been a sign of progress for the last 150 years, and in many parts of life, growth is part of a healthy dynamic (Roser, 2021). The prioritisation of economic growth and activity demands a substantial amount of energy, which leads to increased carbon emissions, as the main sources of energy are non-renewable, such as oil, coal and gas. In 2019, 84,3% of global energy came from fossil fuels (Ritchie & Roser, 2022). Therefore, this mindset has also been heavily critiqued, especially by an environmentalist framework, for being the problem rather than the solution to climate change. The response to this critique has been to research ways of breaking this linkage between economic growth and carbon emissions. This decoupling can be either relative or absolute, relative meaning that economic growth and co2 emissions still both rise but at different speeds (Parrique et al., 2019). On the other hand, absolute decoupling means that the two variables move in opposing directions, meaning that the economy grows simultaneously as co2 emissions drop. There is a growing interest in alternative models that decouple growth and assumed exploitation of resources. Common to these models is an increased focus on sustainable development through alternative economic theories. Several theories also criticise this growth-focused mindset, even questioning if economic growth and absolute decoupling are compatible.

Alternative economics can be explained as an economic system that considers variables other than the financial system we know today as the capitalist, or neoliberal system, does.

According to Healy, alternative economies can be described in two ways, the first being “an array of processes of production, ownership, labour, exchange, and consumption that differ from those of the mainstream economy” (Healy, 2009, p. 338). In other words – something other than today’s classical capitalistic systems. According to Healy, the other way of describing alternative economies is “an alternative representation of economy as a heterogeneous and proliferative social space” (Healy, 2009, p. 338). In other words – a space of difference where the possibility to reconfigure the understanding of the economy, sharing knowledge and ideas, and creating new ways of thinking, are possible.

This thesis investigates how implementing alternative economic models can help answer some of the critiques directed towards the United Nations Sustainable Development Goals (SDGs). The SDGs is a framework created by the United Nations (UN), consisting of 17 goals and 169 targets, and aims to create a more just and sustainable world for all (The United

Nations, 2023a). The critiques directed towards the framework include inconsistencies and contradictions between the goals, the lack of a concrete action plan, and problems with collecting and quantifying data.

The SDGs are designed to be viewed as an intertwined network of “equally important” variables dependent on each other. It is, therefore, not necessarily optimal to look at the goals independently. While all the goals are interconnected, it is beyond the scope of this thesis to do a complete analysis that includes them all. I will, therefore, in this thesis, focus on one goal – goal 8 - and two specific targets within that goal – targets 8.1 and 8.4 - to analyse how the implementation of alternative economic models would affect the SDGs, focusing on economic growth and sustainable production and consumption. The two models used to test these theories are the Doughnut model, which proposes an economic framework that balances human needs and environmental sustainability, and the “Community Economies Return on Investment” (CEROI) approach, which is a tool for assessing the social, economic, and ecological impacts of community-based initiatives. By analysing these targets on the background of alternative economies, I hope to contribute to the literature by exploring how implementing alternative economies can correct some of the criticism directed towards the SDGs.

### **1.1. Background and Motivation of the Study**

Growth is, in many ways, a natural part of life. But what happens when growth becomes a permanent phase? Everything in life has a balance. Not enough is not good, but too much isn't any better. The constant focus on growth in our economy has led to increased use of resources, massive production, and intense consumption. Gross Domestic Product (GDP) is a measure of the growth and flow of our economy, measuring the value added in a country based on the production of goods and services, the income earned from the production, and the money spent on goods and services within the country (OECD, 2023). GDP is not connected to welfare, as it says nothing about the distribution of this value created, nor does it say anything about *how* this wealth is created. To put it another way: this growth in our economy is measured by an increase in capital but says nothing about the overconsumption of scarce resources. Most countries on earth are pursuing GDP growth and increasing financial returns. This growth-focused mindset that encourages economic activities requires massive energy, resulting in significant carbon emissions (Deutch, 2017). At the same time, we are experiencing both humanitarian and ecological crises. The Amazon is on fire, plastic is out-competing the number of fish in the oceans, acidic rain is killing our crops, and extreme heat,

floods, and drought are making it impossible to continue life as usual in many areas of the world (FAO, 2022; Greenberg, 2022; U.S. Global Change Research Program, 2022). We are at a time of climate emergency, and we need to radically reduce our use of the world's scarce resources. But at the same time, the economic models by which we govern our politics push us to increase production to ensure even more significant growth (Norwegian Ministry of Finance, 2021; HM Treasury, 2022). If we want to continue production and consumption at similar levels as is right now, it is debated that economic growth needs to be decoupled from using these scarce resources (Elisha, 2021; UNEP, 2011). In other words, activities that create economic growth but negatively affect living conditions for the planet or the population must be phased out.

## **1.2. Motivation for the Study**

The MSc in Globalization and Sustainable Development at the Norwegian University of Science and Technology (NTNU) includes an internship in the third semester. For my internship, I travelled to Christchurch, New Zealand, to work with Dr Kelly Dombroski, attempting to do a CEROI analysis on the Green Lab - a non-profit organisation focusing on creating "urban green spaces that support strong social connections and promote well-being" (The Green Lab, 2019). During this work, I revised a lot of feminist literature criticising the capitalist economic system we acknowledge as our economy.

We live in a selective economy shaped by variables that directly accumulate capital – in other words, where activities such as household work, child-rearing, voluntary work, composting, community contributions, and bartering of home-grown produce are not given any direct value. Put differently: if an action does not directly accumulate capital, it will not directly appear in our economy either. It is given no value. Our economic system is also designed for infinite growth. Infinite growth requires endless raw materials, and with an economy so dependent on fossil fuels, this is not currently possible. In 2015, the UN presented the SDGs, where one of the goals is sustainable economic growth (The United Nations, 2023b). But what exactly is sustainable growth? Is it even possible? When you look at how the concept of growth is treated in today's economy, it is difficult to see how it can be facilitated for sustainable development. The current economic system is mature to be questioned – maybe even challenged. Several different alternative economic models try to solve this equation. As a student with a background in economics, this way of looking at our economy is new to me. Many of the assumptions proposed in econ101 is rejected in these alternative models, and new possibilities open for how to interpret the economy. For this reason, I have chosen to carry out

a policy analysis of the SDGs in relation to two alternative economic models, which present an alternative to the traditional economic models used today.

### **1.3.About the Study**

Using alternative economic models to sustain sustainable economic growth is a complex and massive project. This 30-credit thesis has limitations regarding the research's time frame and scope. Because of these limitations, I have selected two specific alternative economic models and engaged in studying their effect on SDG goal number 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. I have chosen to take a closer look at two specific targets within SDG goal 8 – target 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries. And 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead. I will use the policy analysis framework to identify alternative solutions and their effects, analyse which solutions to choose and why, and assess the policy outcomes for these specific solutions. I will assess the policy outcomes using transformation theory and discuss my findings in relation to how these solutions would work in counteracting some of the problems that are criticised in today's SDGs.

### **1.4.Research challenge and research questions**

Summing up the introduction chapter, this research is aimed towards alternative economic models and their possible effect on the SDGs if implemented in the framework. Increased consumption, production, and use of resources due to an overlying focus on GDP growth suggests that changes in politics are necessary. Exploring the possible impact alternative economic models can have on the SDGs is a big question. To narrow the scope of the research, this thesis will mainly focus on answering some of the critiques directed towards the SDG framework through the lens of alternative economic models through their implications on economic growth and sustainable consumption. The main research question consists of the following:

1. How can implementing alternative economic models help answer some of the critiques presented regarding the SDGs?



- a. How will implementing the doughnut model and the CEROI toolkit affect the targeting of decoupling economic growth from environmental degradation in the SDGs?
- b. How will implementing the doughnut model and the CEROI toolkit affect the SDG target to promote sustained, inclusive and sustainable economic growth?

The main question sets out to examine in what ways alternative economies will answer to the critique directed towards the SDGs presented in chapter two. Additional sub-questions have been added to the question to narrow down the scope of the research. Question a and b aims to sharpen the research question to focus on SDG goal 8 and the specific targets 8.1 and 8.4.

### **1.5.The Organisation of the Thesis**

This thesis is organised into six chapters. Chapter 1 introduces the research problem, the motivation for my work and why this work is important, and an overview of the research questions. Chapter 2 is the theory chapter, where there will be a presentation of literature and theories this research is based upon, in addition to previous research carried out on this subject. This chapter will elaborate on the models and theories I have based my analysis upon and includes a section regarding the SDGs, alternative economic models, and a section elaborating on transition and transformation theory. Chapter 3 is the method chapter, where I will present the feminist methodology which has inspired my research, policy analysis as the theory I am using to carry out my analysis, and my positionality as a researcher. I will elaborate on methodological limitations, ethical considerations, and the three layers of reflexivity within this research. Chapter 4 is the analysis chapter, where I will present my analysis. The analyse is organised into three sections: first, an analyse of SDG 8 from the perspective of the four lenses in the doughnut economy. Following, there will be one section analysing target 8.1 and one section analysing target 8.4, both with reference to the alternative economic models: Doughnut Economies and Community Economies Return on Investment. Chapter 5 is the discussion chapter, where I discuss whether or not the analysis has answered the research questions regarding how implementing alternative economies in the SDGs can answer some of the critiques it is given. The final chapter, Chapter 6, is the concluding chapter, where I summarise the findings of this thesis and consider the implication this study could have on further research.

## **2. Theoretical Framework**

This chapter outlines the theoretical framework that has supported the empirical work of this thesis. This chapter aims to provide the reader with an overview of theoretical perspectives and significant previous research. Two key alternative economic models have provided the background for the analysis conducted in Chapter 4. The discussion of the analysis has been carried out using theory regarding transformation and alternative economic systems and is based on the United Nations Sustainable Development Goals Framework. In the first section, I will present an outline of the SDGs and an overview of some current critiques directed towards the SDG framework. In the second part of this chapter, I will discuss alternative economic theories and frameworks. This section will present two key theories and models: The doughnut economy with the doughnut model and Community Economies with the CEROI. As the SDGs and the alternative economic models are transformative frameworks aiming for structural, environmental, political or societal transformation, the last section of the theoretical framework will include an overview of transition and transformation theory.

### **2.1. The SDGs**

The Sustainable Development Goals, or the SDGs, were created by the United Nations as the core of the “2030 Agenda for Sustainable Development” in 2015 (The United Nations, 2023a). The SDGs have become a symbol of sustainability in many ways. They are adopted and implemented by all UN member states, as they provide a global framework for addressing key economic, social, and environmental challenges. The SDGs cover many issues, including poverty, health, education, clean energy, economic growth, sustainable cities, responsible consumption and production, climate action, and so on (The United Nations, 2023a). The SDGs are important because they provide a common language and framework for countries and stakeholders to work together towards a sustainable future. They also recognise that economic, social, and environmental challenges are interconnected and must be addressed, and the goal is that no one should be left behind in pursuing sustainable development (The United Nations, 2015).

Because of this interconnectedness, the goals are broad, and many effects, measures, and processes belong within each of and across the goals. The interconnectedness of the goals makes it hard to analyse the goals separately, and this is, in many ways, an important part of the SDGs – they should be looked at as a holistic framework, not as pieces one can juggle around as fits. As Raworth and Gibson-Graham point out, it is not appropriate nor its purpose

to look at these goals separately. It is important to keep this in mind when analysing the SDGs. At the same time, it will also be necessary to study each goal on an individual level in order to analyse how different nations are faring on the different goals, targets and indicators. Researching all the SDGs at the same time is a massive task which is not within the scope of a master's thesis, nor would it necessarily produce any significant information. Because of this, I have chosen to look at goal 8 – focusing on sustainable growth - and two specific targets with corresponding indicators. The two targets from goal number 8 analysed in this thesis are target 8.1 and 8.4, which are presented in Figure 1.

**Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.**

**Target 8.1:** Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.

**Target 8.4:** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.

*Figure 1: Goal 8 and targets 8.1 and 8.4. Source: (The United Nations, 2023b)*

It is important to recognise that the goals are not created to be reviewed in isolation and that the targets, therefore, lose some of their contexts. It is also important to remember that our world and society are a network of complex interactions between different economies, people, and governance. This makes it difficult to measure the effect and progress of the goals, especially if they are never individually scrutinised. It is also important to note that the goals are broad for a reason - there are many effects, measures and processes that belong within each of and across the goals, which is why the limitations are set as they are.

### **2.1.1. Critique of the SDGs**

Several critiques of the goals have been made when looking at the SDGs through the lens of alternative development. Depending on discourse and method, the list of debates regarding the framework is long. Still, this specific discussion is based on some of this methodology's most frequently debated issues.

#### *Inconsistencies and contradictions*

An increased focus on economic growth and higher living standards creates an inconsistency between ecological sustainability and socio-economic progression, causing the goals to oppose each other (ISCU & ISSC, 2015). Of the 17 goals in the framework, many of the SDG goals are not compatible with the overreaching sustainability focus. Goal number 8 – Decent work and economic growth is an example of this. Focusing on economic growth while fighting climate change can be debated as nearly impossible (Raworth, 2017). It is argued that economies should focus on development rather than growth, as positive growth figures often come at the expense of the planet and people's well-being. (Naidoo & Fisher, 2020). Through an environmental lens, it is argued that development is based on the depletion of the environment because of the overlying focus on economic growth and, thus also, dependence on natural resources. At the same time, it can be argued that the sustainability goals are trying to balance out the development discourse (which is accused of being overly focused on human well-being and economic development) and the sustainability discourse (which is accused of being overly focused on the environment). Despite this effort to balance out different points of view, it is argued that the focus on production, consumption, and growth shows that the SDGs have a market-driven focus that will have negative environmental impacts (STWD, 2015). Although there is a focus on sustainable and responsible production and consumption, it is debated whether this in itself will be enough to stop the negative connection between economic growth and climate change (Swain, 2018). This critique further claims that the SDGs do not focus enough on the environmental part of sustainability. It is argued that economic growth and increased consumption have a positive effect on reducing poverty and increasing socio-economic development but a mainly negative impact on CO<sub>2</sub> emission (Spaiser et al., 2017). The STWD report states that the SDGs have “an overriding focus on boosting economic growth by increasing the production and consumption of material goods” (2015). In other words, growth and consumption lead to incompatibility between the SDGs as the root cause of climate change and environmental deprivation are not acknowledged on the same level as economic growth.

### *No concrete action plans.*

The critique of a missing action plan within the SDGs is widely spread amongst critical scholars. Easterly (2015) argues that the SDG framework has no specific action plan, nor does it specify whose responsibility it is to implement an action plan. There are, arguably, very few incentives for states to follow the framework, both regarding rewards and punishments. Hajer et al. (2015) further point out that there is a top-down focus in the framework, which limits the effect of the goals. The SDGs suggest a hierarchical structure, where the goals, targets and indicators are decided on a global level and implemented on a national level. The national government's capacity to affect change can be questioned based on the limited success of environmental governance. Therefore, it is suggested that the SDGs could address other agents of change much more directly (Hajer et al., 2015, p. 1653). It is argued that the goals and targets are too narrow and directed to allow for local variation and creativity, which removes the possibility of benefiting from place-based knowledge and specific considerations based on region and area.

### *Problems with collecting and quantifying data*

The SDG targets have been criticised for being unactionable and unquantifiable (Easterly, 2015). Many goals and targets can't be quantified, measured and monitored, as they are complex and multi-layered, leading to poor judgement when choosing which variables to measure and which results these variables promote. An example of this is how GDP is still used to measure the well-being of a country. As GDP only measures economic growth and value created within a country, not how this wealth is distributed, it will say nothing about the inequality within a country (Swain, 2018). Further, quantifying the SDGs requires lots of data, often of poor quality in poor and/or developing countries (Swain, 2018). This lack of data leads to several challenges not being picked up by the SDGs. One is how high-income countries looking at the goals are missing out on a global scale when determining their impact. An example of this can be how importing certain goods in one country will lead to high emissions, poor working conditions and human rights violations in the exporting country. In other words, high-emission countries can disguise the pollution they cause by, for example, exporting coal and oil products and instead importing green energy through wind or hydropower. In this way, certain countries can make money from CO<sub>2</sub> emissions without having to take responsibility for these emissions.

Based on this criticism, there are a number of incentives to implement an alternative for the cultivation of economic growth. Alternative economies have emerged in recent decades as a challenger to this capitalist way of thinking. The next section presents an overview of what alternative economies are, as well as a couple of examples of these. Specifically, the Doughnut economy and Community economy.

## **2.2. Alternative Economies**

Alternative economies can, to many people, seem insignificant and powerless. When something is pictured as an alternative, it often implies that something else is mainstream or “normal”. Transferring this to the economy, talking about alternative economies would imply that capitalism is the “real economy” (Healy, 2009). This mainstream versus alternative mindset leaves no room for interpreting the economy as a space of difference where several processes can happen simultaneously – capitalist, non-capitalist, and alternative activities all being part of our economic reality simultaneously. This is where alternative economies try to inform us of an alternative way of looking at the economic systems, for example, by including the “invisible economy” and recognising non-monetized values such as volunteer work, homemaking, self-produce, and childcare. Not accounting for household-based, non-monetized production of goods and services is painting a picture that is not an accurate representation of the economy. Most people generate labour that is alternatively compensated for in some way– through gifts, in kind, barter, and so on. In other words, a large part of economic activity is not measured in the economic systems of capitalism.

The aim of alternative economies is not necessarily to offer guarantees or promises but to enact possibilities and present the research of transformative politics (Healy, 2009).

Rethinking the economy to be a heterogenous space with an array of processes has been a project academics have worked on for several years. In 1973, E. F. Schumacher published the book “Small is Beautiful”, in which he criticises mainstream economics. In the book, Schumpeter discusses the problem of man's unsustainable relationship with using natural resources, sustainable development, and the problematics of money being the “highest of all values” (Schumacher, 1973, p. 27). Schumacher criticises the idea of unlimited economic growth, the narrow markers of what is considered part of the economy, and the lack of responsibility in the market. He points out that profit is measured in terms of money and that the uneconomic character of other values is problematic.

The judgment of economics, in other words, is highly fragmentary: out of the large number of aspects which in real life have to be seen and judged together before a decision can be taken, economics supplies only one - whether a thing yields a money profit to those who undertake it or not (Schumacher, 1973, pp. 24-25).

Other scholars, such as Hazel Henderson, Barbara Brandt, and J.K. Gibson-Graham, have presented work based on the same ideas that Schumpeter advocates for - an alternative economy being a space for empowerment, difference, and diversity, where the “invisible economy” takes on a greater significance than it has in the systems we use today. (Brandt, 1995; Gibson-Graham, 1996; Henderson, 1991). In her work, Brandt criticises how the economy is often viewed as separate from the rest of life, advocating for a more holistic way of thinking and pushing for wholeness in the economy. She advocates for the unpaid, invisible labour of women as caregivers to be recognised as an important part of our economy and that the empowerment of people (especially women) would add to a model where the non-monetized part of the economy will gain greater recognition and leeway (Brandt, 1995). Henderson also advocates this thinking, presenting the economy as a multi-layered system with different sectors, including non-monetized activities, such as invisible labour (Henderson, 1991). She pictures the economy as a cake with icing, where each layer represents parts of the economy (first presented in 1982) – from mother nature and earth’s resources as the ground layer, non-monetized economic activities and unpaid labour as the second layer, all the way to the official market economy as the icing on top. She argues for a transition towards sustainable development through social movement, new paradigms, and transformative policies.

Both Henderson and Brandt’s ideas are discussed and highlighted in work by Jenny Cameron and J.K. Gibson-Graham (2003). In the article, Cameron and Gibson-Graham discuss the 'adding on' and 'counting in' strategies that various feminist thinkers have used to better represent "the whole economy" (Cameron & Gibson-Graham, 2003). The article suggests that adding on and counting in to enlarge the scope of the economy might fall short of generating a feminist politics of transformation: “They add to the picture of what contributes to the production of goods and services, but they do not necessarily help us think differently about the economy” (Cameron & Gibson-Graham, 2003, p. 13). Instead, Cameron and Gibson-Graham advocate rethinking the economy, where we step outside the binary framing that undervalues and subordinates alternative variables. Through these strategies, transformative feminist economic policies highlight that the economy lacks the proper validation of certain

variables. In other words, feminist rethinking challenges the boundary between what is considered economical and non-economic – seeing the economy as a transparent and bounded whole where non-monetized labour is given the same value as other work (Cameron & Gibson-Graham, 2003). From this way of thinking, several different models and branches have sprouted, which have formed communities of researchers and socially engaged people, one of these being the “community economy research network”.

The next part of this chapter will discuss the two alternative economic communities and their associated theories, their primary models, and an analysis of cases where each theory has been applied. The two models are the feminist-inspired “community economies” network and the development-focused “doughnut economies”.

**2.3. Doughnut Economy**

The Doughnut Economy framework proposes an economic model created by Kate Raworth, where the goal of the model is to balance human needs and environmental sustainability. The Doughnut model suggests that economic activity should be shaped by two boundaries: an ecological ceiling, which represents the limits of the planet's resources, and a social foundation, which represents the minimum standard of living people need to thrive (Raworth, 2017).



*Figure 2: The Doughnut model. Source: Copyright (Raworth, 2017, p. 44)*



Figure 2 presents the doughnut model as a whole – with the ecological ceiling, the safe and just space for humanity, and the social foundation. The environmental ceiling is based on the nine planetary boundaries proposed by the international group of Earth systems. The nine critical boundaries are climate change, ocean acidification, chemical pollution, nitrogen and phosphorus loading, freshwater withdrawal, land conversion, biodiversity loss, air pollution and ozone layer depletion (Steffen et al., 2015). Even though some of these indicators can be hard to measure, most have specific overshooting limits. This means that there are clear indicators for most of these variables to which it is possible to monitor if these levels are being maintained or if humanity is overshooting the earth’s environmental ceiling.

The social foundation of the doughnut, or “the hole”, is based on 12 social dimensions derived from the social priorities specified in the United Nation’s 2015 Sustainable Development Goals, including food, health, education, income and work, water and sanitation, energy, networks, housing, gender equality, social equity, political voice, and peace and justice (The United Nations, 2023a). The UN has pointed out specific targets and indicators for each goal. It is possible to measure and illustrate the extent of the humanitarian shortfall through sources such as the World Bank, WHO, and UNICEF.

Between this environmental ceiling and the social foundation is “the safe and just space for humanity”. Raworth (2017) suggests seven ways of rethinking the economic system in order to reach this safe and just space for humanity:

- Changing our ways of measuring the economy from GDP to using the doughnut.
- Transitioning from a self-contained market to an embedded economy.
- Reimagining human actions from rational man theory to social adaptable humans
- Changing our models from mechanical equilibrium to dynamic complexity
- Redesigning the goal from growth-focused to distributive.
- Redesigning the goal from growth-focused to regenerative.
- Changing our mindsets from “growth addicted” to “growth agnostic”.

The goal of GDP growth was established in times of economic depression, war, and crisis but has kept on going way after this –until today (Raworth, 2017). In other words: it’s time for a change. The core of what Raworth suggests is a transition from a growth-focused, liberal, capitalist way of thinking to a holistic, regenerative, and distributive economic system. We need a new way of designing our economic system to manage this transition.

Raworth (2017) pictures five factors for what we need to live within the doughnut. First, she states that the population needs to stabilise - the more people on the planet, the more resources we use. Second, she points out that we need to rethink and reorganise our policies and systems for distribution. Today there is an enormous bias both in terms of consumption, food consumption and general policy and attitude when it comes to this consumption-based culture. For us to live within the doughnut, the “Western world” or the “global north” needs to drastically change its consumption habits. Thirdly, Raworth refers to aspiration. We have a lifestyle influenced by each other, where we want what everybody else has, and this needs to change. The general attitude, especially in the global north, to what one needs, how much one needs, and who needs what needs to be redesigned. The fourth factor on Raworth’s list is technology. In many ways, new and further technological development will contribute to solving many of the crises we are facing today by improving energy efficiency, transportation efficiency and so on. Last but not least, Raworth points out that governance is key to these changes. Government and management need to respond on all scales in order to the changes pointed out by Raworth. This will, in many ways, help level out the global playing field, making it possible to follow through with ethical and sustainable decisions and agreements, as the worry of unfair competition will be removed if governance lays a proper foundation for sustainable decision-making.

To sum it up, Raworth has designed a model which suggests shifting from “good is forward and up” to “good is in balance”. From endless GDP growth to thriving in balance in the doughnut. Put differently, an economic system which rethinks the economy, from GDP to the Doughnut, from self-contained market to embedded economy, from rational economic man to social adaptable humans, from mechanical equilibrium to dynamic complexity, from “growth will even it up again” to distributive by design, from “growth will clear it up again” to regenerative by design, and from growth addicted to growth agnostic (Raworth, 2017). As Raworth points out: “Don’t wait for economic growth to reduce inequality – because it won’t. Instead, create an economy that is distributive by design” (Raworth, 2017, p. 174).

### **2.3.1. Using the Doughnut – a case study**

The Doughnut model has grown to become a popular alternative economic model since it was first published in 2012 (Raworth, 2012). The model has been implemented as a guideline for the sustainability strategy in several cities, including Amsterdam, Brussels, Melbourne, Berlin and Sydney (Donut Berlin, 2021). In Brussels, this implementation has been called “the BrusselsDonut project” and was rolled out between August 2020 and May 2021

(BrusselsDonut, 2023). Three key questions were formed in order to adequately research the model (Dissaux et al., 2021a, p. 7).

- How can the vision change proposed by the Doughnut take concrete shape in Brussels?
- How can it be helpful to different actors and, overall, to the evolution of the Region?
- What does the BrusselsDonut look like when we build it in a participatory way?

The goal of the BrusselsDonut project was to find out if and how the Doughnut theory could be helpful to the region, and the model was explored at the micro, meso, macro, and nano level. At a macro level, the Doughnut portrait of the Region was drawn up to determine where the social foundation and ecological ceiling were compromised. At a meso level, regional public institutions collaborated with the project to study how the doughnut framework could work as a guideline for public action and in what ways political guidance is needed to implement and adopt the doughnut framework (Dissaux et al., 2021a). At a micro level, already implemented actions were studied, and the concrete measures and tools to move towards a doughnut economy were discussed alongside actors in the Region. At the nano level, a simple and tangible way to make doughnut tools accessible for everyone was implemented – through smartphones.

Through implementing the framework on these four levels, the project showed that the doughnut framework could be a helpful transformative tool, but only if implemented by a great diversity of actors (Dissaux et al., 2021a). Future development and necessary alliances can be captured and carried out through the tools of the Doughnut, but only when implemented on several scales and levels. Politicians, jurisdictions, public actors, and the region's citizens all need to be involved in implementing the framework successfully.

The first step to implementing a doughnut economy is to recognise the economy as integrated and partial, meaning that it only governs part of our activities and relations (Dissaux et al., 2021a). Therefore, to be concretely applied, the model must be implemented on all scales – the local/social, the local/ecological, the global/social, and the global/ecological. The local/social scale looks at social needs and the realisation of aspirations, questioning what it would take and what it would mean for the people in the region to thrive. On the local/ecological lens, the question: “What would it mean for the territory to thrive in its natural habitat?” forms an entry point to studying how the territory can help restore ecosystems and cycles in the local environment (Dissaux et al., 2021a, p. 14). The

global/ecological lens questions and examines the responsibility and what share the region has on global environmental impacts. How can the planet's health be respected and accounted for in the territory studied? The fourth and final lens, the global/social lens, researches the effect of local choices on the worldwide population. In other words – how is the well-being of the global population affected by choices made in the region? (Dissaux et al., 2021a) After researching the implementation of the doughnut on all four scales, the first Doughnut portrait of the Brussels-Capital Region was produced. The portrait was designed to be regularly supplemented and redefined to reflect the best way to engineer a transition in Brussels. This is an integral part of the doughnut framework in general, as the Doughnut approach does not replace an action plan, nor is it a substitute for something else (Dissaux et al., 2021b). The framework's goal is to create a snapshot of the Region as of what it is right now and a summary of visions, dreams, challenges, and concerns for the future. It is a tool for evaluating and analysing effects induced by actions on the natural and human environment, analysing decision-making, building new stakeholder networks, and creating a better understanding of what is and what needs to be. Summed up:

The Doughnut is, above all, a way of raising questions across teams rather than a tool that is applied externally like an audit. It is a source of inspiration, a way to identify new directions, an opportunity to deepen an aspect or to complete an approach (Dissaux et al., 2021b, p. 29)

In this specific case, the questions raised were spread across all four levels, creating new indicators to develop the region further to become a space for transition. In other words, implementing the doughnut framework in the Brussel Region gave the area a chance to analyse the region on four levels – the Local/Social, the Local/Ecological, the Global/Social and the Global/Ecological – creating a framework where public action can be implemented on every scale, from the local policy of strategies and action plans to the implementation of specific projects and activities, all the way down to everyday tasks and choices. To sum up, the Doughnut framework, though not to be mistaken for an externally implemented tool, can be used to evaluate the impacts of an action, a project, or a strategy, help analyse the region and decide on what decisions to make and steps to implement, and last but not least, help build new stakeholder networks (Dissaux et al., 2021a).

## 2.4. Community Economics

Community economies are based on the work of J.K. Gibson-Graham and are a perspective on diverse economies. Through their work, Gibson-Graham invites us to include diverse economic activities into our understanding of the economy, resulting in scholarly communities such as “The Community Economies Collective (CEC)”, which later evolved into “Community Economies Institute”, and the research network “Community Economy Research Network (CERN)” (CommunityEconomies, 2023). Community economy is similar to both Doughnut economics and the thoughts of Schumpeter, promoting the ideas of a diverse, reconstructed economy where more-than-capitalist, non-monetized variables are included in the equation. The ideas behind community economies in many ways started with the book “The End of Capitalism as We Knew It” (Gibson-Graham, 1996). From this work, the “Rethinking Economy” project evolved. Based at the University of Massachusetts Amherst, the project consisted of 5 stages. The goal was to “develop a different language of the economy and to cultivate spaces of conversation where that language could be spoken” (Graham et al., 2002). Sometimes it can be hard to differentiate between community and diverse economies, as they are picturing similar thoughts. The best way to explain this is by looking at community economies as a branch within diverse economies: “The entry point for analysis in a Diverse Economies approach is ethical, economic action and practice to expand opportunities for collective actions that might help produce a more just and more liveable world” (Cameron & Gibson-Graham, 2022, p. 4)

Rethinking the economy has been an essential part of Gibson-Graham's work, which has, through various publications, led to the book "Take Back the Economy". The book presents a framework where the economy is "taken back" through ethical action. Humans tend to think that the economy is something that happens to us, something we cannot control. But on the contrary, it is precisely our actions that shape the economy we live in. That is why we need a moral compass for our economic activities, which guides us towards ethically just and humane decisions, where we are concerned for the well-being of both the planet and everything that lives on it (Gibson-Graham et al., 2013). According to the community economy framework, taking back the economy through ethical actions means (Gibson-Graham et al. p. xviii):

- Surviving together well and equitably
- Distributing surplus to enrich social and environmental health

- Encountering others in ways that support their well-being as well as ours
- Consuming sustainably
- Caring for—maintaining, replenishing, and growing—our natural and cultural commons
- Investing our wealth in future generations so that they can live well

To create an economic system that is both just, sustainable and considerate, the capitalistic systems and theories embedded in today’s economy have to be revalued and uprooted, according to community economies (Gibson-Graham et al., 2013). Private capitalist enterprises have created significant wealth for some, but at the same time, it has increased our inequality. It is time for a new framework, but how do we create it, and what does it look like?

Gibson-Graham et al. suggest a starting point could be by accounting for “how surplus is produced, who owns it, who decides how it can be used, and how it can be deployed to produce well-being for people and the planet” (Gibson-Graham et al. p.54). Put differently, an economic system that considers the production, accumulation, and distribution of surplus. The Community Economies Return on Investment, or the CEROI, can provide us with a framework for explicitly analysing the effect these ethical actions and new variables have on the economy.

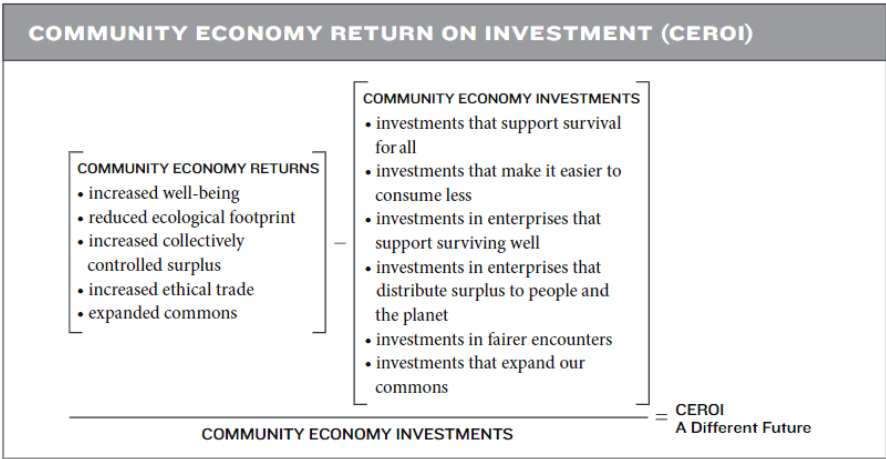
#### **2.4.1. The Community Economies Return on Investment (The CEROI)**

The CEROI analysis, or The Community Economies Return on Investment Analysis, is a framework for measuring the economic return on investment when we account for the non-monetised, non-capitalist values highlighted in community economies.

In a community economy, investment can be accounted for in many ways, including investing time, energy, and imagination. What characterises these investments is that they are carried out to create social returns that can be shared ethically. Instead of undertaking a cost-benefit analysis to measure the value of a project is measured the purely monetary return for shareholders, the return on investment in the community economy is measured holistically - the focus is shifted towards ways of investing for the benefit of the entire society (Gibson-Graham et al. 2013).

Because we inherit social capital, it is also our responsibility to “invest with the interest of future generations in mind, including the continued integrity of the natural systems that

sustain life” (Gibson-Graham et al., 2013, p. 177). When focusing on how resources are directed toward ensuring a better, more sustainable future for everyone, the models we use to measure growth or profit from these investments need rethinking and redesigning. This also includes the flow-on effects that accumulate from investments in the commons, which need to be accounted for to get a sense of the full return. In other words, when creating a CEROI analysis for an enterprise, values beyond the monetary are accounted for. This includes social connections, well-being, biodiversity and volunteer work.



**Figure 3:** The CEROI tool kit. Source: Copyright (Gibson-Graham et al., 2013, p. 178)

The representation of the CEROI model in Figure 3 shows how community economy investments are listed as investments that support surviving well for all, including distributing surplus, creating fairer encounters and expanding our commons. Community economy returns are results that increase well-being, reduce ecological footprints, increase collective surplus, ethical trade and expand commons (Gibson-Graham et al., 2013, p. 178). Examples of these types of investments are investments in the commons, creating spaces for human connections and projects that safeguard biological diversity. To give an even better understanding of what this entails, the following section contains a presentation of two cases where the CEROI has been used to highlight these returns – one with a quantitative analysis and one with a qualitative design.

**2.4.2. Case Studies**

In 2021 an urban farm on the outskirts of Paris was closed down to make way for a carpark. Petrescu et al. (2021) conducted a quantitative CEROI analysis to communicate the economic, social, and financial costs this entailed.

An “urban farm” or “community gardening” describes a piece of land used as a common where a group of people cultivates the land together (Ministry of Agriculture, 2023). From 2011 to 2016, more than 6900 people participated in the projects conducted by R-urban, which included the urban farm, a community recycling centre, a community kitchen and café, a compost school, a teaching space, a mini-market, and a greenhouse connected to the farm (Petrescu et al., 2021).

Through a CEROI analysis of the different variables connected to the project, the researchers show how terminating the project was an unfortunate decision when accounting for community building, inclusive spaces, and the commons. The authors picture this by conducting a CEROI analysis of the project, putting monetary values on variables not accounted for in capitalistic systems, such as knowledge growth, creating commons, and biodiversity. The analysis was conducted in four layers: first, accounting for direct financial revenues generated by R-urban, such as garden tours and flea market stalls. Second, adding estimated value of unpaid labour by R-urban, accounting for voluntary lecturing, event organising and other volunteer work. Thirdly, by including the estimated value of increased individual capacity generated by R-Urban, including skill enhancement and training cost savings through peer training and practical training and finally, adding the value of saved costs, such as human and social well-being, gardening and environmental care, increased biodiversity, and reduced consumption of non-renewable energy. The article shows that a car park would create a monetary value equivalent to £45 000 a year through parking fees and tickets, giving a 67% return on investment the first year if the car park had a 10-year life span (Petrescu et al., 2021). The R-urban was evicted after only one year, but with the same 10-year lifespan as accounted for when researching the car park, the CEROI for R-Urban would give a 180% return on investment when accounting for alternative variables. In other words, there would have been a 113% higher return by continuing the R-urban project than by building the car park if one facilitates and values variables beyond what would usually be considered in a strictly financial return on investment calculation.

Dombroski et al. (2018) have also carried out a project using the CEROI toolkit. Working with “Cultivate”, an urban farm in Christchurch, Dombroski et al. conducted a qualitative analysis, using the CEROI to “document and measure the holistic impact of the Cultivate project” (Dombroski et al., 2018, p. 5). This work led to two reports.

Cultivate provides care, support, and work training for urban youths through growing food and handling green waste at their two urban farms in Christchurch. The project was created as



part of the post-quake rebuild of the city. The aim of the project was to provide mental health care to young people without the stigma often connected to this. However, the project's impact extended beyond individual mental health care to several levels of positive outcomes. By handling food waste for restaurants in the local area, cultivate operated two urban farms where vegetables were grown and sold back to the same restaurants. Through this work, the ground and soil where the projects were located regained their value through diverse agriculture, and young people received follow-up both socially and personally from volunteers and employees. Through the project, the participants were able to acquire new skills and connect with people they may not have met otherwise, resulting in a valuable social network.

To be able to document and measure the holistic impacts of the project, Dombroski et al. conducted a qualitative CEROI analysis through interviews, workshops and observations of the work on the farms. The research resulted in a set of indicators that describe what success could look like at different scales for Cultivate. The steps conducted to develop the CEROI used in the project were to:

“1) articulate what people are investing in, 2) understand how people are investing and what the investments are, and 3) identify what the outcomes or returns on these investments might be” (Dombroski et al., 2018, p. 14)

In the two reports, the CEROI is used to find and articulate the investments in Cultivate, to measure and demonstrate the holistic return on investment from the project, and to help clarify how social enterprises like Cultivate can play a crucial role in sustainable and just societies and economies (Dombroski et al., 2019). To properly document and measure these holistic impacts of the project, the researchers focused on identifying value practises in order to assess the return on investment, defining what success would look like, and finding a proper way to communicate the impact of the investment. Interviews, participation, and observations helped the researchers understand how people invested their time in cultivating and how they experienced the value created by their participation. The results from this research suggested that developing self-care skills and being provided with a therapeutic environment were the most critical outcomes for the youths participating in the project.

This article is an excellent example of how the CEROI can be helpful in qualitative analysis through interviews, observation and participation.

The CEROI works well with both qualitative and quantitative data. The challenge lies in how these results should be communicated to the public. Numbers are often perceived as “solid facts” and can therefore be more accessible to communicate than qualitative data derived from interviews. But at the same time, using words to describe human experiences, increased values, and hidden qualities can often be just as significant. Putting these more than capitalist, holistic values into boxes that are being enumerated might lead to the variables losing some of their value, as many values are difficult to quantify. At the same time, financial players often base their investments on positive growth figures. In other words, a qualitative and quantitative use of the model will have both positive and negative sides, and how the analysis is carried out should be based on the specific project.

### **2.5. Terms of Transformation**

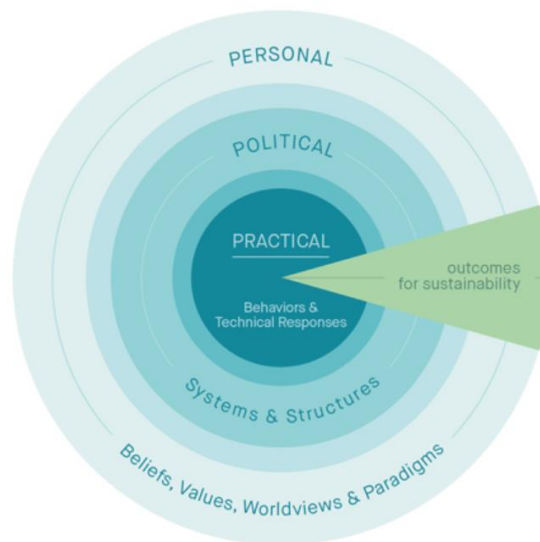
Transformation and transition are two terms that can be hard to distinguish between, and the specific or different meanings connected to the terms tend to create confusion or conflict. It is debated that there is not yet a solid theory of transformation because of the lack of precise definition, as the phrases are used interchangeably as both a description of but also the outcome of a process (Griffith et al., 2010). Different languages, translations, fields of study and ontologies create a number of different meanings and interpretations of the same words, and attempting to present one specific definition of a term might be misleading and deficient. Transformation is, by some scholars, viewed as a consequence of societal collapse, while others see it as the capacity to transform and create change within a given system (Beddoe et al., 2009; Butzer, 2012). It has been argued that pursuing a one-version-suits-all definition of transformation might not be abundant research to carry out, as transformation as a term can carry so many different meanings and concepts (Kapoor, 2007). If adding the concepts of resilience, adaptation and tipping points, finding a common agreement on the meaning behind the words does not get any easier. When dealing with transformation and transition by studying alternative economic models, it is important to be able to assess the process and impact of the implementation of these models. Transformation can be classified as a change that acts through a combination of endogenous and exogenous processes. Feola (2015) identifies two main alternatives for how to use transformation as a term: as a loose metaphor, indicating fundamental change without theoretically funded patterns or characteristics, or applying it as an analytically relevant concept, recognising differences and using them to understand the complexity of transformative change from different points of view. Different concepts of transformation will provide different analyses, not necessarily recognising the

same transformative processes, as concepts of transformation refer to systems that are “conceptualised as complex, dynamic, and multi-level entities” (Feola, 2015).

If applying transformation as an analytical concept to understand and decide which responses to pursue when facing global environmental change, Feola (2015) suggests differencing between solution-oriented and analytic-descriptive research. Analytic-descriptive research aims to provide knowledge and descriptive approaches to the issue of transformation, while a solution-oriented or “transformational social science” perspective calls for a more strategic and operational approach within social sciences when discussing change. Solution-oriented research suggests an active social role for science in the process of social change through networks of change (such as researchers, local actors, and stakeholders), letting academia be an active player in transformation processes (Evans, 2011). Because of this active role of both academia and stakeholders, this thesis will focus on transformation from a solution-oriented research point of view, more specifically, through the concept of deliberate transformation (DT). DT is an approach that focuses on transformation as a response - as a way of achieving a specific goal, where it is important to recognise that some fundamental shifts are necessary to enable desirable outcomes and a sustainable future (O’Brien, 2012). It emphasises deliberate change processes, including the possibility of steering or navigating the change process. Collective action, social learning, and consensus building are all common approaches to deliberate transformation and highlight the fundamental role of agency (Feola, 2015). Transformations may occur across multiple dimensions and scales. To reach this desirable future, changes need to occur on all levels, from policymaking and shifts in behaviour to technological innovation and institutional change, leading to challenging assumptions and fixed beliefs in prioritising ethical and sustainable development. O'Brien and Sygna's (2013) theory of "The Three Spheres of Transformation" is a theory that, in many ways, supports this concept of transformation.

O’Brien and Sygna suggest viewing transformation as a process that takes place across three spheres: the practical, the political and the personal. (O’Brien & Sygna, 2013). The practical sphere represents the core of transformation and can be considered the sphere where the outcomes are measured. Often, this is the sphere that gets the most attention because it is within this sphere the “technical” responses, such as management practises and innovation, take place (O’Brien & Sygna, 2013). In many cases, technical responses are the easiest to measure and which, therefore, often can feel like the “most important” ones and, therefore, also the sphere many people focus on when debating and studying climate change. The

political sphere represents systems and structures where practical transformations can take place, such as economic constraints, political possibilities, and social systems. It is in this sphere where problems and solutions are both identified and delimited and, therefore, also, the sphere where the how's and why's of transformation are debated (O'Brien & Sygna, 2013). The personal sphere includes individual and collective values, beliefs, and worldviews. It is in this sphere ways of understanding, ways of acting, and revelations occur, meaning that it's also the sphere for powerful consequences through collective action (O'Brien & Sygna, 2013). Figure 4 presents the three spheres as a layered circle, where outcomes of sustainability are pictured as a dynamic process happening through interactions across all three spheres.



**Figure 4:** *The three spheres of change.* Source: Copyright (Cchange, 2023)

The spheres are embedded and interacting, and it is important to understand that transformation often happens through interactions between these spheres, as transformation processes are dynamic. All three spheres should be taken into consideration when aiming for transformation, as the goal should be practical solutions at the right rate and scale so that one avoids conflict (O'Brien & Sygna, 2013). Transformation needs to happen both “inside-out” and “outside-in”, meaning that the links between the three spheres go both ways.

When studying the SDGs through the lens of transformation, it is interesting to look at the wording of the goals. The UN itself is specifically using the heading: “Transforming our world: the 2030 Agenda for Sustainable Development” (The United Nations, 2015). There is

general agreement that transformation is a process of structural change - a change of fundamental patterns, elements, and interrelations within systems. Pursuing sustainability, therefore, requires the involvement of social, symbolic, physical, and material changes, and these changes are often connected to ontologies, power relations, networks, infrastructure, and technology (Feola, 2015).

Through this definition, we see that in order to achieve the sustainability goals, we need systematic and fundamental change at all levels. In order to further analyse and discuss this type of change, the next chapter will explain how secondary data collection and policy analysis has extracted the data researched in the analysis, which has led to a discussion regarding the properties alternative economic models can have on the sustainability goals.

## **2.6. Summary of theory chapter**

This chapter has provided an overview of the theoretical framework of this thesis. The chapter starts with a review of the SDG framework and criticisms related to it. Furthermore, two alternative economic models are presented, starting with a presentation of the alternative economy as a concept, before addressing the two alternative economic frameworks, doughnut economies and community economy, alongside their associated models, namely the Donut model and the CEROI tool. Case examples of the two models are also presented to help lay a foundation for the analysis in Chapter 4. In addition, an overview of ways to define transformation is presented, where the three spheres of transformation are emphasised in the final section of this chapter.

The literature review in this chapter has been reviewed to lay a solid foundation for the analysis carried out in Chapter 4. Through presenting and reviewing all major frameworks, models and theories used in the analysis, the goal is to provide the reader with enough context so that the analysis and discussion can be presented and understood in a transparent and clear way.

The next chapter will delve into the topics of method, methodology and ethics. The chapter aims to provide a clear and comprehensive presentation of policy analysis, which is the method utilised in this thesis. By reviewing my methodological position, as well as my situationally, the aim is to present clear evidence that the research has been reflexive, transparent, and responsible.

### **3. Research Design and Method**

This chapter details the methodology used to explore the connections between alternative economic models, sustainable development and growth, using policy analysis as a method to conduct the research presented in this thesis. There is a section describing the feminist approach this research is inspired by, the ethics of the research, and my positionality as a researcher in this area of study. Because there have been no interviews conducted, nor participatory research, there has been no need for an NSD approval or data management plan.

#### **3.1. Research Design**

The research carried out in this thesis follows a qualitative research design, where the goal is to provide the reader with holistic, in-depth reflections. Qualitative research is based on “the systematic collection, organisation, and interpretation of textual material derived from talk or observation” (Malterud, 2001). Policy analysis can be conducted both qualitatively, focusing on numerical data and statistics to understand trends and differences, or qualitatively, focusing on subjective factors and information regarding data that cannot be reduced to mere numbers (Dunn, 2015). Because of these subjective factors, researching the needs of the planet and the people, I categorise my research as qualitative. Still, I acknowledge that this is a field of research where the boundaries between qualitative and quantitative research often are fluid and where mixed methods are often used. From the research questions and problem statement in the introduction, I have presented the goal of this research, which is to investigate the effect of applying alternative economic models to the SDGs. My conceptual framework is presented in the theory section, and I interpret my data based on how the implementation affects the critique presented in said section. I am conducting research on alternative economic models and how they apply to specific instances like the SDGs. This makes my research deductive, according to Hyde (2000), which explains deductive reasoning as: “ a theory testing process which commences with an established theory or generalisation and seeks to see if the theory applies to specific instances” (Hyde, 2000)

My research problem states that there is a broad consensus that in order to preserve a liveable climate, a drastic change has to be made now (IPCC, 2022; UNECE, 2021). If humanity is going to stand a chance in facing the sustainability challenges and environmental deprivation the world is experiencing today; we need to reconsider how we are going to tackle these challenges. In order to gain a more in-depth understanding of the chosen topic, I have reviewed several frameworks and theories from my chosen field of study. I have used

secondary data in terms of policy frameworks, alternative economic theories, and alternative economic models in order to research alternative perspectives and solutions to the environmental challenges we face today from a qualitative research point of view.

### **3.2. Methodological Approach**

To capture the transformative and holistic models of alternative economies, I have engaged in my thesis with a feminist approach. A feminist approach builds on empowering research, focusing on the transformative potential of those involved (Johnson & Madge, 2021). Empowerment can be seen as “the process of increasing the social, political, spiritual, economic, and/or psychological potential of individuals and communities” (Johnson & Madge, 2021, p. 61). Empowering research is not easy, as it challenges power relations. There is a focus on social justice and a constant drive to uproot and change constructed inequalities. Alternative economic models reject the patriarchal assumptions and heteronormality which is assumed in the standardised economic models currently used in our economy. This is a good example of how power relations in knowledge affect the research conducted - sometimes without us even noticing. It is, therefore, important to be aware of the limitations in models of research, often set by Western standards. When conducting empowering research, multiple ontologies and epistemologies will present themselves - different groups of people have different ways of viewing the world and, therefore, also different ways of conceptualising knowledge. Keeping in mind the vision of a pluriverse world is therefore very important in feminist methodology, respecting multiple knowledge systems and acknowledging diverse ways of knowing (Johnson & Madge, 2021).

Feminist research practice can be conducted in different ways, and it is both diverse and overlapping in its expression. There is no research method that is indicated as a specific feminist; it is rather the epistemological stance behind the research that reflects the feminist research practice (Johnson & Madge, 2021). Today, feminist research goes beyond gender, focusing on queer, post-colonial theory, where social relations, inequality and privilege are challenged. How data is collected, how one acts as a researcher, and how one conceptualises one's projects are also part of what makes research feminist. Positionality, objectivity, and multiplicity is all very important part of the research practice – checking one's bias, both as a researcher and as a human being. What it comes down to is this: feminist research deals with power in some way or another – in this case, the power to decide which parts of the economy should be visible and which should stay invisible.

### 3.3. Method

Policy analysis can be defined as “an applied social science discipline which uses multiple methods of inquiry and arguments to produce and transform policy-relevant information that may be utilised in political settings to resolve policy problems” (Dunn, 1981, p. 60).

Policymaking is multidimensional and multifaceted, and the aim is to provide relevant information to policymakers through a critical investigation of potential solutions to diverse and complicated challenges. Policy analysis requires descriptive and explanatory causes and consequences of implemented policies and frameworks, in addition to examples of alternatives and solutions (Dunn, 2017). Rational decision-making in politics often follows steps that are similar to methods of scientific research. To reach an optimal solution, decision-makers first identify a problem empirically before formulating goals and objectives that, in theory, would lead to the optimal solution. Potential consequences and probabilities of various solutions are evaluated and determined. Finally, they combine all the information to select the most effective alternative (Fischer, 2003).

Several researchers present a classic 5-step plan for policy analysis (Dunn, 2017; Meltzer & Schwartz, 2018; Mintrom, 2012):

1. *Define and present the problem.*
2. *Identify alternative solutions and their effects.*
3. *Compare solutions - which solutions should we choose, and why?*
4. *Assessing and predicting the policy outcomes*
5. *Did the policy solutions work as intended? Report findings and make recommendations.*

Although these five steps make it easy to present a policy analysis neatly in the method chapter, it does not necessarily mean that the analysis is as rigid in its steps as what is presented here. An example of this is the analysis carried out in this thesis. In this case, step 2 - identifying alternative solutions and their effects, and step 3 - comparing solutions will overlap in the theory chapter. One reason for this may be that alternative economics is a relatively new field in global policy decision-making and that there is, therefore, little basis for comparison.



Rist (2000) suggests qualitative policy analysis can be implemented in four phases: in policy formulation, policy implementation, policy accountability and policy tools. Although all these phases overlap, due to this thesis's limitations, I will focus mainly on policy tools, specifically targeting. Targeting refers to the capacity of a policy tool to be aimed at a specific problem, institution, or challenge in general, and it is argued that a qualitative study of challenges targeted by policy tools and the need (or lack of) specificity in the targeting can be useful in policy formulation (Rist, 2000). Because of this, I will analyse SDG goal number 8 through the frameworks of the two alternative economic models presented in the theory chapter, namely the Doughnut model and the CEROI framework.

Following the 5-sep plan, the first step of defining and presenting the problem is already carried out through the problem statement of this thesis. In my analysis, I will identify alternative solutions and their effects before comparing and assessing the outcomes in the discussion chapter. Step 5 will be discussed, stating that making recommendations without proper data can be against its purpose. I will get back to this in my final chapters.

I have chosen this method based on what would be the best fit for my problem statement and research questions. As I am analysing a policy framework using alternative economic models, decision-making and transformation are key to the research. Using a framework as widely known as the SDGs, alongside less-known tools like the CEROI, contributes to the knowledge base by connecting something “new” to the well-known. This can also help make sense of the alternative frameworks for readers who have not heard about them before.

### **3.4.Methodological Limitations**

Qualitative research designs analyse information in small samples, which is limiting to the credibility of the data analysis. Findings in qualitative research are not tested to see whether they are statistically significant, as data verification through statistical analysis is hard to implement for qualitative analysis (Ochieng, 2009). This means that findings cannot be extended to wider populations with the same degree of certainty that quantitative analyses can. When it comes to policy analysis, the use of analysis is often delayed and not applied directly to decision-making, as it is a complex process consisting of multiple cycles (Dunn, 2015). Implementation of improvements due to policy analysis depends on the ideology or political stand of the group of people in charge of the policy, meaning that what is viewed as an improvement in the first place depends on the government or chair in charge (Dunn, 2015). As an extension to the problem of ideology, what is viewed as useful reflects the interest of

the ones in power, which translates to the fact that a possible implementation of change due to policy analysis is a privilege, not a matter of course (Dunn, 2015)

### **3.5.Ethical Considerations**

Because this policy analysis does not involve observations, interviews, or any type of confidentiality questions, there are parts of the typical qualitative data management that have not been necessary for this research. Due to no personal information being collected, there has been no need for consent forms, anonymisation or NSD approval, nor has a data management plan been required. Still, it is important to revisit the theory of research ethics because of the credibility of the researcher and the research conducted.

Research is a systematic search for new knowledge, and guidelines for ethical and responsible research must be followed to preserve the value of the research. The responsibility for research ethics applies to everyone conducting research and is important to ensure quality and independence. The National Research Ethics Committee in Norway suggest a set of norms to follow, which includes guidelines regarding ethical obligations towards the research community, research participants, groups and institutions, commissioners, funders, and collaborators, and dissemination of research (NERC, 2022).

In this thesis, the main obligations that need to be considered are the research community and the dissemination of the research. For my research, I am heavily dependent on the work of other researchers, and it is my responsibility to treat their work with respect and properly recognise the researchers. My work needs to be transparent, with good citation practice and accountability. Furthermore, the relationship between my supervisor and I should be respectful and balanced, and I will treat my research network with the same respect.

The dissemination of my research is also an important part of the ethical consideration due to maintaining my social and institutional responsibility, accountability, and the factuality of the research (NERC, 2022). During the dissemination, I will have to take responsibility to prove that this assignment is my work.

### **3.6.Reflections on Positionality**

Because of the multiple ontologies within empowering and feminist research, applying multi-layered reflexivity in feminist and empowering research is crucial. The layers of self-reflexivity, interpersonal reflexivity and collective reflexivity ensure that the research is ethically sourced, checked for biases and properly questioned. Self-reflexivity encourages

researchers to explore hidden assumptions about the research, both on an epistemological and an ontological level, which helps the researcher unlearn what has been learned, creating a neutral starting point free from assumptions (Johnson & Madge, 2021). To question my self-reflexivity, I have engaged in debates and conversations with researchers, other students, friends and family to make sure I position myself with as little biased opinion as possible. Interpersonal reflexivity helps challenge institutional constructions, acknowledging the role of and expectations by academic institutions when conducting research. To limit this interpersonal reflexivity, NTNU has drawn up a master's agreement that both student, supervisor and the research department sign, which is mandatory for anybody carrying out research on master's levels. Collective reflexivity encourages discussions regarding the research process – has it been transformative, affirming and empowering? For whom? Has it affected social change? In other words, a critical consciousness regarding one's work (Johnson & Madge, 2021). Collective reflexivity has been carried out through conversations with my supervisor and will also be tested in the dissemination of this thesis.

Power and knowledge will always affect the research, making it inherently political (Cragg & Cook, 2007). I am a young, white female researcher with a background in economics and currently studying globalisation and sustainable development. My interest in sustainable development was the main reason why I chose to study economics in the first place. I must ensure that my theories are valid and that my results are based on factuality, not just views and opinions. To ensure this factuality, I have made sure to read up on a wide selection of literature, wider than what was available in the theory chapter. I have actively sought different angles on the same problems and sought out opinions and viewpoints from people with different backgrounds, situations, and political points of view. Research is an embodied activity, drawing on the researcher's identity, which makes full objectivity both impossible, but also maybe not necessary either (Cragg & Cook, 2007). What's important is that the researcher recognises and comes to term with their own objectivity and carry out their research with ethical consideration, high levels of factuality and all layers of reflexivity.

### **3.7. Summary of Methods and Ethics**

In this chapter, I have presented the method and methodology of my research. When carrying out a policy analysis while framing the research within a feminist methodology, it is essential to be aware of one's reflexivity as a researcher. Therefore, I have thoroughly elaborated on both the ethical considerations of the thesis and my positionality. The next chapter will present my analysis of the collected data before the results are discussed in the discussion

section of the thesis. In my analysis, I have studied how SDG goal number 8 would be affected by implementing the doughnut model and the CEROI toolkit, looking at both goal 8 as a whole, as well as by going one level deeper and looking at two of the associated variables. The reason for this analysis is to collect data useful to answer the question of how this implementation of alternative economies may possibly help to answer the criticism addressed in chapter two. I will discuss this in Chapter 5.

## 4. Analysis

*Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.*

In this chapter, I will analyse if and how implementing alternative economic models in the SDG framework can affect the SDGs and their belonging targets and indicators. Firstly, I will analyse goal 8 on a general level, where I will specifically look at top-down versus bottom-up decision-making. Then I will focus on two specific targets - target 8.1 and 8.4 - along with their respective indicators, using the Doughnut model and the CEROI toolkit to identify possible changes to meet the critiques. For target 8.1, I will analyse how measuring growth in GDP will change if implementing alternative economies to the framework, and for target 8.4, I will focus on the decoupling of economic growth and environmental degradation from an alternative economic point of view. This chapter of my thesis is the section of my policy analysis where I assess and predict the policy outcome of the alternative solution to the SDG critiques.

### 4.1. Implementing alternative economic models on Goal 8

The SDGs is a high-level, general framework with specific targets and indicators within each goal. The targets within each goal are still high-level but more specific than the general goals. The indicators within each target are a tool to measure how close we are to reaching each target. In other words, the SDGs are organised into three levels – an overarching framework consisting of 17 goals, a level of 169 more specific targets, and 247 indicators to measure progress (The United Nations, 2023a). The United Nations Environment Program (UNEP) is the custodian for 25 of these indicators - among others for target 8, which are the overarching goal to be analysed in this chapter (UNEP, 2023). This means that UNEP is mandated to develop the methodologies, training materials and SDG data reporting mechanisms for these specific goals. The targets and indicators for goals within the UNEP mandate are, in other words, based on international provisions and discussion forums. This top-down approach neglects the importance of local decision-making and region-based relevance in Doughnut and Community Economies.

Implementing the Doughnut model and CEROI's community-based theory advocates for a bottom-up approach, where local decision-making is crucial to creating a holistic, distributive, and regenerative community that cares for the commons and promotes just, sustainable, and considerate economic systems. Such actions should be implemented at all levels, including

local/social, local/ecological, global/social, and global/ecological perspectives. In other words, decision-making must come from a bottom-up perspective to consider the unique challenges and needs of different regions, which are difficult to address within top-down and global decision-making. To clarify this implementation at all levels, the four place-based doughnut levels are used as a framework for this section.

#### **4.1.1. The four lenses of decision making.**

##### *The local, social lens*

From a local social lens, communities need to ask themselves what it will take for them to thrive, depending on the region. If applied in a developing country, where the social foundation is not met, one of the first steps towards people thriving would be meeting the targets of goal 8 – decent work and economic growth for all. This would allow the people in the region to earn the money to pay for the essentials for a decent life, such as food, housing and education. Inclusive growth promotes both gender and social equality, and it would, on a much higher-level secure education for all, as one of the main reasons why children are taken out of school is due to poverty (UNICEF MENA, 2014). In a developed country with well-established social foundations, the same focus on economic growth and decent work for all may not be as crucial, as most people would have already fulfilled these needs. Although unemployment remains an issue in developed countries, it does not require the same extensive focus on economic growth to meet the social needs of the region's people. In other words, the 8<sup>th</sup> SDG goal will have a much higher importance and impact on people in a developing region than in a developed region. These metrics also apply at a lower level, focusing on economic growth within regions or small communities. If implementing alternative economies, this means that high-income countries can redirect their focus from growth-focused to regenerative and distributive.

##### *The local, ecological lens*

If applying the local ecological lens to goal 8, we see that goal construction of the goal does not respect the ecological ceiling of the doughnut model. If asking the question: what would it mean for this specific territory to thrive in its natural habitat? - It is reasonable to assume that there would not be much natural habitat left to care for if the objects from goal 8 are to be reached. According to neoliberalism, investing in new markets is essential for growth (Harvey, 2005). However, this constant pursuit of growth leads to a cycle of even more growth. As discussed in Chapter 1, this never-ending growth requires infinite resources. And

in a society as reliant on scarce natural resources, as we are today, growth in many ways equates with high emissions and ecological degradation. By implementing the two alternative economic models, the focus will have to shift from growth dependent to growth-agnostic, where surplus will be redirected to produce well-being for people and the planet, creating a society where human thriving will not be dependent on economic growth and constant desire for more.

#### *From a global, social lens*

The global social lens addresses how the well-being of the global population is affected by local choices. The focus is on specific territories' responsibility for global impacts is questioned. What consequences will the choices made in one specific region have on populations elsewhere in the world? Consumption patterns have impacts on the populations working to produce or extract the resources needed for these consumptions. The well-being of people worldwide is not taken into consideration when the definition, and the consequences, of growth, are so vaguely put in the SDGs. The global social lens includes focusing on the working conditions of people working in sweatshops in India or Bangladesh to produce fast fashion for Western countries. It also opens to a focus on economic inequality in general. The distribution of food, resources, and medicines, and the general distribution of any amenity that can provide well-being.

#### *From a global, ecological lens*

From a global ecological lens, the focus is directed towards how the local community can respect the health of the whole plane, and the specific territories' responsibility for global environmental impacts is questioned. For example, does the region use more than its fair share of global resources? Does the region use a larger amount of the globe's capacity than other regions? This focus on responsibility goes beyond national climate goals and includes the problems wealthy regions and nations tend to relinquish responsibility for. Each region has to take responsibility for emissions they are responsible for, far beyond national borders, according to the alternative economy. Exported goods with high climate impact need to be accounted for by the country earning money for these goods.

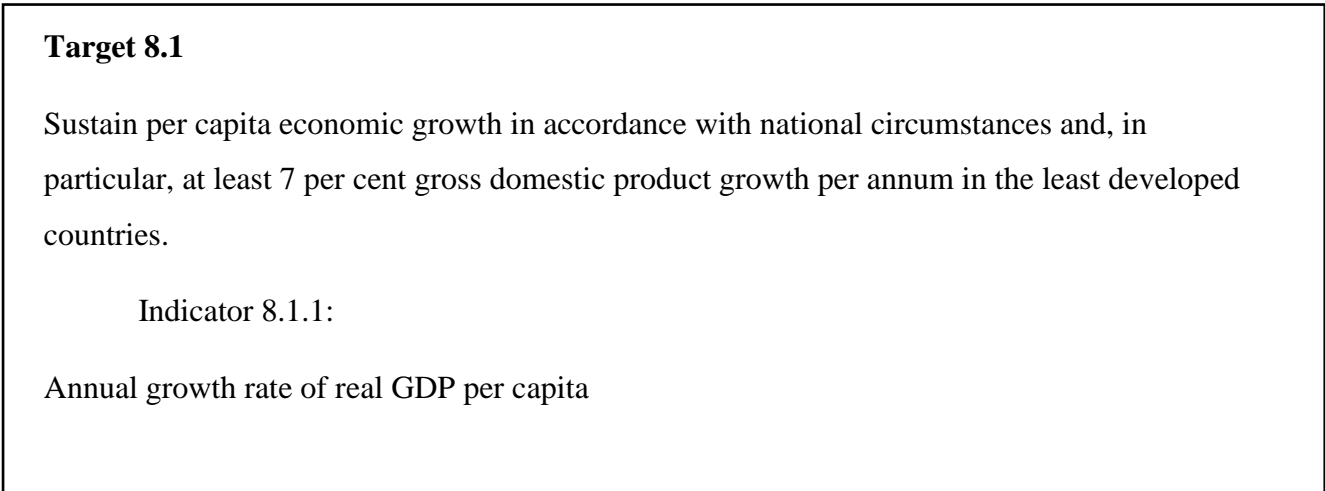
By implementing the doughnut model, these four lenses will lay the foundation for decision-making. Although this tool belongs to doughnut economies, it also fits in with the framework and value base for community economies and, thus also, the CEROI. However, by implementing the CEROI on top of this framework, the indicators will be constructed to

develop a cost/benefit analysis of what an implementation of the framework will mean for the well-being of all involved. Where the doughnut focuses on policies and implementation, the CEROI focuses on showing the actual value of these variables. We will return to this in the discussion chapter.

From having looked at goal 8 in its entirety, we will reach down at a deeper level to focus on the two selected targets and what effects the implementation of alternative economies to the framework will have on these targets and their indicators.

**4.2.Implementing alternative economic models to target 8.1.**

Implementing the Doughnut model to SDG goal number 8 - Promoting sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all, will lead to several structural changes for the goal as a whole. First, the Doughnut framework questions if sustainable growth is even possible. In her book, Raworth (2017) emphasises that the economic goal should be redesigned from growth-focused to regenerative and distributive by design, changing our mindsets from “growth addicted” to “growth agnostic”. This means that the economic system we all live within should focus on redistributing wealth, creating economies that let us thrive without being addicted to growth instead of focusing on growth rates and increased consumption. Economic growth is, by many, deemed as politically necessary for humanity to thrive. Still, the doughnut framework suggests stepping away from this assumption, focusing on an economy that provides us with what we need, but without the preconceived notion that it is problematic if growth is lower than a given percentage. Target 8.1. and the indicator connected to the target, indicator 8.1.1, is presented in Figure 5.



*Figure 5: Target 8.1. Source: (The United Nations, 2023b)*



Target 8.1. targets exactly what Raworth (2017) suggests separating from – sustaining economic growth measured in GDP. The Doughnut economy suggests an economy where instead of measuring economic growth and success through GDP, one should look at what it takes for humanity to thrive, bringing everybody into the doughnut. Raworth and the SDGs agree that the least developed countries will have an advantage in economic growth, as this will bring the population into a safe and just space for humanity. The reason for this is that it is the least developed countries that, in most cases, experience a deprivation of the social foundation, which means that human necessities such as food, shelter, education and electricity are not met. A focus on economic growth within these types of countries can lead to basic human needs being covered, which will push humanity into the doughnut. This is a way of levelling the playing field, which is why a focus on economic growth within doughnut economics is accepted in developing countries.

Gibson-Graham et al. (2013) emphasise through the CEROI how investment and growth can be accounted for using other variables than the classical, GDP-focused growth model does. The CEROI emphasises the investment of time, energy and imagination, for example, when being put into caring for the commons. The return on investment accounted for in the community economy is valued by the increase in well-being, reduced ecological footprint, and increased collective surplus. Put differently, if applying the CEROI to the annual growth rate of real GDP per capita, GDP would be re-imagined and re-drawn, including not just variables of paid labour and investments in capitalist projects but also accounting for volunteer work, bantering, investing energy into caring for the commons and so on. The CEROI would, in other words, redraw the picture of GDP, supporting growth-agnostic thinking through alternative variables and human connections.

#### **4.3. Implementing alternative economic models to target 8.4.**

Target 8.4. is a target that, in many ways, intertwines with SDG goal 12 - Ensure sustainable consumption and production patterns. Target 12.1 has almost the same wording as target 8.4. And for target 12.2. the same indicators are used as in target 8.4 (The United Nations, 2023c). This corresponds to the criticism regarding inconsistency and contradictions. When two goals are so similar on so many levels, it is natural to make assumptions that question the diversity and impact of the framework. Target 8.4 and its indicators 8.4.1 and 8.4.2 is presented in Figure 6.

**Target 8.4:**

Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.

*Indicator 8.4.1:* Material footprint, material footprint per capita, and material footprint per GDP

*Indicator 8.4.2:* Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP.

**Figure 6:** Target 8.4. Source: (The United Nations, 2023b)

Target 8.4 encourages countries to strive to decouple economic growth from environmental degradation through global resource efficiency in consumption and production in accordance with the 10-year framework for programs for sustainable consumption and production. The 10-Year Framework of Programmes on Sustainable Consumption and Production is a framework for action to accelerate the shift towards sustainable consumption and production (For more information, see: UNDESA, 2014). In target 8.4. the goal is to decouple economic growth from environmental degradation. This is a heavily debated topic, with researchers on each side debating whether it is possible or not. As elaborated on in the introduction chapter, there is a difference between relative and absolute decoupling, relative means that economic growth and co2 emissions still both rise but at a different speed, and absolute decoupling is that the two variables move in opposing directions, meaning economic growth and diminishing co2 levels (Parrique et al., 2019). Data from our world in data suggests that many countries have achieved economic growth while reducing emissions through decoupling energy use and replacing fossil fuels with low-carbon energy (Ritchie, 2021). Though this is great, this emissions reduction is still not significant enough. In fact, Parrique et al. (2019) state that there is no empirical evidence for an absolute, permanent, global, significant and fast enough decoupling of economic growth that is currently taking place. In other words, the question arises again: can sufficient absolute decoupling be compatible with an ever-growing

GDP? The doughnut suggests that there is a better option: simply put, stop relying on economic growth. Raworth suggests we stop measuring success in rising GDP and start looking at the Doughnut, as elaborated on under target 8.1. If looking at the doughnut, success is defined by an economy that:

“Promote human prosperity in a flourishing web of life so that we can thrive in the balance within the Doughnuts safe and just space. It starts with recognising that the household, the commons, the market and the state can all be effective means of provisioning for our many needs and wants and that they tend to work best when they work together” (Raworth, 2017, p. 287)

With both indicators within the target focusing on material footprint and material consumption per GDP, the same issues as analysed in target 8.1 comes up yet again – using a growth-based indicator to measure consumption is particularly reluctant; when GDP measures economic growth, the target for target 8.4 is decreasing environmental degradation and the way to get there is a decoupling between economic growth and given degradation. Global resource efficiency in consumption and production will, if using the framework of the Doughnut and the CEROI, mean cutting down on consumption. It sounds easy when put like that, but with the overlying focus on economic growth, it is nearly impossible. Both the Doughnut model and the Community Economies focused on CEROI, therefore, propose to redefine what economic success actually is and change the indicator system to focus on regional targets rather than material footprint per GDP.

#### **4.4. Summary of analysis**

In this chapter, SDG goal number 8 and the two targets 8.1 and 8.4 has been analysed with reference to the Doughnut model and the CEROI toolkit. The analysis took place on two levels – first, looking at goal 8 as a whole, analysing how an implementation of the alternative economic models could encourage a bottom-up, place-based policy instead of the top-down framework the SDGs are inspired by today. After looking at the goal in its entirety, targets 8.1 and 8.4 was analysed separately. For target 8.1. the analysis focused on the GDP-based measuring of economic growth and how alternative economies suggest looking beyond the GDP framework to measure people’s well-being instead of GDP within a country. Target 8.4 focus on decoupling economic growth while maintaining consumption and production at a high level. From the analyse, it was suggested that decoupling economic growth while focusing on the main issues with the growth focus – increased production and consumption –

is not compatible. If implementing alternative economic frameworks to the SDGs, the terms of a successful economy would look quite different than what it does today.

In the next chapter, chapter 5, these results will be discussed on the background of the critiques of the SDGs from Chapter 2.

## 5. Discussion

Based on the analysis in the previous chapter, alongside the critique of the SDG framework presented in Chapter 2, the discussion will build on these findings, trying to answer the research questions presented in the introduction. The research question is as follows:

1. In which ways can the implementation of alternative economic models help answer some of the critiques presented regarding the SDGs?
  - a. How will implementing the doughnut model and the CEROI toolkit affect the targeting of decoupling economic growth from environmental degradation in the SDGs?
  - b. How will implementing the doughnut model and the CEROI toolkit affect the SDG target to promote sustained, inclusive and sustainable economic growth?

Section, a and b of the research questions is, to some extent, already answered in the analyse chapter, where the implementation of the alternative economic models was analysed with reference to target 8.1 and 8.4. The discussion will, therefore, mainly seek to answer in which ways can the implementation of alternative economic models help answer some of the critiques presented regarding the SDGs.

### 5.1.Replying to the SDG critique

**RQ1:** In which ways can the implementation of alternative economic models help answer some of the critiques presented regarding the SDGs?

- *Inconsistency between the goals*

The critique regarding the inconsistency between the goals is on many levels based on them not being compatible with the overreaching sustainability focus. In the critique introduced in the theory chapter, it is suggested that instead of focusing on economic growth in GDP, the SDGs should focus on development and the people's and planet's well-being. From the analysis in Chapter 4, this is precisely what an implementation of the two alternative economic models aims to develop. The market-driven focus on growth in both production and consumption, related to a negative impact on CO<sub>2</sub> emissions, is in many ways stated as the e root cause of climate change and environmental deprivation in the critiques of the SDGs. If changing the SDGs from a growth-focused framework to a well-being-focused framework, the findings from the analysis support the assumption that the SDG framework would change from a framework based on capitalist assumptions and values to a framework based on targets

reflecting holistic well-being. Both the doughnut and the CEROI reflect these types of frameworks, focusing on investing in the future and caring for the commons. From analysing goal 8 and the two targets, there are three clear changes that would have led to this conversion:

- Changing from a top-down, outsider perspective to a bottom-up focused, place-based perspective
- Transitioning from a focus on economic growth and GDP to a focus on thriving within the doughnut
- Repositioning production growth to fit within the means of absolute decoupling.

These changes need to be implemented on all levels to have the most profound effect, which both the four lenses in the doughnut and the three spheres of change highlight. It is desirable to perform the same analysis on the remaining goals and targets to produce more data to base these assumptions on. Still, the inconsistency between the goals in Chapter 2 was mainly focused on the environmental part of the SDGs, specifically economic growth and increased consumption simultaneously as ecological sustainability. In addition, it is worth bearing in mind that the goals are very different, and although there should be an equal focus on achieving all the goals, some are vague and others solid. Some are relevant for people worldwide, while others may be based on specific societies, sectors and situations. Therefore, even if they are only based on specific targets, these results will, in many ways, be translatable to other objectives in the framework.

- *No concrete action plans.*

When discussing the lack of a concrete action plan within the SDG framework, it is debated that the top-down implementation of the goals limits the effect of the framework, as governments have had limited success in environmental governance. By implementing alternative economic models, one can argue that this top-down focused framework would have to give way to a bottom-up approach. This approach can work as the driving force to start implementing goals based on the three spheres of change through the personal, the political and the practical - through implementing action plans on all levels: the local/social, the local/ecological, the global/social and the global/ecological. Deliberate transformation (DT) defines transformative change not only as involving structural change but also as moving specifically in desirable directions, determined based on significant benefits to both

society and ecosystems, increased adaptive capacity, or empowerment and agency (Feola, 2015). From a bottom-up implementation of the framework, the three spheres of change will identify a change on all levels through dynamic interactions between the spheres. This suggests that, according to DT, community development would generate transformative action. Implementing the CEROI toolkit would further concretise an action plan by specifying and concretising the target indicators by implementing an actual cost/benefit analysis of factors that lead to ecological deprivation. By moving away from GDP and rather focusing on variables and factors that measure holistic well-being for both people and the planet, these indicators will be able to give more explicit incentives to states to take responsibility for their emissions. A focus on local place-based goals and variables would, as argued by Hajer et al. (2015), address actors of change much more directly, assumably leading to more efficient change-making.

- *Problems with collecting and quantifying data*

One of the main challenges within the critique regarding data collection is that many of the goals and targets can't be quantified, measured and monitored. The doughnut model implies that this need or aim of quantification of data is not very useful. On the contrary, it is suggested that giving up on this wish of comparability within the goals opens up transformative action that can be meaningful for specific communities and regions. The challenge of metrics within the goals is that the data aims to be comparable, constraining them while forcing regions of different climates, resources, traditions and cultures to fit into the same metrics. Further, the criticism of GDP as a way of measuring growth and success, and generally as a data source, is also a big part of the data collecting problem that alternative economic models can contribute to a solution to. From the analysis, the outcome of the implementation of the two alternative models changes this focus from a top-down focus to a place-based framework with room to localise targets.

High-income countries are missing out on the global-social lens and global-ecological lens when determining their ecological and social impact. From the analysis, we can see that by implementing the two alternative models, the four lenses will be implemented in the SDG framework, creating a bottom-up policy focus where each country has to take responsibility for both their global environmental impacts and the impact their consumption choices have on people elsewhere in the world.

The SDGs are built around what people are already measuring. Therefore, the indicators are built around what we already know, not necessarily what we need to learn. So then, what type of data do we need? One of the biggest contradictions with the SDG framework is that most of humanity can agree on the wording of the SDG goals but maybe not the indicators. Aiming for decent work for all, no poverty or hunger, sustainable cities, and peace and justice is something most people can get behind. But the plan for how we are going to reach these goals, and even more importantly, what reaching these goals will look like, is debatable. Derived from the debates and critiques regarding the SDGs, one approach to this could be that we need a new set of indicators, focusing on place-based, localised, bottom-up targets that focus on reaching a safe and just space for humanity through a focus on holistic wellbeing.

Carrying out these analyse with feminist lens results in perspective different from mainstream sustainability. Where mainstream sustainability often equals weak sustainability that leads to business as usual, this feminist lens advocates that you can't fix the problem with the tool that created the problem. Both doughnut and community economy are critiquing this mainstream perspective, coming from different lenses, suggesting a development-focused economy which brings them together (Cameron & Gibson-Graham, 2003; Cameron & Gibson-Graham, 2022; Gibson-Graham, 1996; Gibson-Graham et al., 2013; Raworth, 2017; Yates et al., 2022).

Where the doughnut is a big framework with international spread and many successful case studies in its portfolio, the CEROI is still an emerging, experimental toolkit. Three women scholars trained in economics and geography have, through feminist and development theory, coalesced in the same place, developing meaningful, productive, and proactive critics. Instead of just criticising, new ways of thinking are created, and a solution to the challenge is suggested.

## **5.2. Significance of the results**

From this discussion, it becomes clear that merely striving for GDP and export-led growth doesn't guarantee the overall well-being of both human societies and ecological systems; when solely focused on economic growth, the environment tends to suffer at the expense of fulfilling human needs. To promote the well-being of both humans and non-humans, a shift towards an alternative economy is necessary. This assumption is supported by a number of scholars (Gibson-Graham et al., 2013; Hajer et al., 2015; Raworth, 2017; Yates et al., 2022). The current methods used to measure progress towards achieving SDG goals often reinforce systems that encourage the use of scarce resources, as they rely on indicators embedded in the conventional business practices of growth-dependent policies. Unfortunately, global and



influential organisations tend to be responsible for determining goals, targets, and indicators tied to global economic policies of increased production, consumption, and resource extraction. Since indicators are simplified and generalised, they overlook local knowledge and ignore cultural and national differences. Indicators are not only problematic in terms of their cultural and local derivation, but they can also be culturally transformative in negative ways, encouraging subjectivities based on individualist quantification (Yates et al., 2022).

What would it look like if one had access to the kind of data needed to track the effects of the decision-making? Which direction would this guide decision for global, local and regional socio-ecological well-being? In many ways, the CEROI attempts to develop a place-based, adaptable, locally fitted tool for holistic and sustainable decision-making using holistic variables beyond the monetary systems we use today. This approach, in many ways, encourages shifting the focus within governance to start acknowledging the agency of more-than-human actors. In other words, political reorientation is needed to register these differences between regions, and the CEROI could be a good place to start.

### **5.3. Notes about the CEROI**

From the analysis, it becomes quite clear that the doughnut model is a larger framework that encompasses more details than what the CEROI does. It is worth mentioning that where the doughnut is a framework, the CEROI is a toolkit developed through community economies. It is important to remember here that the purpose of the analysis is not to compare the two alternative models but rather to look at how they complement each other. Where the doughnut is a way of raising questions across teams and a source of inspiration to identify new directions and aspects of approaches, the CEROI is a tool for analysing the return on investment when such alternative frameworks are implemented. Community economy returns are results that increase well-being, reduce ecological footprints, increase collective surplus, ethical trade, and expand commons - which is in many ways compatible with the goals of the doughnut model.

When conducting a CEROI, it is essential to remember whom one is trying to communicate. Different stakeholders and actors might be interested in different parts of the project, which means that it is important to evaluate which variables to include in the model and how to process them. For example, if presenting suggestions to stakeholders as an ideal organisation, public funding might be viewed as the cost of the project – as this is all the funds the organisation is able to use. In other words, the costs of the project cannot exceed the funding.

On the other hand, if results were to be presented to the public administrations providing the funding, it might be better to conduct the CEROI using the actual costs of each project, as this is what is taken into account when funding is to be assessed and calculated.

There are both positive and negative consequences of the lack of definition when it comes to the placement of the data. First off, it makes the tool, in many cases, less rigorous. This means that the model can be tweaked and bent to produce a specific outcome. Therefore, it is essential to provide a proper explanation of why the variables are defined and placed as they are when conducting a CEROI analysis. On the other hand, the possibility of assessing where the variables should be placed can lead to a more holistic presentation and understanding of the variables in the project. Having to actively deal with how the variables influence the result can further lead to a better understanding of the project as a whole.

#### **5.4. Summary of Discussion**

The points made in this discussion suggest that future policy and efforts should, as also Swain (2018) points out, shift the focus from consumption-based economic growth to investment in human well-being and environment-friendly technologies. We don't have time to sit quietly in the boat and wait for scientists to invent a technological solution to all these problems. Moreover, it is unlikely that there is a singular invention that will be the solution to all these intricate problems, but rather a transformation of a number of variables and indicators that today are pointing towards the status quo. For this transformation to occur, bottom-up-focused frameworks are crucial for both assessing change and implementing it. Yates et al. (2022) argue that place-based decision-making tools and wellbeing-led governance can lead to something more than business as usual, as human (and environmental-centred) metrics are not some that fall under the SDGs in the way the targets are framed today.

## 6. Conclusion

When a problem comes up, especially a really big one, it is easy to reach for a “silver bullet solution”. The truth is that no one answer can fix all the problems we face regarding climate or humanitarian crises, but rather lots of different ones working together – kind of like baking a cake. The comparison of food and models within alternative economics is frequent, but it is perhaps not so strange as it is one of the fundamental cornerstones of human existence. In honour of these repeated analogies, this thesis will end with yet another such comparison. The contribution of each ingredient makes a dish what it is. Too much of one ingredient gives you a dry, flavourless crumble; too much of the other gives you a runny, sticky mush. In this case, the ingredients are the metaphor for climate solutions. Some require patience, some need to be handled with care, and most of them require collaboration. Collaboration between humans, sectors, and governments, between local and global decision-making, and between big stakeholders and local associations. And just like how you would never eat a spoonful of salt, or drink a decilitre of oil on its own, land conservation, renewable energy, ocean clean-ups and preservation of the rain forest, will not alone solve the climate crisis or the deprivation of the social foundation, but rather the combination of all of these working together.

Both the doughnut model and the CEROI analysis framework can work as important ingredients for stepping out of the capitalist model that the world economy today reflects. The models both support the idea of an economy that values variables that today are invisible in our financial systems. To reach the 2030 sustainability goals, it is clear that something has to change, and implementing these tools in our economic frameworks can help provide results that support sustainable development. While the SDGs and their targets can be problematic, a sustainable way of critiquing them will be further to develop alternatives to the problematic parts of the framework. In order to contribute to transformative processes, one should aim to engage in these processes, conducting research to contribute to the solution rather than just the critiques.

The results of the analysis imply that by recognising and including alternative economic models and theories in the SDGs, a more straightforward action plan can be arranged through a bottom-up focus on doughnut solutions. The CEROI can contribute to facilitating a framework where data embedding will look very different than it does today, as the focus will be able to shift from "what do we think globally" to "what do we need locally". Furthermore, the inconsistency between the goals can be minimised by implementing a holistic well-being

focus where the well-being of both people and the planet come first. It must clearly function as a beacon for the framework as a whole.

For target 8.1. it has been a consistent element that GDP is a poor measure for measuring the overall well-being of the planet and those who live on it. Implementing the alternative economic models in this thesis suggests moving the focus from growth dependent to growth-agnostic, which means that whether we thrive as humanity is not determined by economic growth.

For target 8.4. it has been discussed that without reassessing economic growth as a goal, decoupling economic growth from environmental degradation will be very difficult. It is therefore proposed to redefine economic success and change the indicator system to focus on regional targets rather than material footprint per GDP.

The SDGs, however flawed they are, is an international framework that has received broad support. Part of the reason for this may be the weak promises and the lack of concrete action plans. But however banal it sounds, a common agreement on something might be better than no agreement. As Raworth herself points out: it's no point criticising something if one doesn't have an alternative to a solution. In this thesis, I have argued that implementing the Doughnut model and the CEROI toolkit could help some of the SDGs critiques by using two specific targets from the 8<sup>th</sup> goal as examples.

Further research could involve analysing the rest of the SDG goals and their targets based on these two alternative models. It could also be interesting to link the CEROI and Donut models together in a case study to collect data on how they work together. An effective way to do this could be to introduce the CEROI in already existing "doughnut cities". Other frameworks useful to carry this research even further is the doughnut enrolled, which is a further development of the "doughnut cities" project. Carrying out further research to pinpoint if, and precisely where, the CEROI might fit within The Doughnut Model, is also interesting and very useful research to focus on in the future.

## 7. Sources

- Beddoe, R., Costanza, R., Farley, J., Garza, E., Kent, J., Kubiszewski, I., Martinez, L., McCowen, T., Murphy, K., Myers, N., Ogden, Z., Stapleton, K., & Woodward, J. (2009). Overcoming systemic roadblocks to sustainability: The evolutionary redesign of worldviews, institutions, and technologies. *Proceedings of the National Academy of Sciences*, 106(8), 2483-2489. <https://doi.org/doi:10.1073/pnas.0812570106>
- Berlin, D. (2021, April, 19, 2021). *Designing the Doughnut: A Story of Five Cities*. Doughnut Economics Action Lab. <https://doughnuteconomics.org/stories/93>
- Brandt, B. (1995). *Whole Life Economics: Revaluing Daily Life*. New Society Publishers.
- BrusselsDonut. (2023). *Together for an ecological and fair transition in Brussels*. BrusselsDonut. <https://donut.brussels/en/homepage/>
- Butzer, K. W. (2012). Collapse, environment, and society. *Proceedings of the National Academy of Sciences*, 109(10), 3632-3639. <https://doi.org/doi:10.1073/pnas.1114845109>
- Cameron, J., & Gibson-Graham, J. K. (2003). Feminising the Economy: Metaphors, strategies, politics. *Gender, Place & Culture*, 10(2), 145-157. <https://doi.org/10.1080/0966369032000079569>
- Cameron, J., & Gibson-Graham, J. K. (2022). THE DIVERSE ECONOMIES APPROACH. In F. Stilwell, D. Primrose, & T. B. Thornton (Eds.), *Handbook of Alternative Theories of Political Economy*. Edward Elgar.
- Cchange. (2023). *The three spheres of transformation*. <https://cchange.no/about/the-three-spheres-of-transformation/>
- CommunityEconomies. (2023). *About*. <https://www.communityeconomies.org/about>
- Crang, M., & Cook, I. (2007). *Doing Ethnographies* SAGE Publications Inc.
- Deutch, J. (2017). Decoupling Economic Growth and Carbon Emissions. *Joule*, 1(1), 3-5. <https://doi.org/https://doi.org/10.1016/j.joule.2017.08.011>
- Dissaux, T., Lestré, T. D., Malchair, L., Nalpas, D., Nevens, L., Roman, P., Thiry, G., & Infante, L. F. V. (2021a). *GUIDE 1: SUMMARY OF THE RESULTS*. BrusselsDonut. <https://donut.brussels/wp-content/uploads/2022/10/Cahier1EN.pdf>
- Dissaux, T., Lestré, T. D., Malchair, L., Nalpas, D., Nevens, L., Roman, P., Thiry, G., & Infante, L. F. V. (2021b). *GUIDE 2: THE LESSONS FOR THE BRUSSELS REGION*. BrusselsDonut. <https://donut.brussels/wp-content/uploads/2022/10/Cahier2EN.pdf>
- Dombroski, K., Diprose, G., Conradson, D., Healy, S., & Watkins, A. (2018). *When Cultivate Thrives: Developing Criteria for Community Economy Return on Investment* (Milestone Report No. 1). T. a. C. P. D. U. W. t. T. C. E. Building Better Homes. <https://ir.canterbury.ac.nz/bitstream/handle/10092/18031/Cultivate%20Report%20No.1%20FINAL.pdf?sequence=2&isAllowed=y>
- Dombroski, K., Diprose, G., Conradson, D., Healy, S., & Watkins, A. (2019). *Delivering Urban Wellbeing through Transformative Community Enterprise* (Final Report). T. a. C. P. D. U. W. t. T. C. E. Building Better Homes. <https://ir.canterbury.ac.nz/bitstream/handle/10092/100656/Dombroski%20et%20al.%20Delivering%20Urban%20Wellbeing%20Through%20Transformative%20Community%20Enterprise%20final%20report.pdf?sequence=2&isAllowed=y>
- Dunn, W. N. (1981). *Public Policy Analysis: An Introduction*. Prentice-Hall. <https://books.google.no/books?id=tqXrAAAAMAAJ>
- Dunn, W. N. (2015). *Public policy analysis*. Routledge.
- Dunn, W. N. (2017). *Public Policy Analysis: An Integrated Approach*. Taylor & Francis. <https://books.google.no/books?id=1FgPEAAQBAJ>

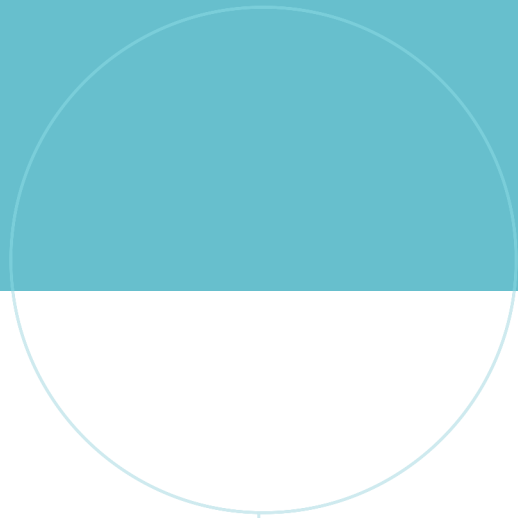
- Easterly, W. (2015, Nov 2015). The Trouble with the Sustainable Development Goals. *Current History*, 114(775), 322-324. <https://www.proquest.com/magazines/trouble-with-sustainable-development-goals/docview/1728619895/se-2?accountid=12870>
- [https://bibsyst-almaprimo.hosted.exlibrisgroup.com/openurl/NTNU\\_UB/NTNU\\_UB\\_services\\_page?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Aartshumanities&atitle=The+Trouble+with+the+Sustainable+Development+Goals&title=Current+History&issn=00113530&date=2015-11-01&volume=114&issue=775&spage=322&au=Easterly%2C+William&isbn=&jtitle=Current+History&bttitle=&rft\\_id=info:eric/&rft\\_id=info:doi/](https://bibsyst-almaprimo.hosted.exlibrisgroup.com/openurl/NTNU_UB/NTNU_UB_services_page?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Aartshumanities&atitle=The+Trouble+with+the+Sustainable+Development+Goals&title=Current+History&issn=00113530&date=2015-11-01&volume=114&issue=775&spage=322&au=Easterly%2C+William&isbn=&jtitle=Current+History&bttitle=&rft_id=info:eric/&rft_id=info:doi/)
- Elisha, O. (2021). Resources Scarcity and Sustainable Economic Growth.
- Evans, J. P. (2011). Resilience, ecology and adaptation in the experimental city. *Transactions of the Institute of British Geographers*, 36(2), 223-237. <https://doi.org/https://doi.org/10.1111/j.1475-5661.2010.00420.x>
- FAO. (2022). *The State of World Fisheries and Aquaculture 2022* (The State of World Fisheries and Aquaculture (SOFIA), Issue. FAO.
- Feola, G. (2015). Societal transformation in response to global environmental change: A review of emerging concepts. *Ambio*, 44(5), 376-390. <https://doi.org/10.1007/s13280-014-0582-z>
- Fischer, F. (2003). *Reframing Public Policy: Discursive Politics and Deliberative Practices* [Book]. OUP Oxford. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=176953&site=ehost-live&scope=site>
- Gibson-Graham, J. K. (1996). *The End of Capitalism (As We Knew It): a feminist critique of political economy*. Blackwell Publishers.
- Gibson-Graham, J. K., Cameron, J., & Healy, S. (2013). *Take Back the Economy*. The University of Minnesota Press.
- Graham, J., Healy, S., & Byrne, K. (2002). CONSTRUCTING THE COMMUNITY ECONOMY: CIVIC PROFESSIONALISM AND THE POLITICS OF SUSTAINABLE REGIONS. *The Journal of Appalachian Studies*, 8(1), 50-61. [https://www.communityeconomies.org/sites/default/files/paper\\_attachment/Constructing%20the%20Community%20Economy.pdf](https://www.communityeconomies.org/sites/default/files/paper_attachment/Constructing%20the%20Community%20Economy.pdf)
- Greenberg, C. (2022, 5. September 2022). *Amazon rainforest fires 2022: Facts, causes, and climate impacts*. Greenpeace. <https://www.greenpeace.org/international/story/55533/amazon-rainforest-fires-2022-brazil-causes-climate/>
- Griffith, R., Mitchell, M., Walkerden, G., Brown, V., & Walker, B. (2010). *Building a Framework for transformative action in the Wakool Shire (Transformation for resilient landscapes and communities project Working Paper 1)*. W. a. S. Institute for Land, Charles Sturt University. [https://cdn.csu.edu.au/\\_data/assets/pdf\\_file/0005/702860/61\\_Wakool\\_report.pdf](https://cdn.csu.edu.au/_data/assets/pdf_file/0005/702860/61_Wakool_report.pdf)
- Hajer, M., Nilsson, M., Raworth, K., Bakker, P., Berkhout, F., Boer, Y. d., Rockström, J., Ludwig, K., & Kok, M. (2015). Beyond Cockpit-ism: Four Insights to Enhance the Transformative Potential of the Sustainable Development Goals. *Sustainability*, 7(2), 1651-1660. <https://doi.org/https://doi.org/10.3390/su7021651>
- Harvey, D. (2005). *A Brief History of Neoliberalism* Oxford University Press Inc.
- Healy, S. (2009). Economies, Alternative. In R. Kitchin & N. Thrift (Eds.), *International Encyclopedia of Human Geography* (3 ed., pp. 338-244). Oxford: Elsevier.

- [https://www.communityeconomies.org/sites/default/files/2018-12/Healy\\_2009\\_Alternative\\_Economies.pdf](https://www.communityeconomies.org/sites/default/files/2018-12/Healy_2009_Alternative_Economies.pdf)
- Henderson, H. (1991). *Paradigms in Progress: life beyond economics*. Knowledge Systems Inc.
- Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*, 3(2), 82-90.  
<https://doi.org/10.1108/13522750010322089>
- IPCC. (2022). *Climate Change 2022: Impacts, Adaptation and Vulnerability*. C. U. Press.
- ISCU, & ISSC. (2015). *Review of the sustainable development goals: The science perspective*. I. C. f. S. (ICSU). <https://resourcecentre.savethechildren.net/pdf/sdg-report.pdf/>
- Johnson, J. T., & Madge, C. (2021). Empowering Methodologies: Feminist and Indigenous Approaches. In I. Hay & M. Cope (Eds.), *Qualitative Research Methods in Human Geography* (5th ed., pp. 60-78). Oxford University Press.
- Kapoor, R. (2007). Transforming self and society: Plural paths to human emancipation. *Futures*, 39, 475-486.
- Lab, T. G. (2019). *Welcome to The Green Lab*. The Green Lab. <https://thegreenlab.org.nz/>
- Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The Lancet*, 358(9280), 483-488. [https://doi.org/10.1016/S0140-6736\(01\)05627-6](https://doi.org/10.1016/S0140-6736(01)05627-6)
- Meltzer, R., & Schwartz, A. (2018). *Policy Analysis as Problem Solving: A Flexible and Evidence-Based Framework*. Taylor & Francis.  
<https://books.google.no/books?id=uloPEAAAQBAJ>
- MENA, U. (2014). *Regional Report on Out-of-school Children*. UNICEF.  
[https://www.unicef.org/mena/media/6711/file/Middle%20East%20and%20North%20Africa%20Region%20Out-of-School%20Children%20Report%20\(2015\).pdf%20.pdf](https://www.unicef.org/mena/media/6711/file/Middle%20East%20and%20North%20Africa%20Region%20Out-of-School%20Children%20Report%20(2015).pdf%20.pdf)
- Ministry of Agriculture, F. a. R. A., Canada (2023). *Urban Agriculture Business Information Bundle*. <http://omafra.gov.on.ca/english/livestock/urbanagbib/welcome.htm>
- Mintrom, M. (2012). *Contemporary Policy Analysis*. Oxford University Press.  
<https://books.google.no/books?id=HZiuAAACAAJ>
- Naidoo, R., & Fisher, B. (2020). Reset Sustainable Development Goals for a pandemic world. *Nature*, 583, 198-201. <https://doi.org/https://doi.org/10.1038/d41586-020-01999-x>
- NERC. (2022). *Guidelines for Research Ethics in the Social Sciences and the Humanities*. T. N. N. R. E. Committees. <https://www.forskningsetikk.no/globalassets/dokumenter/4-publikasjoner-som-pdf/guidelines-for-research-ethics-in-the-social-sciences-and-the-humanities.pdf>
- Norwegian Ministry of Finance. (2021). *Long-term Perspectives on the Norwegian Economy 2021*. Retrieved from  
<https://www.regjeringen.no/contentassets/91bdfca9231d45408e8107a703fee790/en-gb/pdfs/stm202020210014000engpdfs.pdf>
- O'Brien, K. (2012). Global environmental change II: From adaptation to deliberate transformation. *Progress in Human Geography*, 36(5), 667-676.  
<https://doi.org/10.1177/0309132511425767>
- O'Brien, K., & Sygna, L. (2013). Responding to climate change: The three spheres of transformation.  
[https://www.researchgate.net/publication/309384186\\_Responding\\_to\\_climate\\_change\\_The\\_three\\_spheres\\_of\\_transformation](https://www.researchgate.net/publication/309384186_Responding_to_climate_change_The_three_spheres_of_transformation)
- Ochieng, P. A. (2009). An analysis of the strengths and limitations of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13, 13.
- OECD. (2023). *Gross domestic product (GDP)*. OECD. Retrieved 01.04.2023 from  
<https://data.oecd.org/gdp/gross-domestic-product-gdp.htm>

- Parrique, T., Barth, J., Briens, F., Kerschner, C., Kraus-Polk, A., Kuokkanen, A., & Joachim H. Spangenberg. (2019). *Decoupling Debunked: Evidence and arguments against green growth as a sole strategy for sustainability*. [https://gaiageld.com/wp-content/uploads/2021/04/decoupling\\_debunked\\_evidence\\_and\\_argumen.pdf](https://gaiageld.com/wp-content/uploads/2021/04/decoupling_debunked_evidence_and_argumen.pdf)
- Petrescu, D., Petcou, C., Safri, M., & Gibson, K. (2021). Calculating the value of the commons: Generating resilient urban futures. *Environmental Policy and Governance*, 31(3), 159-174. <https://doi.org/https://doi.org/10.1002/eet.1890>
- Raworth, K. (2017). *Doughnut economics: seven ways to think like a 21st century economist*. Random House Business.
- Rist, R. C. (2000). Influencing the policy process with qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 1001-1017). Sage Publications, Inc.
- Ritchie, H. (2021, 01.12.2021). *Many countries have decoupled economic growth from CO<sub>2</sub> emissions, even if we take offshored production into account*. Our World In Data. <https://ourworldindata.org/co2-gdp-decoupling>
- Ritchie, H., & Roser, M. (2022). Energy mix. *Our World In Data*.
- Roser, M. (2021, 13. May 2021). *What is economic growth? And why is it so important?* Our world in data. <https://ourworldindata.org/what-is-economic-growth>
- Schumacher, E. F. (1973). *Small is Beautiful: a study of economics as if people mattered*. Blond & Briggs.
- Spaiser, V., Ranganathan, S., Swain, R. B., & Sumpter, D. J. T. (2017). The sustainable development oxymoron: quantifying and modelling the incompatibility of sustainable development goals. *International Journal of Sustainable Development & World Ecology*, 24(6), 457-470. <https://doi.org/10.1080/13504509.2016.1235624>
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855. <https://doi.org/doi:10.1126/science.1259855>
- STWD. (2015). Beyond the Sustainable Development Goals: Uncovering the truth about global poverty and Demanding the universal realisation of Article 25. In.
- Swain, R. B. (2018). A Critical Analysis of the Sustainable Development Goals. In W. Leal Filho (Ed.), *Handbook of Sustainability Science and Research* (pp. 341-355). Springer International Publishing. [https://doi.org/10.1007/978-3-319-63007-6\\_20](https://doi.org/10.1007/978-3-319-63007-6_20)
- The United Nations. (2015, 21.10.2015). *Transforming our world: the 2030 Agenda for Sustainable Development* <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>
- The United Nations. (2023a). *The 17 Goals*. <https://sdgs.un.org/goals>
- The United Nations. (2023b). *Goal 8*. <https://sdgs.un.org/goals/goal8>
- The United Nations. (2023c). *Goal 12*. <https://sdgs.un.org/goals/goal12>
- Treasury, H. (2022). *The Growth Plan 2022*. T. C. o. t. E. b. C. o. H. Majesty. <https://www.gov.uk/government/publications/the-growth-plan-2022-documents/the-growth-plan-2022-html>
- U.S. Global Change Research Program. (2022). *Extreme Weather*. U.S. Global Change Research Program. <https://nca2014.globalchange.gov/highlights/report-findings/extreme-weather>
- UNDESA. (2014). *The 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP)* D. f. S. Development. [https://sustainabledevelopment.un.org/content/documents/1444HLPF\\_10YFP2.pdf](https://sustainabledevelopment.un.org/content/documents/1444HLPF_10YFP2.pdf)



- UNECE. (2021). *Is the UNECE region on track for 2030?* U. Nations. <https://unece.org/sites/default/files/2021-03/SDG-Report%202021-withcovers.pdf>
- UNEP. (2011). *Decoupling natural resource use and environmental impacts from economic growth, A Report of the Working Group on Decoupling to the International Resource Panel.* U. N. E. Programme. <https://www.resourcepanel.org/reports/decoupling-natural-resource-use-and-environmental-impacts-economic-growth>
- UNEP. (2023). *Sustainable development goals.* Retrieved 01.05.2023 from <https://wesr.unep.org/article/sustainable-development-goals-0#:~:text=The%20SDG%20framework%20has%20a,of%20which%20are%20environment%20related.>
- Yates, A., Dombroski, K., & Dionisio, R. (2022). *Dialogues for wellbeing in an ecological emergency: Wellbeing-led governance frameworks and transformative Indigenous tools.* <https://journals.sagepub.com/doi/abs/10.1177/20438206221102957>



 **NTNU**

Norwegian University of  
Science and Technology