

# **Ecolabels: On the Money?**

A Policy Evaluation of Eco-labels for Retail Investment Products in  
the EU

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## **Abstract**

To catalyse transition toward a more sustainable economy, the European Union is proposing several policy interventions within the regulatory framework governing the financial sector. As part of this effort, a new EU Eco-label policy for green investment funds seeks to (i) facilitate individual investor participation in the sustainable investment market and (ii) increase private sector investments in sustainable assets. Using a program theory evaluation, this thesis analysed the efficacy and legitimacy of eco-labels for investment products to achieve the stated policy goals. Through a qualitative content analysis (QCA) and expert interviews (n= 13) this thesis examined the experience of existing labels in the EU, and potential challenges and opportunities that might present for effective eco-label implementation in the context of investment products. The resulting analysis revealed that (i) eco-labels can be effective means to facilitate certain sustainable investment activities such as critical mass positioning, individual positioning and market signalling, but (ii) a label's potential to trigger positive outcomes may be limited by trade-offs between aspects of the label's design and its acceptability among market actors. As more sustainable finance policies emerge in the EU, considerations related to harmonizing environmental impact measurement and reporting practices among all actors in the investment chain will be critical if they are to be both relevant to the financial industry and drive the market towards positive environmental impacts.

**Keywords:** eco-labelling, sustainable investments, sustainable finance, green investments, program theory evaluation, reverse logic analysis

## Executive Summary

### **Problem Definition**

Accelerating the transition to a climate-resilient and resource-efficient economy will require significant investment capital re-deployment and new financial resources directed towards sustainable activities, such as increases in renewable energy investments of between €1 and €2 trillion per year. Building on the momentum created by the Paris Agreement and the Sustainable Development Goals (SDGs), the EU has committed to addressing this challenge through numerous proposed policy reforms that aim to integrate sustainability within the regulatory framework governing the financial sector. Among these proposals is an EU Eco-label for *green* investment funds, which seeks to (i) facilitate individual investor participation in the sustainable investment market and (ii) increase private sector investments in sustainable assets.

However, while regulations aimed at embedding sustainable practices within the financial sector appear consistent with various policy discourses (e.g. green economy) and agendas (e.g. climate transition, sustainable development), aligning a financial system comprised of thousands of institutional participants and billions of individual market participants towards a common *sustainability* goal has proven to be a complex challenge for policymakers.

Mobilizing and directing capital towards ‘green’ investments appears to pose several challenges for policymakers as certain green investment strategies can represent a departure from more mainstream SRI and ESG investment practices either because they are seen as *too risky* or *not financially competitive*. Due to inherent logics in the industry, system-level challenges can limit policy effectiveness in shifting the sustainable investment market from a focus on sustainable investing as a risk mitigation tool towards a focus on deriving positive social and environmental results through investments.

### **Objective & Methodology**

The objective of this thesis was to consider how alternative eco-label program designs can create mechanisms of change in the context of investment products. The overarching research questions that guided the evaluation were:

1. How (and to what extent) might eco-label program performance be influenced by contextual factors relevant to the financial investment market?
2. How can eco-label programs be designed to effectively achieve policy goals in the context of the EU investment market?

For that purpose, this thesis conducted a Program Theory Evaluation, which is defined as an evaluation that “explicitly integrates and uses stakeholder, social science, or a combination of theories in conceptualizing, designing, conducting, interpreting, and applying an evaluation” (Coryn et al., 2011:201).

### **Methods for Data Collection & Analysis**

The data collection process consisted of various concurrent processes including a literature review of eco-labels, program theory evaluation and sustainable investing; exploratory, unstructured interviews (n= 4) with relevant experts to guide research iterations; semi-structured interviews (n= 9) to examine the mechanisms of the program and the context under study; and key document collection using a snowballing method.

Open-ended interviews were conducted with experts to develop an understanding of the eco-label's logic model and select stakeholders in order to identify the desired effects and key issues that would be explored in the evaluation. Semi-structured interviews were conducted with eco-label issuers as well as potential eco-label users to gauge potential program efficacy and legitimacy based on the parameters set.

A pre-set coding frame, consisting of two code levels, was initially developed following the initial literature review, and the frame was revised on an iterative basis as emergent codes developed. The final coding structure was used to guide transcript and document analysis.

The program theory analysis and evaluation were guided by a reverse logic analysis (RLA) method which “uses scientific knowledge to evaluate the validity of the intervention's theory and identify promising alternatives to achieve the desired effects” (Rey et al., 2012:62). The RLA processes for analysis and evaluation consisted of the following steps:

3. **Logic Model Development:** Initial exploratory research was used to uncover and synthesize relevant social science and program theory regarding eco-labels. Drawing from ecological modernisation theory, institutional theory and legitimacy theory, as well as from prior eco-label program theory evaluations, a preliminary eco-label program model, consisting of interactions between program inputs, outputs and various intended outcome stages was developed and used to identify issues related to the program to be explored.
4. **Conceptual Framework:** A qualitative content analysis and expert interviews (n=13) contributed to the development of a conceptual framework, consisting of alternative program outputs, causal mechanisms and relevant contextual conditions. The framework was used to assess three existing eco-labels for investment products in the EU: the Nordic Swan Label (Scandinavia), the LuxFlag Environment Label (Luxembourg) and the TEEC Label (France), and to guide a context analysis of the EU investment market.
5. **Program Evaluation:** The program theory was then revisited, and alternative scheme designs were evaluated for their potential to trigger alternative causal mechanisms. Concurrently, contextual forces within the retail investment sector were explored based on their potential to influence program design.

## **Findings**

### ***Causal Mechanisms Underlying Eco-Label Program Theory***

The thesis findings show that, among policymakers and asset managers who aim to improve sustainability related practices among industry participants, a number of alternative strategies, methods, and triggering mechanisms are employed, which can include:

1. Greater **market uptake** in sustainable investments, which is seen by some policymakers and asset managers as a means to trigger improved impact measurement and environmental performance across the industry (*critical mass positioning*), which could improve environmental performance through more sustainability-minded practices among investors and companies. An example of this process is the experience of the green bond principles, which several industry experts suggested have triggered greater participation in the green bond market, which has helped facilitate improvements to product (bond) quality in addition to market uptake as a result.

2. Increased **transparency and disclosure** requirements with respect to the sustainability strategies and activities that asset managers engage in are viewed by policymakers and certain sustainability-focused industry coalitions as a means to provide investors with more accurate information, which may reduce participation costs associated with misaligned strategies and inaccurate performance reporting (*signalling*). More fulsome process disclosure may also trigger a reduction in information search costs for investors in identifying portfolios that cater to their needs and in turn, may promote greater knowledge among asset managers regarding sustainability and sustainable investment.
3. **Improved measurement and reporting** practices with respect to specific environmental impacts of pooled investment funds is believed by some to trigger increased investor participation in (and greater loyalty towards) impact investments (*individual positioning*).

### ***Eco-label Programs***

Eco-label programs for investment products can trigger a number of different mechanisms to drive these and other impact-oriented strategies among the investment market. A common thread among all labels evaluated is their intention to provide consumers with greater exposure to sustainable finance activities. This is done through third-party certification, which aims to provide a competitive advantage for asset managers and is intended as a means to galvanize greater reporting and promotion of their sustainability efforts. In return, these labels also aim to provide consumers with greater transparency and clarity with respect to the desirability of the sustainable investment practices used in portfolio formation as a mechanism towards reducing information asymmetry and associated search costs.

Similarly, eco-label criteria and oversight are employed as a means to trigger increased transparency among asset managers with respect to the sustainability strategies and practices used in portfolio management. This is seen as a potential mechanism towards unlocking greater market participation among retail investors. All of the eco-labels examined incorporated at least some requirements that non-financial strategies be clearly communicated to investors.

Among certain policymakers and industry experts, there is the belief that increasing participation and awareness among asset managers with respect to sustainable investment strategies will trigger improvements in those strategies as more producers enter the market. To that end, certain policymakers interviewed saw eco-labels as a means to facilitate that transition, or at least signal to investors that the investment community is taking steps to align industry practise with socially acceptable norms through credible and stringent ***process standards criteria***. These process criteria are intended to serve, in part, as a mechanism for re-establishing trust among market participants in the investment market.

Interviews with experts and officials, and official position statements with the investment sector reveal that more fulsome, accurate and transparent reporting on how funds and strategies are making an impact in the real economy are seen as a means of triggering more 'impact' investments. According to this logic, eco-labels that sets stringent criteria with respect to the manner and methods by which asset managers measure and report on fund impacts (towards environmental issues) may indirectly drive the market by increasing (and improving) transparency across the investment chain through: i) improved data collection and analysis methodologies; and ii) improved corporate disclosure materiality. The above process is also believed by certain policymakers to have a spill-over effect into the quality of investment impact measurement.

### ***Program Trade-offs***

While all label designs examined aimed to generate greater transparency with respect to certain sustainable investment processes, trade-offs were identified between the alternative mechanisms employed that may curtail program effectiveness depending on the intended outcomes:

1. Stringent impact measurement and disclosure practices might cause increased administrative fees for asset managers who may be forced to engage in certain reporting activities in compliance with label standards they otherwise would not have. An increase in asset manager fees could lead to a decrease in investor participation in those funds, however they may also trigger increased fund loyalty among certain investors, which could theoretically reduce erratic investor behaviour and promote *long-termism*.
2. Based on interviews and policy review, the research suggests that alignment of sustainable investment strategies (for asset managers) and eco-label development (for policymakers) with international agreements such as the SDGs is believed to increase the attractiveness of the strategy or policy given its potential to trigger positive marketing to investors. A concern echoed by several interview subjects and through document analysis is that, aligning policies and strategies around international goals and commitments may trigger an increase in sustainable investment without leading to corresponding improvements to real economy impacts (referred to as ‘impact dilution’) if investment strategies and policy measures are not coupled with stringent and scientifically valid impact measurement criteria.
3. An eco-label that focuses on impact measurement standards aligned with a taxonomy of sustainable activities might have the desired effect of achieving additionality through triggering new funds created for the purpose of aligning investors with label standards, however based on the data collected for this thesis, it is possible that criteria which limit asset manager flexibility (such as by restricting the investible universe or prescribing certain investment activities) are less likely to be accepted by many in the industry on the asset management side.

### ***Implications for EU-Wide Program Design***

From the interview data and documents examined, a consensus among industry actors and policy makers emerged that increasing efforts to trigger harmonization in the reporting and disclosure processes used by actors within the field of sustainable investments is a legitimate and relevant policy goal. Doing so, according to the prevailing logic observed, may also trigger greater improvements across the investment chain with respect to sustainable practices and may ultimately serve to reduce participation barriers for both retail investors and asset managers through high quality standards with respect to sustainable investments.

This may have the following implications for eco-label design at the EU-wide level:

- a) In setting eligibility standards with respect to sustainable investment transparency standards for an EU-wide eco-label for investment products, a policy that implements stringent criteria with respect to non-financial reporting and disclosure processes that managers must use in fund construction and management is not likely to experience



decreases in expected participation among market actors. Further, an EU-wide label which applies stringent criteria related to reporting and disclosure may trigger a greater amount of asset manager participation in the same program (or multiple programs) implemented at the national level, as the costs of complying with multiple national standards was identified through interviews and in the literature as a significant barrier for asset managers.

- b) In setting eligibility standards for an EU-wide eco-label that will restrict in some fashion the strategies that an asset manager can apply, the investment universe that an asset manager can select from, or the environmental activities or sectors that an eligible underlying asset (i.e. a company or project) can participate in, the acceptability of those criteria to asset managers are likely to be inverse to their level of stringency. As such, it stands to reason that strict impact or activity-based criteria are unlikely to trigger a significant increase in direct participation in the program among asset managers. However, based on past experiences with such labels at the national level, these criteria may have potential to indirectly trigger increased investment activity among asset managers in line with the label criteria due to the *signalling effect* that the criteria may have on market activity.

The above findings suggest that, combining process and impact criteria in a single eco-label may limit the label's effectiveness to achieve goals related to setting process standards or impact/activity-based standards, due to the heterogeneity of potential policy outcomes. Further, given the heterogeneous nature of the criteria's intended aims, to certify either the *transparency* of a fund's processes or certify the *sustainability* of the fund itself, it stands to reason that separate labels that focus on these different aims could achieve complementarity if implemented in tandem.

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## **Abbreviations**

2DII	Two Degrees Investing Initiative
AIF	Alternative Investment Fund
AuM	Assets under Management
CAGR	Compound Annual Growth Rate
CBI	Climate Bond Initiative
EC	European Commission
EIB	European Investment Bank
EP	European Parliament
ESA	European Supervisory Authorities
ESG	Environmental, Social and Governance
ETF	Exchange Traded Fund
EU	European Union
FSB	The Financial Stability Board
GBP	Green Bond Principles
GHG	Greenhouse Gas
GIIN	Global Impact Investing Network
GWh	Gigawatt Hour
HLEG	High-Level Expert Group
ICMA	International Capital Markets Association
ISO	International Standards Organisation
HNWI	High Net Worth Individuals
KPI	Key Performance Indicator
OECD	Organisation for Economic Co-operation and Development
PDC	Portfolio Decarbonization Coalition
PTE	Program Theory Evaluation
ROI	Return on Investment
SDGs	Sustainable Development Goals
SDSN	UN Sustainable Development Network
SI	Sustainable Investment
SIF	European Sustainable Investment Forum
SRI	Socially Responsible Investment
TEEC	Energy and Ecological Transition for Climate
UCITS	Undertakings for Collective Investment in Transferable Securities Directive
UNEP	United Nations Environment Programme
UNPRI	United Nations Principles of Responsible Investment
USDA	United States Department of Agriculture
WEF	World Economic Forum

# 1 Introduction

Estimates suggest that the transition to a low-carbon, climate resilient and resource-efficient economy will require a significant increase in investment capital coming from the private sector over the next 20 years (Inderst, Kaminker, & Stewart, 2012). The level of additional global investment in renewable energy needed to head off dangerous levels of climate change has been estimated at between €1 and 2 trillion per year (Arjaliès, Grant, Hardie, MacKenzie, & Svetlova, 2017; Fulton & Capalino, 2014), while the UN Sustainable Development Solutions Network (SDSN) suggests that the total *additional* investment needed to achieve the Global Goals in all countries is approximately €2.1 trillion a year, or around 11% of annual global savings. While the private sector currently holds €255 trillion in assets and is growing at a rate of five percent a year (BDSC, 2017), current capital flows continue to fall below these estimates, while *public* capital inflows continue to see a decline in relative value among many developed countries (see Figure 1-1). Despite these trends, it is becoming clear to many that meeting the requisite investment targets to address the most pressing climate challenges we face are unachievable without greater participation and contribution from private sector investors.

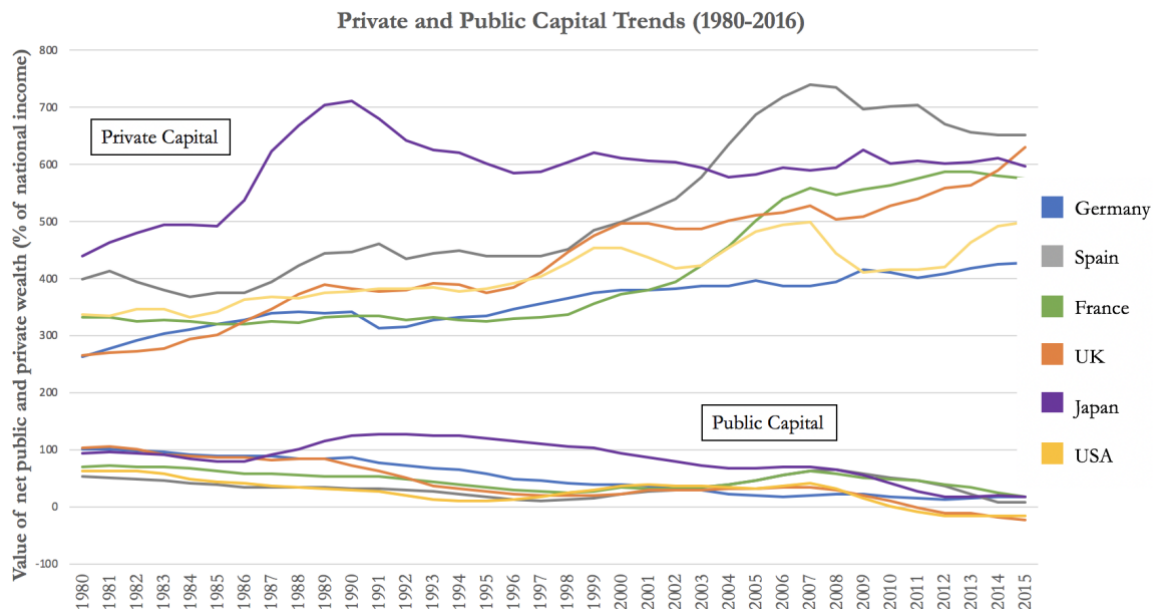


Figure 1-1 Trends in the value of public and private wealth

Source: adapted from Alvarado, Chancel, Piketty, Saez, & Zucman (2018)

Raising capital towards a sustainable, low-carbon economy will likely entail raising additional capital from public and private sources, and allocating that capital towards investments that bridge the gap between “the levels of low carbon investment that are needed to avoid dangerous climate change and the levels of low carbon investment that have actually been made” (Clark, Vercelli, & Gouldson, 2016:18). Current data shows that certain sectors in particular, such as small and medium-sized enterprises (SMEs), energy, infrastructure and innovation, lack significant funding (2DII, UNEPFI, & WRI, 2015). Solving this challenge will require a multi-faceted strategy, which will likely include sourcing further investments from those already invested in environmental challenges, mobilizing capital from new sources, and

properly allocating new capital towards investments and companies that further the transition to a low-carbon economy.

Investment levels in Europe remain significantly below what is expected given current macroeconomic conditions (Arjaliès et al., 2017), and significant volumes of cash remain in private bank accounts, despite the prevalence of low-interest rates (European Fund and Asset Management Association (EFAMA), 2017). The financial crisis of 2007-08 (the ‘Financial Crisis’), which caused severe economic and financial harm on a global scale, put many fundamental problems with the financial sector on full display for society (de Jager, 2017). The effects of the Financial Crisis are still being felt a decade on as trust in financial markets and corporations has been hard to regain, and many retail investors<sup>1</sup> continue to experience a ‘crisis of faith’ in capital markets. As such, policymakers have placed greater emphasis on increasing market trust and participation among retail investors whom many see as a promising leverage point for increasing funding for sustainable projects (Bassen, Gödker, Lüdeke-Freund, & Oll, 2018).

In the wake of the Financial Crisis, there was temporary momentum in the European Union (EU) behind the development and implementation of policy measures and initiatives designed to spur transition towards a ‘green economy’, described as one that reduces environmental risks and ecological scarcities alongside sustainable development (United Nations Environment Programme (UNEP), 2016). The concept of the ‘green economy’ was particularly appealing to EU policy makers post-Financial Crisis given its perceived ability to solve two pressing issues: i) further economic downturn and ii) climate change (European Environment Agency, 2014). However, the aftermath of an economic recession has not historically proven to be the most conducive laboratory to experiment with new or innovative environmental policy (Feindt & Cowell, 2010). Stricter austerity measures from political institutions, a crowded political, and calls for deregulation from industry can all act to stifle political innovation, which appears to have occurred in the EU post-crisis (Chiu, 2018; Feindt & Cowell, 2010).

The Financial Crisis also highlighted for many the need for greater regulatory oversight over the financial sector in Europe and around the globe (European Commission (EC), 2017). Sectoral flaws that contributed to the global financial crisis such as misaligned incentives, information asymmetry, financial innovation and unsustainable risk levels also created broader environmental, social and governance risks (T. Clarke & Boersma, 2016). However, while regulations aimed at embedding sustainable practices within the financial sector appears logical, aligning a financial system consisting of thousands of institutional participants and billions of individual market participants towards sustainability has proven to be a complex challenge for policymakers.

Recently, efforts towards integrating environmental considerations throughout EU policy as well as efforts to develop stronger oversight over the financial sector have regained momentum. Initiatives such as the 7th Environment Action Programme No 1386/2013/EU have provided a framework for the EU’s environmental goals to 2020, with emphasis on the need not only for more stringent environmental policy, but for more effective integration of environmental considerations into all relevant policy areas (European Environment Agency (EEA), 2015).

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<sup>1</sup> Individual investors who purchase securities for their own personal account rather than on behalf of an organisation

Similarly, in September 2016, the EC appointed a High-Level Expert Group (HLEG), with a mandate to prepare a comprehensive blueprint for reforms to the financial sector in order to develop a sustainable finance strategy for the EU. In so doing, the EC noted the three essential drivers underlying ‘sustainable finance’ reform: (i) commitments made under the Paris Agreement<sup>2</sup>; (ii) greater alignment between the financial system and EU policies in support of sustainable growth and investments; and, (iii) the challenges posed by growing climate risks to the financial system (EIB & GFC, 2017). In January 2018, the High-Level Expert Group on Sustainable Finance (HLEG) published a report outlining recommended policy measures aimed at fostering a shift in the financial sector towards sustainability (European Commission, 2018). In response to the HLEG’s report, the EC published its Action Plan on Financing Sustainable Growth (EU Action Plan) in March 2018, which sets out an ambitious timeline for the rollout of several regulatory policy initiatives over the coming years.

Among those measures are the development of a “technically robust classification system” to create a common sustainable finance taxonomy (European Commission, 2018) and to develop standards and labels related to green investments such as a ‘green bond’ standards and an EU-wide ‘green label’ for green themed investment funds (European Commission, 2018). The latter program, an EU-wide label for investment funds, is a key element of the HLEG’s plan to spur on retail investor participation in sustainable financial markets by empowering and connecting “Europe’s citizens with sustainable finance issues” (European Commission, 2018:13). In that context, this thesis aims to examine the potential of such a program to help galvanize greater and more effective capital allocation from the private sector towards sustainable investments.

## 1.1 Problem Definition

While there is a perception among EU retail investors that investing in funds promoted as ‘sustainable’ enables them to have a positive impact on the economy (European Commission, 2018) in practice these assumptions can present numerous challenges. There appears to be both a supply deficit in the number of ‘sustainable’ funds available to retail investors (European Commission, 2018), and an empirical challenge in the specific context of ‘green finance’<sup>3</sup> with respect to identifying the complex and complicated processes of ‘cause and effect’ between investments, the real economy, and the environment (European Commission, 2018). From a policy perspective, this provides both challenges and opportunities for those seeking to implement and evaluate policies aimed at generating a more ‘sustainable’ financial market. In response to similarly blurry connections between regulation and outcome, researchers have suggested that examining the underlying rationale of a program’s ‘theory of change’ can help both policy makers and evaluators purposefully and clearly understand the change they are trying to create and to alter strategies and instruments to best serve those goals (Jackson, 2013).

Eco-labels, alternatively referred to as green or environmental labels<sup>4</sup> (Sherman, 2012), have seen a significant increase in use and variety since their inception in the late 1970s (Grolleau, Ibanez, Mzoughi, & Teisl, 2016). While the proliferation of eco-labels may indicate an increased concern for sustainability among producers and consumers, a growing preference

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<sup>2</sup> The EC has pledged to reduce CO<sub>2</sub> emissions by 40% in all sectors of the economy by 2030.

<sup>3</sup> Green finance is a subset of sustainable finance although there is no precise definition. This will be explored in Chapter 4

<sup>4</sup> In the literature, the term ‘eco-label’ is sometimes used interchangeably with ‘environmental labels’, whereas alternatively, eco-labels may also be used as a term that only refers to Type I labels according to ISO 14024 standards. In this thesis, the term ‘eco-label’ will be used to describe the general concept of environmental labelling and will be differentiated as needed when referring to specific label types.



for their use as policy instruments among regulators, or a combination of both (Austgulen & Stø, 2013; Boström & Klintman, 2008), it may also be a result of other factors such as the increase in globalized trade (Cashore, Auld, & Newsom, 2003), a lack of political will for more restrictive policy instruments (Horne, 2009) or increased industry consolidation (Grolleau et al., 2016; Orsato, 2006).

An eco-label program's successful implementation can depend on many factors (Boström & Klintman, 2008; Rubik & Frankl, 2005), and when considering the implementation of a new program, a need may exist to develop a deeper understanding about how it may be affected by the context in which it will be implemented, in an effort to gauge both how eco-labels impact market dynamics and how they perform from an environmental perspective (Thidell, Leire, & Lindhqvist, 2015). This has produced recent calls from researchers to explore eco-labels for investment products with reference to contextual factors, both institutional and external, that may impede or enable their success (Darnall & Aragón-Correa, 2014).

In the investment context, eco-labelling research appears to be fragmented and has mostly focused on consumer behaviour and label design (e.g. Drescher, Roosen, & Marette, 2014; Hüsser, 2015) or market dynamics and program outcomes (Bassen et al., 2018; Døskeland & Pedersen, 2015; Gutsche, Köbrich-León, & Ziegler, 2016). There is also a noted lack of research into the factors that enable or restrain eco-labels from influencing successful environmental outcomes within specific market contexts such as the financial sector (Prieto-Sandoval, Alfaro, Mejía-Villa, & Ormazabal, 2016). More broadly, prior eco-label research has also tended to focus on the market dynamics of eco-labels for products rather than services (Prieto-Sandoval et al., 2016).

## 1.2 Objective and Research Questions

The primary objective of this research was to gain a deeper understanding of how alternative program designs and contextual factors may influence the implementation of an eco-label for investment products, thus generating 'policy-relevant' information concerning eco-label policy evaluation. As a secondary objective, this research aimed to explore the "conceptual use" of eco-label programs (Mickwitz, 2006) and shed empirical light on theoretical concepts that might hopefully apply to a broader set of policy formation contexts (Yin, 2003).

At the most general level, this thesis aimed to perform policy evaluation research, through program theory evaluation, intended to build the knowledge base on how market contexts may impact the performance of eco-labels, which might aid in future eco-label policy design and implementation (Tojo, 2004). As Thidell (2009) notes, evaluating a policy through the application of a program theory can serve as a valuable conceptual framework for examining both direct and indirect effects of labelling programs, which can be particularly important when examining the program in a novel or unique context.

This thesis conducted an *ex ante* program theory evaluation to ascertain the potential outcomes and impacts of an EU-wide eco-label for investment products and the potential interactions between program and context that might result. A *program theory evaluation* design was considered optimally fit-for-purpose as it is particularly useful for illuminating how programmes are knowingly and unknowingly affected by the context in which they operate (Dahler-Larsen, 2001). In doing so, program evaluations can assist policymakers by focusing less on policy instruments as constructed (Rogers, 2000) and more on how and why they are intended to produce certain outcomes at the exclusion of others. Doing so can also allow policymakers to become more sensitive to the complex interaction between a program and its context.

Accordingly, this thesis aimed to examine both the relevant contextual factors and underlying assumptions of eco-label programs. The objective of this thesis research was not to conduct a comprehensive evaluation of the eco-label as a policy instrument, but instead to examine its potential suitability as a policy measure given the mechanisms and effects it is intended to generate as moderated by context-specific factors. To address the research objectives, the following research questions were selected to guide the examination and evaluation:

**RQ 1: How (and to what extent) might eco-label program performance be influenced by contextual factors relevant to the financial investment market?**

It was beyond the scope of the thesis to research **all** contextual factors of the investment market. Therefore, two aspects were selected as most relevant after an initial round of exploratory interviews with experts in the field:

*RQ1.1: What market-based and/or environmental challenges are addressed by eco-label programs for investment products?*

*RQ1.2: How can existing market dynamics and industry norms in the EU investment sector influence eco-label performance?*

**RQ 2: How can eco-label programs be designed to effectively achieve policy goals in the context of the EU investment market?**

In order to research this question, this thesis sought to obtain a thorough understanding of the functioning of eco-labels for investment products, thus the following research question was formulated:

*RQ2.1: What alternative causal mechanisms have been or might be used in theory and in practice by eco-labels in the context of investment products?*

Taking into consideration both the causal mechanisms and potential contextual factors that influence eco-label performance, some context-specific design features for an EU-wide label were explored through the following research question:

*RQ2.2: How might an eco-label program applied in the context of the entire EU retail investment market most effectively address current challenges faced?*

### **1.3 Limitations and Scope**

The research scope of this thesis will consider positive and voluntary eco-labels for products and services, which are operated by third party organisations and applied to retail investment products. From a policy perspective, the geographic scope of the context under analysis was limited to the EU, with experiences drawn from various environmental and social labels at various stages of implementation and development. These labelling programs were chosen based on their relevance to the analysis and discussion, as each label examined provided unique policy design features, which served the research questions well. Further constraints regarding the specific geographical regions explored and eco-label programs selected were due in part to data availability and accessibility. Further, while the EU has laid out tentative plans to introduce an EU-wide label, there is no existing EU-wide label to date which is why an *ex ante* approach to the evaluation was taken.

As program theory evaluations aim to focus on the *effects* of a program rather than on a program as a whole (Thidell, 2009), analytical methods were chosen in order to narrow the research scope to key issues identified as most relevant at the outset of the evaluation. Normative evaluation criteria were also selected based on the narrower scope of the evaluation, and in the case of the legitimacy and relevance criteria used, with specific consideration to their relevance in examining interactions between the program and its context.

This research aimed to apply an institutional perspective to the evaluation, and thus efforts were made to collect as many different perspectives on the institutional context as possible. However, despite those efforts it is likely that for practical reasons, certain viewpoints were unable to be explored within the confines of this research.

## 1.4 Audience

The evaluation, which has been conducted in coordination with policymakers in the EU, is intended to provide those and other policymakers either directly involved or interested in eco-label programs, with a means of facilitating the formative decision-making process of eco-labels. Additionally, this research is also intended for an academic community, as it aims to contribute to the academic discourse about how contextual and institutional factors can be implemented into program theory evaluation for eco-label programs. To do so, concepts were drawn from social science theory in order to ground the analytical framework and applied in novel ways as needed within the new analytical context of eco-labels for investment products.

Lastly, as this research was conducted as part of a master's program, it is also anticipated that certain audiences will be unfamiliar with eco-label programs or with certain concepts related to sustainable investing. As such, this thesis is intended to be accessible to audiences with a general interest in environmental policy or sustainable investing.

## 1.5 Outline

The objective of this thesis was to consider the alternative modes of constructing an eco-label program for financial services in terms of the outcomes they are likely to produce and their potential *efficacy* in the context of retail investment products. For that purpose, according to the reverse logic analysis (RLA) method described below in **Chapter 2**, initial exploratory research was used to uncover and synthesize relevant social science and program theory regarding eco-labels. This knowledge synthesis was then used to develop a preliminary eco-label program model and to identify the issues related to the program that would be explored, analysed and evaluated. The results of this process are described in **Chapter 3**.

Building on the theoretical framework, a conceptual framework was iteratively constructed, modified and re-developed to identify and analyse the alternative mechanisms and relevant contextual factors uncovered through the research. **Chapter 4** introduces the case under study, namely the EU sustainable investment context, and how certain contextual forces might influence program design. **Chapter 5** introduces the eco-label programs that serve as templates for program design in subsequent chapters as well as a discussion regarding how these alternative scheme designs are intended to trigger certain causal mechanisms. **Chapter 6** evaluates the eco-label program based on direct and side effects and pre-defined criteria. Finally, **Chapter 7** provides a discussion regarding key policy implications of the research and **Chapter 8** provides recommendations for further research.

## **2 Research Method and Methodology**

This chapter presents the research framework and methodological steps that have been applied to explore the research questions outlined in Section 1.2. First, in order to position the research, specific aspects of policy evaluations that have shaped the research methodology are introduced, followed by a discussion of Program Theory Evaluation (PTE). The chapter then discusses the methods used for data collection and analysis, including the overarching analytical method (Reverse Logic Analysis) and evaluation framework that were used to guide the research.

### **2.1 Methodological Approach**

The overall methodological approach of this thesis is guided by case study design (Yin, 2003), which is described as “an empirical enquiry that investigates a contemporary phenomenon in-depth and within its real-life context” (Yin, 2003). A case-study approach was considered the appropriate approach to answer the evaluation questions and well-suited to the research objectives for two main reasons. The first is that according to Yin (2003), a case study analysis is appropriate when contextual conditions are relevant to the phenomenon under study or when the boundaries between the phenomenon under study and its context are unclear, which were both challenges inherent in the current research. The second reason is that qualitative case studies are most valuable in examining how and why an intervention might succeed or fail (Keen & Packwood, 1995), which is particularly the case when evaluating the feasibility of applying established programs in new, potentially unpredictable settings (Balbach, 1999).

Case study research is viewed as particularly helpful to achieve an in-depth understanding of causal mechanisms and the conditions that activate them (Biermann, Pattberg, Van Asselt, & Zelli, 2009:78; Easton, 2010; Underdal, 2002:47). As such, there is a strong link between the policy evaluation methods chosen for this thesis (discussed below) and a case study analysis, which can provide for a robust research design when based on solid theoretical foundations, and can potentially allow for application to other contexts when it presents a detailed understanding of causal relationships (Brousselle & Champagne, 2011).

This thesis adopts a critical realist perspective as its overarching philosophical positioning, which has guided the ontological, epistemological and methodological choices made throughout. Generally, a critical realist approach to research draws conceptually from both positivism (ontologically) in that it suggests that generally applicable laws can be derived from experimental observations, as well as from postmodernism (epistemologically) in the belief that fact is mediated by pre-existing concepts and so observation cannot be ‘theory-neutral’ (Danemark, Ekstrom, Jakobsen, & Karlsson, 2002; Dendler, 2013; Sayer, 1999). As a result, a critical realist approach aims for explanation through observation by unveiling causal mechanisms and context-specific conditions that might modify them (Sayer, 1999). Critical realism is concerned with what an object “can do and what it is like” which, according to Dendler (2013:69) “allows us to make judgments about what is and is not feasible and what is and is not desirable” about the object.

#### **2.1.1 Policy Evaluation Methodology**

‘Policy evaluation’ is a field of study that includes a range of objectives and boundaries. Evaluation has been previously described as ‘the process of determining the merit, worth and value of things’ (M. Scriven, 1991, cited in Vedung, 1998:2) and its application to the field of policy analysis has been widespread. In contrast to most other fields of science, the purpose of evaluation research is not precisely defined. Some have described evaluation as means of facilitating decision-making regarding the future of the evaluand as opposed to discovering

new knowledge (A. Clarke & Dawson, 1999:2; Patton, 1987:14). Others describe the practice as a means of contributing to an understanding of how to optimize policy rationalisation (Crabbé & Leroy, 2012). Policy evaluations are seen by others as serving a variety of practical and theoretical objectives, including contributing to substantive methodological social science knowledge (Rossi, Lipsey, & Freeman, 2003). Given the wide swath of policy evaluation applications and intended outcomes, prior research has identified the need to select from and adapt evaluation research designs and methodologies according to the nature of the evaluand under study (Patton, 1987; Tojo, 2004; Weiss, 1998).

### **2.1.2 Introduction to Program Theory Evaluation**

Program Theory Evaluations (PTEs) have emerged as an important form of policy evaluation over the past several decades (Chen, 1990; A. Clarke & Dawson, 1999; Coryn et al., 2011). The concept has appeared in the literature on evaluation study since as early as the 1930s but did not fully take hold within the community of policy researchers until the publication of Chen's seminal work "Theory-Driven Evaluations" in 1990 (Coryn et al., 2011). Since then, the concept has developed under numerous different titles including theory-driven evaluation, theory-based evaluation, program logic, logical frameworks, program theory-driven evaluation science and many others<sup>5</sup>.

Broadly defined, PTE "explicitly integrates and uses stakeholder, social science, or a combination of theories in conceptualizing, designing, conducting, interpreting, and applying an evaluation" (Coryn et al., 2011:201). The role of a Program Theory, in the context of policy evaluation is to describe how a policy is intended to be implemented and the expected outcomes of the intervention (Mickwitz, 2003). To do so, PTEs aim to assess a program's expected outcomes, as well as the quality of underlying assumptions about the program's causal mechanisms in order to determine the strength of connection between the program and those outcomes (Crabbé & Leroy, 2012). PTE is therefore a consideration, above all else, "of the micro-steps or linkage in the causal path from [policy] program to ultimate outcome" (Rogers, 2000:10). As such, the 'program theory' developed by the evaluator becomes an instrument that guides the understanding of how a program is implemented and what effects it has had or is expected to have<sup>6</sup> (Mickwitz, 2003; Rogers, 2000).

Program theory can be derived from a number of different sources including social science theories (deductive), prior evaluations (inductive), practitioners' expectations and experience (user-oriented), or a combination of all of the above (integrated) (Birckmayer & Weiss, 2000). Theory-driven strategies and approaches to evaluation such as PTE are method-neutral, and therefore there is no preference with respect to method(s) selected (Coryn et al., 2011).

## **2.2 Data Collection and Analysis**

PTE is equally suited to either quantitative methods, qualitative methods, or both (Coryn et al., 2011). However, this thesis applied a qualitative approach to data collection and analysis in

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<sup>5</sup> For further discussion see: (Astbury & Leeuw, 2010; Coryn, Noakes, Westine, & Schröter, 2011; Donaldson, 2012)

<sup>6</sup> A point of qualification regarding the use of the term 'theory' within this evaluation approach, which is intended to refer to 'theory with a small t' (Birckmayer & Weiss, 2000) as opposed to theory developed in natural or social sciences. Program theories are not intended to carry the same weight as a widely-accepted scientific theory but are instead intended to represent a set of beliefs or assumptions that drive the logic underlying a policy intervention (Birckmayer & Weiss, 2000; Tojo, 2004).

large part due to its suitability for identifying and investigating the causal mechanisms underlying policy interventions.

### 2.2.1 Methods for Data Collection

The method selection and processes for data collection and evaluation, as well as interview techniques were drawn primarily from Van Audenhove (2007), Creswell (2014), and A. Clarke & Dawson (1999). The data collection process consisted of four concurrent processes:

- A literature review of eco-labels, program theory evaluation and sustainable investing;
- Exploratory, unstructured interviews with relevant experts to guide the abductive reasoning applied throughout the research and to identify further relevant issues and potential interview candidates;
- Semi-structured interviews to develop a deeper understanding of the mechanisms of the program and the context under study;
- Key document collection using a snowballing method, drawing from the literature review and interviews.

#### Interviews

In total, 13 interviews were conducted, with the aim of developing a deeper understanding of the user and issuer-oriented perspectives<sup>7</sup> of an eco-label program's mechanism of change, specifically as they might function within the context of the EU investment industry. Interview subjects were selected using a maximum variation purposive sample, allowing for an examination of a broad range of cases relevant to the case under study, namely eco-labelling policies for investment products within the EU. To ensure interviewees' privacy, they are referred to as Interviewees 1 to 13 (I1 to I13). Appendix C contains a summative overview of the interviews conducted along with general descriptive data on the individuals interviewed. Both open-ended and semi-structured interviews were used as primary sources of data, as both forms provided for the elicitation of complicated, sensitive and program specific information, and enabled the researcher to build upon answers given (Avetisyan & Hockerts, 2017; Ghauri & Grønhaug, 2005).

*Open-ended interviews* were conducted with experts to develop an understanding of the eco-label's logic model and select stakeholders in order to identify the desired effects and key issues that would be explored in the evaluation. *Semi-structured interviews* were conducted with eco-label issuers as well as potential eco-label users. The flexibility of a semi-structured interview process was necessary in order to delve into relevant issues that arose during interviews, adjust the interview guide on an iterative basis according to new findings, and to identify new sources of evidence.

An interview guide was developed with open-ended questions in order to collect pluralist data that could help identify competing or complimentary conceptualizations of program theory design in the interview subject's own words (Avetisyan & Hockerts, 2017; Pettigrew, 1990). Two separate interview guides were developed, one for interviews with eco-label *issuers* and another for potential eco-label *users*, and each interview was reviewed in order to identify

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<sup>7</sup> In the context of eco-labels, *issuers* generally refer to the organisation(s) responsible for label development, issuance and oversight, while *users* can refer to the relevant stakeholders that might participate in the eco-label program.

recurring or emerging patterns on an ongoing basis (Paetzold & Busch, 2014; Yin, 2003). As a result, the interview guides were updated on two occasions in order to strengthen the thesis' internal and construct validity (Gibbert, Ruigrok, & Wicki, 2008). The final version of each interview guide can be found in Appendices A & B.

## **Documents**

Documents were obtained from various sources and analysed according to their relevance to one of two aspects of the research. First, policy documents were obtained from a number of label providers within the EU, including Nordic Swan, LuxFlag, Novethic, and Ethibel, as well as from industry associations related to sustainable investments such as Eurosif and from official publications related to the EU Eco-label and Sustainable Finance Action Plan. Official documents included label eligibility criteria documents, annual reports, methodology reports, European Commission reports and other official publications taken from the official websites of label providers and the European Commission. Second, documents were obtained regarding the state of the financial services sector and sustainability related sub-sectors. These documents were obtained from various sources including administrative documents (proposals), responses to consultations, academic and other organisational reports, evaluation studies, and news articles in order to inform the context analysis. Relevant documents were identified through academic database searches such as Web of Science, Google Scholar and Scopus, as well as through search engines and websites of relevant labelling organisations, market actors and government organisations.

### **2.2.2 Methods for Data Analysis**

In this thesis, data analysis and program evaluation were conducted through the application of a reverse logic analysis (discussed below). Both substantive theory and practitioner input were used to identify the *initial conditions* that could affect the ways that the eco-label program might operate, the nature and operation of *feedback* mechanisms within the financial system, and the potential *controlling parameters* that might determine whether the necessary conditions for effective program implementation might be impacted by existing institutional or external forces<sup>8</sup> (Westthorp, 2012).

Documents and interviews were reviewed and analysed through a qualitative content analysis (QCA). Official documents, academic literature and grey literature were reviewed through a *document analysis*, which is described by Bowen (2009:27) as “a systematic procedure for reviewing and evaluating documents in both printed and electronic form”. It can involve a number of different approaches and types of documents but generally involves finding, selecting, appraising, and synthesising data contained in those documents (Bowen, 2009). A similar process was applied to interview transcripts. A QCA was used for this research both because of the practical theoretical benefits it offers as a research method, and also for its strength in combining document and interview data as a method of triangulation, which can help limit potential interview bias (Patton, 1990).

The findings were interpreted using an abductive method, which can be described as the interpretation of empirical observations through a conceptual framework or set of ideas (Danemark et al., 2002:80). In line with critical realism, Van de Ven (2007:67) argues that reality usually “exceeds the explanatory capabilities of any single theory or model that a researcher

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<sup>8</sup> In the context of a Program Theory Evaluation, the initial conditions and controlling parameters are aspects that help inform the context in which a program is (or will be) implemented, while feedback systems operate as mechanisms that can generate or constrain intended outcomes (Rogers, 2008; Westthorp, 2012).

might devise” and thus the process of abduction normally requires a combination of multiple theories as a means of *theoretical triangulation* throughout the analysis.

A pre-set coding frame, consisting of two code levels, was initially developed following the initial literature review, and the frame was revised on an iterative basis as emergent codes developed, which better reflected the research objectives and aims (Eisenhardt, 1989). This resulted in a final coding structure of three coding levels, which was used to guide transcript and document analysis (see Appendix D for the coding frame) (Gibbs, 2008). NVivo 11 coding software was used to assist in the data collection and analysis processes through compiling documents and interview transcripts and facilitating the coding process conducted throughout the research.

### **Reverse Logic Analysis**

Logic analysis is defined as “a type of program theory evaluation that uses scientific knowledge to evaluate the validity of the intervention’s theory and identify promising alternatives to achieve the desired effects” (Rey, Brousselle, & Dedobbeleer, 2012:62). As an analytical method, logic analysis aims to test a program’s plausibility according to existing theories and research, and aligns closely with other PTE approaches developed by Donaldson (the ‘plausibility check’) and Pawson and Tilley (the ‘realist review’) (Brousselle & Champagne, 2011). A logic analysis can be useful to shed light on a program’s anticipated strengths and weaknesses, elucidate the links between the program’s design and the production of desired outcomes, and highlight relevant contextual factors that can influence program implementation (Brousselle & Champagne, 2011; Contandriopoulos et al., 2015; Rey et al., 2012). Logic analysis can also be useful in analysing whether a program’s logic allows for transference to multiple contexts (Brousselle & Champagne, 2011; Contandriopoulos et al., 2015).

A logic analysis was chosen to structure the analysis in this thesis due primarily to the *complexity* of the system being analysed, namely the EU sustainable investment sector. Financial systems contain several hallmarks of a highly complex system such as various tipping points<sup>9</sup>, asymmetries, and unintended consequences (Blundell-Wignall, 2016; Battiston et al., 2016). As Bardach & Patashnik (2015:19) suggest, examining the causal model of an intervention embedded in a complex system is particularly useful for identifying possible “intervention points” that can help guide further evaluations. A logic analysis was considered to be the most effective means to account for system complexity in policy evaluation while maintaining sufficient rigor to provide meaningful findings for practitioners. This approach was inspired by the rationale put forward by Walker and Kubisch (2008:497) and subsequently by Rey et al. (2012:2), who remind policy evaluators that sometimes the most effective means of evaluating complex systems is through a straightforward evaluation method.

A *reverse logic analysis* (RLA) explores alternative ways of achieving an outcome in order to determine the most effective means among multiple program choices (Brousselle & Champagne, 2011; Rey et al., 2012)<sup>10</sup>. To do so, the RLA method focuses the program analysis and evaluation on identifying the means through which a program can achieve certain desired

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<sup>9</sup> The point at which a series of small changes or incidents becomes significant enough to cause a larger, more important change.

<sup>10</sup> By contrast, a *Direct Logic Analysis* scrutinizes the essential characteristics of an intervention to determine whether it is likely to lead to the desired effects (Pawson, Owen, & Wong, 2010; Pawson & Tilley, 1997).



effects with particular attention paid to the critical conditions necessary for successful implementation as well as alternative causal paths that might produce the same or similar outcomes (Rey et al., 2012). Conducting an RLA consists of three procedural steps:

- 1) *constructing the logic model* – the logic model is developed based on established theory and then particular issues related to the program theory are identified for further exploration (Chapter 3);
- 2) *developing the conceptual framework* – in which existing scientific knowledge, theory and expert and stakeholder input are all explored to develop an understanding of the alternative causal mechanisms that might lead to successful program output as well as the contextual factors that may impede or augment the program (Chapters 4 & 5);
- 3) *evaluating the program theory* – the evaluator then re-visits the original program theory to determine whether the intervention under consideration is appropriate in the context, and whether certain alternative approaches developed in the conceptual modelling are most suited to achieving the intended outcomes (Chapters 6 & 7).

In order to examine the contextual factors relevant to the prospective program’s success, this evaluation considered the program theory both as a goal-oriented rational process, as well as a product of its institutional context (Crabbé & Leroy, 2012). Taking an institutional perspective in policy research requires a consideration of the typical features of a certain institutional context and how they affect policy outcomes (Crabbé & Leroy, 2012). An institutional perspective can be particularly helpful in illuminating how effective a program might be in changing organisational or individual behaviour, which is considered particularly useful in the context of an eco-label program evaluation which, among other outcomes, intends to influence market behaviours (Chiu, 2018).

## 2.3 Methods for Evaluation

### **Evaluation Framework**

A *side-effects evaluation* seeks to examine potential indirect program effects that might arise outside the program’s direct target area. To examine these side effects, Vedung (1998) arranges the target area evaluation into an examination of beneficial (main), detrimental (perverse), and null effects (Vedung, 1998). In addition, consideration is paid to both anticipated and unanticipated effects (positive and negative) occurring outside of the target area (Vedung, 1998), which is represented in Figure 2-1.

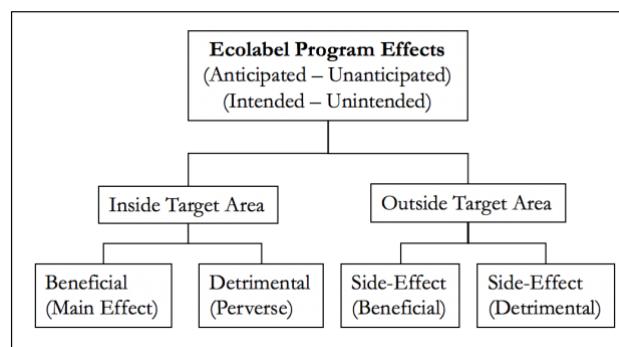


Figure 2-1 Side-Effects Evaluation

Source: adapted from Vedung, 1998

Several prior eco-label evaluations (Berkmann, 2015; Thidell, 2009) have sought to examine both direct and indirect effects of an eco-label program, which has proven particularly useful as eco-labels can interact with market structures in complex ways, creating unanticipated distortions<sup>11</sup> in the way that both the program and the market function (Bonroy & Constantatos, 2012). Within a complex system such as the financial system, policy outcomes may be latent or multi-faceted, and so the intended effect of combining an RLA with a side effects evaluation is to ensure that alternative causal mechanisms can be evaluated for their ability to effectively influence the intended target audience, as well as their potential to indirectly influence actors and processes outside the target area.

### 2.3.1 Evaluation Criteria

As evaluations are primarily a normative exercise, value criteria serve as a basis for making normative judgements concerning a policy's expected outcomes (Bemelmans-Videc, 1998; Crabbé & Leroy, 2012; Mickwitz, 2003). As PTEs aim to examine the effects of a program rather than evaluate the intervention as a whole (Thidell, 2009), evaluation criteria can be selected for analysis based on their relevance to the program under evaluation. Thus, during the initial stages of the research, which involved constructing the program model, criteria were identified to guide the evaluation and the construction of the theoretical and conceptual frameworks. The criteria of *effectiveness (efficacy)*, *relevance* and *legitimacy* were chosen to guide the evaluation based on their perceived relevance to the current evaluation as well as their application in prior similar studies (Thidell, 2009:30).

#### **Effectiveness (Efficacy)**

According to Mickwitz (2003), evaluating the effectiveness of a policy involves an *ex post* consideration of the degree to which the outcomes it achieves correspond with its intended goals. Similarly, examining program *efficacy* is an *ex ante* approach that involves assessing the likelihood that intended policy effects will actually be attained (Crabbé & Leroy, 2012), which can indicate the general suitability of a policy or measure for reaching a specific goal<sup>12</sup>. The primary purpose of an efficacy assessment is to obtain knowledge of the effects an intervention is *expected* to have in the future. To do so, an evaluation can be based on empirical approaches that draw from past experience (*ex-post*), theoretic and context-based approaches (*ex-ante*), or a combination of the two (European Commission (EC), 2014).

#### **Legitimacy & Relevance**

In order for a policy program to be successful, a key factor is often the program's acceptability to both a wide range of stakeholders and implementing institutions (Gupta et al., 2007). Thus, in examining a program, it is important to consider the extent to which it is likely to be accepted, adopted and implemented by market actors (Gupta et al., 2007; Thidell et al., 2015), as well as the political constraints that may limit effective implementation of the policy (Dellas & Pattberg, 2013).

*Legitimacy*, as an evaluation criterion, pre-supposes that program acceptance is a crucial aspect of its potential effectiveness and thus seeks to examine contextual aspects of the program under evaluation (Bemelmans-Videc 1998:8; Thidell, 2009). Given the relatively non-coercive nature of an eco-label program, there is a close connection between the effectiveness

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<sup>11</sup> E.g. with respect to both participation costs and credibility, which are discussed in Chapter 5

<sup>12</sup> The 'goal-achievement model' is the oldest form of program evaluation (Mickwitz, 2003) and has also been referred to as an 'effectiveness' evaluation (Mickwitz, 2003)

of the program in bringing about market transformation towards environmentally-friendly practices and the level to which the label is seen as legitimate (or acceptable) by its intended audience (Thidell, 2009). As such, the potential willingness that users might have to utilise the eco-label program based on its perceived positive outcomes was viewed as a useful aspect to explore.

The **relevance** criterion seeks to examine whether the program's goals cover key environmental problems (Mickwitz, 2003). Solving environmental problems can create challenges with respect to causal attribution and often entails bringing together actors with conflicting goals. Thus, examining the intended objectives of an environmental program at the outset of the program's design or implementation phases can be particularly useful towards addressing concerns raised by various actors (Mickwitz, 2003). In the context of an *ex ante* program evaluation, examining the relevance of a program's intended outcomes relative to the acceptability (legitimacy) of the potential mechanisms intended to bring them about can be a useful supplement to an examination of the program's efficacy. These criteria can also serve as a useful means to assess a program's prospective credibility among target users (Thidell, 2009).

### 3 Building the Logic Model

According to the RLA method described in the previous chapter, initial exploratory research was used to uncover and synthesize relevant social science and program theory regarding eco-labels. To guide the program model development and evaluation framework, this thesis drew concepts from various knowledge fields that have been used in prior eco-label evaluations such as Ecological Modernisation Theory (EMT) particularly through prior research conducted by Berkmann (2015), Rubik & Frankl (2005), and Thidell (2009); and concepts from new institutional theory and legitimacy theory inspired by prior research conducted by Cashore et al. (2003), Dendler (2013) and Suchman (1995). **Section 3.1** provides an overview of the theories used to guide the research; **Section 3.2** provides an overview of the eco-label theory and rationale; Section 3.3 presents the normative program model and finally; **Section 3.4** synthesizes the research to identify the issues to be examined through the evaluation.

#### 3.1 Theoretical Grounding

Greenwood et al. (2015:15) define the term '*institutionalisation*' as: "the process whereby things become institutionalized, which, in turn, simply means that things are more or less taken for granted". That concept forms the core of the analytical and evaluation methods used throughout this thesis on two grounds. First, it served as a starting point for exploratory research (*i.e.* what environmental considerations are already taken for granted within the institutional context under study?). Second it provided the outline of a normative program goal to guide the evaluation of alternative causal mechanisms and program outcomes (*i.e.* what eco-label program mechanisms are most effective in institutionalizing considerations of environmental impacts?).

To examine the relationship between labelling programs and the surrounding institutional context, this thesis considered the process of institutionalization from two perspectives: (i) the degree to which eco-label programs can contribute to the institutionalization of environmental considerations within the investment sector; and (ii) the degree to which alternative eco-label programs might be seen as valid within the industry based on existing institutionalized norms (Dendler, 2013). To do so, concepts were drawn from different perspectives within *ecological modernization theory*, *new institutional theory* and *legitimacy theory* to help position the analytical exploration of how eco-label programs can either be helped or hindered by market dynamics and/or social norms.

##### 3.1.1 Ecological Modernisation Theory

Ecological Modernisation Theory (EMT) provides a framework for exploring the manner in which societies address the ecological risks surrounding industrialism (Hajer, 1995; A. P. Mol & Sonnenfeld, 2014). In contrast to the prevailing environmental movements of the 1980s and 1990s<sup>13</sup>, EMT discourse has been rooted in the foundational belief of (i) progress; and (ii) the problem-solving capacity of modern techniques and institutions (Austgulen & Stø, 2013; Boström & Klintman, 2008). While a precise doctrine has yet to emerge from EMT, there appears to be consensus concerning its core principle, which is that reconciliation between economic development and environmental policy is both possible and desirable (Pataki, 2009). As a result, EMT's main focal point as a school of thought has been on the process of

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<sup>13</sup> Movements such as demodernisation, deindustrialization and counter-productivity, which all posited that, in some manner, a fundamental reorganisation of modern institutions would be an essential pre-condition of sustainable development (A. P. Mol, Spaargaren, & Sonnenfeld, 2013).

institutionalizing environmental concerns within modern institutions (Mol, 2002; Mol, Spaargaren, & Sonnenfeld, 2013; Van Vliet, 2003).

From the perspective of market dynamics, environmental reform is seen as a product of the interactions between economic markets and actors on one hand, and consumers and political institutions aiming to condition them on the other, with the end result of institutionalising “environmental considerations, requirements and interests” within the economic domain (Mol, 2002:102). As Mol (2002) notes however, the process of shifting dynamics does not, as a rule, originate in the economic domain itself, but is a result of external pressure imposed on market actors to ‘self-regulate’, in many instances due to the revelation of existing *market failures* within the domain. Thus institutional factors that allow for industry self-regulation with respect to environmental considerations emerge primarily as a result of political pressure, which creates the need among market actors for the legitimization of their products and production processes (Mol, 2002).

### 3.1.2 New Institutional Theory

New Institutional Theory examines how organisations attempt to ensure long-term survival by conforming to prevailing norms and commonly accepted values in their surrounding environment (Meyer & Rowan, 1977; Slager, Gond, & Moon, 2012) and thus the way in which rules, customs and beliefs can either guide or constrain the behaviour of organisations (Albertini, 2017; Scott, 2008). New Institutional Theory takes the position that external forces can act to moderate organisational policies, as organisations may need to adopt their structures and procedures to conform to external pressures (Crisóstomo, Prudêncio, & Forte, 2017; DiMaggio & Powell, 1983). To examine the potential of eco-labels to create moderating forces that might bring about organisational behaviour change, this thesis considered two different perspectives within new institutional theory: (i) ***rational choice institutionalism***; and (ii) ***normative institutionalism***.

***Rational choice institutionalism*** draws primarily from rational decision-making theory, which assumes “that rational actors calculate strategically to maximize utility or pay-offs for themselves in line with their preferences and within budget constraints” (Dendler, 2013:113). The main focus of rational choice institutionalism in examining external moderating forces is therefore on the market transaction as the primary unit of analysis. Rational choice institutionalism posits that an institution’s acceptability flows from its ability to provide a dependable framework in which units can cooperate or compete, and which enables more efficient social action and economic exchange (Coriat & Weinstein, 2010; Davis & North, 1970; Powell & DiMaggio, 2012).

According to rational choice institutionalism, institutions are designed in order to constrain opportunist behaviour and promote efficiency through minimized transaction costs, such as market uncertainty, through the provision of efficient exchange frameworks that help correct multiple market failures (Brown, 2018; North, 1999). Through the prism of market dynamics, an eco-label’s main function can be said to provide the optimal level of information necessary to assist consumers in making more sustainable choices (Dendler, 2013) thus eliminating barriers which create unnecessary transaction costs for sustainability-oriented consumers and provide a competitive advantage for participating producers.

**Normative institutionalism** by contrast, is concerned with the way that models of appropriateness diffuse through isomorphic processes<sup>14</sup> and are determined by the social relations that exist both external to and within respective organisational fields (DiMaggio & Powell, 1983). Normative institutionalism is thus more concerned with how external forces moderate organisational policies, as organisations attempt to adopt their structures and procedures in order to conform to external pressures (Campopiano & De Massis, 2015; Crisóstomo et al., 2017; DiMaggio & Powell, 1983). Isomorphic forces might originate from overarching societal norms (the *macro* level), or through relationships and practices that create a range of ‘acceptable’ behaviours within an organisational field (the *meso* level).

Within an organisational field (the *meso* level), socially constructed models of appropriateness can be derived from the values, goals, and practices of the field, and thus different interpretations of models of appropriateness might emerge over time (Bernstein, 2004; Dendler, 2013). These belief systems can result in the development of *institutional logics*, which define the acceptable decision-making structures and procedures of the organisational field (Arjaliès, 2014; Thornton & Ocasio, 2008). Organisational fields can be guided by complimentary or competing logics (e.g. the competing logics of care and science in the medical education sector), although in most instances organisational fields are governed by a prevailing or ‘dominant’ logic (Nigam & Ocasio, 2010; Roulet, 2015), which acts to promote and reinforce certain practices while simultaneously marginalizing others (Roulet, 2015).

One common criticism of EMT regarding its treatment of market dynamics and processes is the perfunctory underlying assumption regarding the existence of ‘enlightened’ corporate actors who are able to easily realize business opportunities through eco-efficiency improvements and adapt behaviour accordingly (Crane, 1997; Fineman, 1996; Levy, 1997; Pataki, 2009). The normative institutionalist perspective seeks to expand this understanding, examining how new processes are integrated within stable, recurrent patterns of behavioural interaction (Ansell, 2008:76), and which conform with prevailing institutional logics as well as existing models of appropriateness according to social norms. A normative institutionalist perspective can introduce a systematic understanding of how programs might produce positive institutional changes and positive social outcomes (Dendler, 2013). Therefore, a normative institutionalist perspective was considered relevant to this evaluation as it expands the examination of market dynamics to include prevailing norms and commonly accepted values in the surrounding environment (Meyer & Rowan, 1977; Slager et al., 2012).

### 3.1.3 Legitimacy Theory

Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.

(Suchman, 1995)

Legitimacy is a social construct, in that it describes the acceptability of a thing, individual, or organization as whether or not it receives “social approval” (Greenwood et al., 2015:6). Legitimacy theory suggests that companies aim to legitimise their corporate actions in order to obtain approval from society and thus, to ensure their continuing existence (Omran &

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<sup>14</sup> Isomorphism is defined as “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio & Powell, 1983: p149) and are delineated as either: **regulative** (e.g. legal sanction), **normative** (e.g. moral authorisation), and **cultural-cognitive** (e.g. cultural support)” elements that underlie institutional order (Scott, 2008).

Ramdhony, 2015; Schoenmaker, 2017). Organisations traditionally receive societal approval, according to legitimacy theory, when they are perceived as functioning within the bond and norms of the society in which they operate (Fernando & Lawrence, 2014). Suchman (1995) delineates the various forms of organisational legitimacy that can be conveyed according to three broad types: *pragmatic legitimacy*, *moral legitimacy*, and *cognitive legitimacy*<sup>15</sup>.

*Pragmatic legitimacy* rests on the “self-interested calculations of an organisation’s most immediate audiences” (Suchman, 1995:578). For instance, Suchman suggests that organisations or policies will obtain legitimacy based on their expected value to specific constituents, referred to as *exchange legitimacy*. While this aspect rests primarily on the self-interest calculations of the audience, in some instances the perception of pure exchange legitimacy may be coloured by cultural notions of appropriateness. An organisation may also receive support not because it provides specific, tangible benefits, but rather because it is seen by others as being generally responsive to their larger interests (Suchman, 1995:578), referred to as *influence legitimacy*. Thus, an organization that appears highly responsive to the influence of its constituents either by incorporating them into its policy-making structure or relinquishing some measure of authority, will be seen as legitimate even without providing perceptible value.

*Moral legitimacy* reflects a “positive normative evaluation of the organization and its activities” (Suchman, 1995:579), which suggests that organisations should be judged based on results, referred to as *consequential legitimacy*. According to Suchman (1995), organisations or policies may be judged according to their general contribution to overall societal welfare, or against their contributions to the individual welfare of specific actors or organisations (Suchman, 1995:580). Alternatively, without directly observable information regarding an organisation’s impact to social or individual welfare, organisations may also be judged based on the perceived legitimacy of the processes or structures used in execution of their functions. Thus, organisations can obtain legitimacy through embracing “socially accepted techniques and procedures” (*procedural legitimacy*) (Suchman, 1995:580) or where their structural characteristics place them within a “morally favoured taxonomic category” (*structural legitimacy*) (Suchman, 1995:581).

### 3.2 Eco-label Theory & Rationale

Eco-labels represent a form of neoliberal<sup>16</sup> environmental policy that seek to achieve social benefit through the extension and facilitation of market relationships (Larner, 2000). Eco-labels are a market-oriented method of certification and labelling that identify the most environmentally preferable products or services within a specific product or service category (Boström & Klintman, 2008; Global Eco-labelling Network, n.d.), with the ultimate aim of increasing both the supply of and demand for environmentally preferable products (Thidell, 2009).

Bemelmans-Videc et al. (1998) categorize environmental instruments according to the degree of constraint that the instrument imposes on target groups as: ‘carrots’ (economic instruments), ‘sticks’ (command-and-control legislation) and sermons, which are described as a form of ‘soft law’ that impose few market constraints and seek only to provide target actors with information

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<sup>15</sup> Conceptual legitimacy refers to the more passive ‘taken-for-grantedness’ of an organisation’s legitimacy. For the purposes of this thesis, concepts were drawn only from *pragmatic* and *moral* legitimacy, as cognitive legitimacy was seen to be outside the scope of the more focused analytical inquiry.

<sup>16</sup> Neoliberalist policies aim to “maximise the role of market mechanisms in public policy and service provision” (Docherty, Shaw, & Gather, 2004; Monios, 2016)

about the implications of certain choices. Eco-labels generally fall into the latter category, and are viewed as ‘information as policy’ instruments, which aim at altering the priorities and significance that both consumers and producers attach to certain aspects of a product or producer (Cashore et al., 2003; Dendler, 2013; Suchman, 1995).

Eco-labelling schemes encourage product environmental quality improvements based on an appeal to the commercial interests of the industry and its organisations (Berkmann, 2015). By distinguishing environmentally superior products within a product group, eco-labels can provide producers with a reliable communication tool (and potentially a competitive market advantage) with respect to the environmental performance of such products and highlight environmentally-friendly products that would otherwise remain hidden to the consumer (Salzman, 1991:12; Thidell, 2009). Eco-labels may also have numerous secondary effects that can influence a market, such as serving as a standard for environmental performance against which all products in a product group are measured (Thidell, 2009).

Leadership in the area of sustainable consumption and production tends to be the exception rather than the norm among many industries (Dendler, 2013). Therefore, in aiming to shift market behaviour, eco-labels often aim to provide additional benefits that are indirectly related to environmental performance in order to ensure significant participation (Dendler, 2013; Pedersen & Neergaard, 2006). These have been identified generally as either a cost savings for consumers or a competitive advantage<sup>17</sup> for producers (Dendler, 2013; Horne, 2009; Mak & Crane, 2015; Thidell, 2009). In most eco-label programs, producers are required to pay a fee for the verification process and continued use of the label (Frydendal, Hansen, & Bonou, 2018). While this administrative fee creates an added financial burden on companies wishing to reduce their environmental impact, the rationale behind the scheme is that consumers are actually willing to pay a little bit more for eco-labelled products, and in most cases the fee will not affect the final price for the consumer significantly (Frydendal et al., 2018).

### **Taxonomy of Eco-labels**

Categorizing the various design features of an eco-label traditionally begins with two points of differentiation, namely (i) whether labelling scheme participation is mandatory<sup>18</sup> or voluntary, and (ii) whether certification and monitoring are carried out by independent third-parties or not (Salzman, 1991; Thidell, 2009). Additional means of differentiating various eco-label schemes are the *scale* and *scope* of the eco-label’s coverage, the former referring to geographic coverage of the label (e.g. operated by a public or private agency at a national or supranational scale) and the latter referring to the scope of environmental aspects covered (e.g. multiple or single criteria areas) (Horne, 2009; Rubik & Frankl, 2005).

With respect to voluntary eco-labels, the International Standards Organisation (ISO) differentiates between Type I, II and III labels. Type-I labels are verified by an independent third-party, who provide a logo to products certifying that they fulfil criteria corresponding to the best environmental performance within their product group. Type-II labels are those that rely on producer self-declaration exclusively, and may take the form of a statement, symbol or graphic on a product or within advertising. Type-III labels, referred to as ‘environmental

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<sup>17</sup> Competitive advantage has been defined as the characteristic, unique opportunities of a firm that results from the firm’s product-market position and the direction relative to that position (Ansoff, 1965).

<sup>18</sup> Mandatory labels are often prescribed by law and apply to an entire product group or category, traditionally addressing one or a select few key safety or performance issues. One example is the EU Energy Label (EU) 2017/1369, which requires all products to disclose and display information related to product specifications, energy consumption, noise emissions, and energy class (Horne, 2009; Sherman, 2012).



product declarations' provide quantitative environmental data in a more extensive report format (Boström & Klintman, 2008; Horne, 2009; Rubik & Frankl, 2005). Figure 3-1 provides an illustration of the ISO classification scheme:

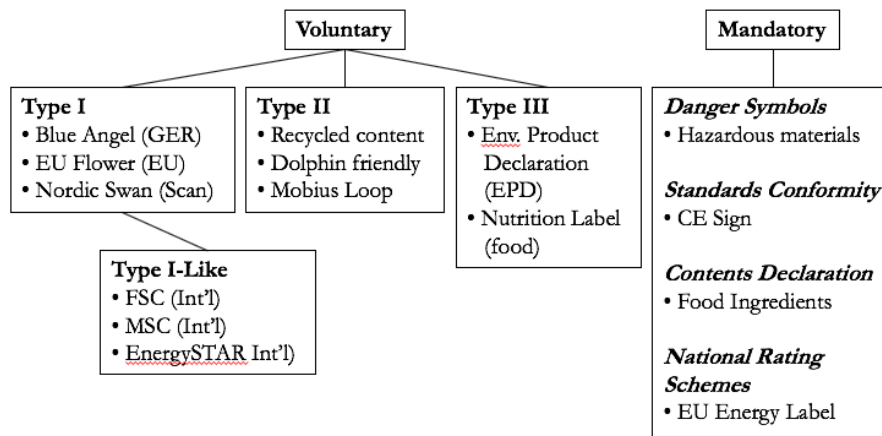


Figure 3-1 Environmental Label Classification (ISO Standards)

Source: Adapted from Horne, 2009; Rubik & Frankl, 2017

### 3.3 Constructing the Program Model

Mickwitz (2003:29) describes the core elements of a program theory as: *actors* (the issuers and intended users of the program); *inputs* (the resources used by the implementing body, including information); *outputs* (the matters that users are presented with); and *outcomes* (both the actions taken by the users in response to the program as well as the consequences of those actions). A simplified program model, which is presented in Figure 3-2 below, represents the program as a single stream process defined by the program's intended goals. This model serves as a useful starting point in the PTE inquiry process as it is intended not to formulate a total picture of the program's reality, but rather generate questions regarding its application (Mickwitz, 2003).

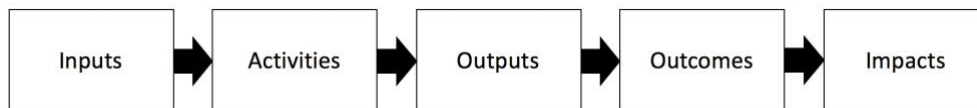


Figure 3-2 Simplified Program Model Design

Source: Adapted from Mickwitz, 2003; Rogers, 2008; Thidell, 2009

The next step in constructing the model involves expanding the simplified model to identify the problems and needs that the program aims to address; the goals the program needs to achieve in order to address them; the micro-steps that occur at various causal stages in the labelling process (divided into initial, intermediate and ultimate outcomes); as well as process feedback loops that occur between outputs and outcomes that might contribute to dynamic and continual institutionalisation. This model is presented below in Figure 3-3 in line with the outcome processes identified by Mickwitz (2003) and Vedung (1998) and based on previous program model constructions developed by Thidell (2009).

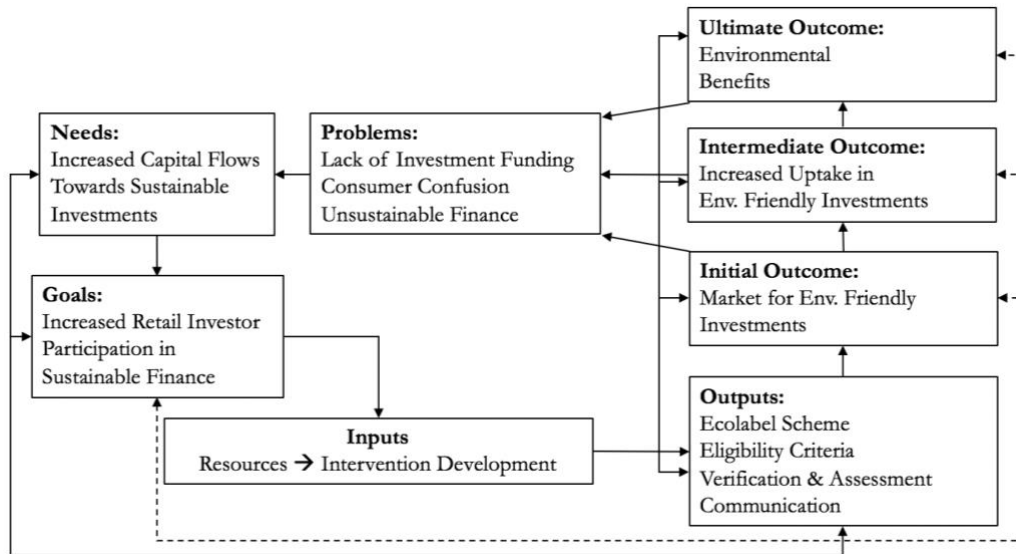


Figure 3-3 Program Model for Investment Product Eco-labelling Programs

Source: Author's Own (Adapted from Thidell, 2009)

Constructing the program model also produces a series of articulated ‘preconceptions’ about the program (Dubois & Gadde, 2002) that allows for the identification of key issues related to the program’s mechanisms, and which helps guide the structure of the analysis and evaluation. As PTEs aim to explore the causal mechanisms that either drive or impede the cause-effect chain, it is important to note that, more so than examining any of the individual components of the model in isolation, it is the process of conversion that occurs between the components of the model that are the focus of the evaluation. Due to the thesis’s scope (which aims to examine causal mechanisms during implementation), various potential input combinations were not examined.

### Issues to be Examined

Estimating the efficacy of an eco-label as an ‘*information as policy*’ intervention requires consideration of its potential to impact market dynamics. From that perspective, environmental reform is seen as a product of the interactions between economic markets and actors on one hand, and consumers and political institutions aiming to condition them on the other, with the end result of institutionalising “environmental considerations, requirements and interests” in the economic domain (Mol, 2002:102). The aim of an eco-label program, from the narrow perspective of market dynamics, is to provide consumers with accurate product environmental information in order to change their behaviour, and offer producers a competitive edge in providing environmentally friendly products (Dendler, 2013).

The question asked in evaluating the potential efficacy of an eco-label policy from a **consumer perspective** is: whether and to what degree alternative causal mechanisms might reduce *information asymmetry* with respect to the environmental preference of a product or signal a cost savings advantage? From a **producer perspective**, the potential for these program alternatives to convey benefits for participating market actors are also explored. To delineate the evaluation, drawing on Thidell (2009)’s application of the evaluation model, the target area is defined as producers (asset managers) and consumers (retail investors) that will use the eco-label, while indirect effects relate to how the eco-label will impact other relevant actors across the investment supply chain (e.g. non-participating asset managers, companies and other

investment professionals), as well as the potential synergies that might occur between the eco-label and other policies. Institutional theory was used to explore the ways in which existing rules, customs and beliefs might either guide or constrain the otherwise utility-focused behaviour of financial market actors (Albertini, 2017; Scott, 2008).

To answer these questions, this thesis considered how and to what extent various eco-label programs alleviate information asymmetry problems with respect to *processes* that an asset manager uses in developing and managing sustainable investment funds such as: sustainable investment strategies, disclosure, transparency and reporting processes and asset selection and analysis methods. This thesis also explores the potential for eco-label program designs to produce measurable, positive environmental *impacts*. To do so, this thesis examined the stringency (quality) of the criteria standards underlying the eco-label, including their ability to identify the most environmentally preferable producers, and the clarity with which the information can be made accessible to consumers. Figure 3-4 provides a summary of how the issues, theory and evaluation criteria were applied to the program model as first constructed:

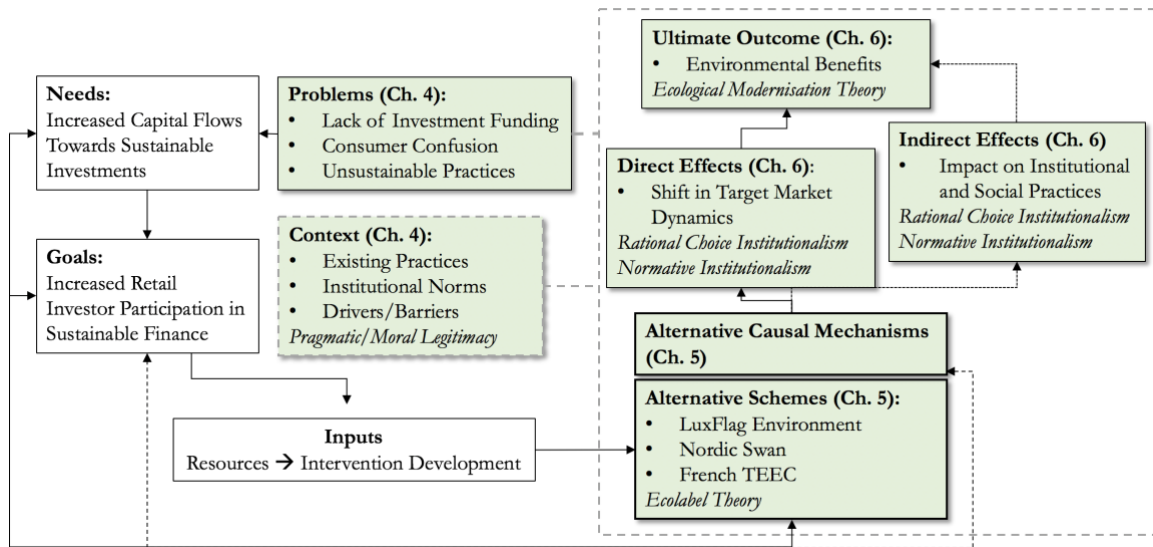


Figure 3-4 Revised Program Logic Model and Issues to be Explored

Source: Author's Own

The EU investment market context and influence is analyzed, signified by the dashed lines. Learnings from existing eco-labels are examined to analyze extent to which direct and indirect effects and potential to achieve ultimate outcomes. White boxes indicate aspects that are not directly explored in the analysis.

Drawing primarily from Suchman (1995)'s seminal framework of legitimacy, which provides a framework for examining whether and how an entity receives support across its internal participants and external constituents, this thesis evaluated program *legitimacy* and *relevance* from two perspectives: (i) the acceptability of certain environmental label programs (with specific emphasis on product categories and label criteria stringency), (ii) the role that credible third-party label providers (and relevant labelling programs) may play in (re)directing the financial sector towards more positive environmental practices and outcomes.

## 4 The EU Investment Sector

As indicated in chapter 3, qualitative content analysis and expert interviews (n=13) contributed to the development of a conceptual framework, which included consideration of relevant contextual conditions (discussed in **Section 4.1** below) that were used to frame the context analysis discussed in **Section 4.2**. The overarching purpose of this context analysis is to better frame the ultimate program evaluation within the confines of its market context. It is hoped that, by doing so, the evaluation can expand the understanding of the policy through an examination of how it might feasibly be integrated within the stable, recurrent patterns of behavioural interaction that exist in the investment sector (Ansell, 2008:76).

### 4.1 Retail Investments

The financial *sector* primarily conducts three related activities: i) investment; ii) lending; and, iii) financing (Swiss Finance Institute, 2016), which are channelled primarily through two institutional structures: banks and capital markets, that together make up the financial *system* (EFAMA, 2017). The notion of ‘financial products’ can therefore include investment products (e.g. mutual funds, insurance funds, structured notes) as well as savings products sold within this system. Actors across the investment chain<sup>19</sup> may offer both investment ‘products’ and ‘services’ such as investment portfolio management and financial research and analysis. This thesis will deal only with the former, specifically with mutual funds and similar instruments provided by asset managers.

*Public* equity is an asset class which allows investors to buy ownership in shares of a company through public stock markets<sup>20</sup>. The *public* equity investment process refers to the “buying, holding and selling of shares on a stock market in anticipation of income in the form of dividends and gains on subsequent sale, as the value of the stock rises” (EFAMA, 2017). A fixed-income investment process by contrast (which include investment vehicles such as corporate bonds, government bonds and bond mutual funds) usually consists of lending money to a borrower for a certain period of time in exchange for interest (Arjaliès, 2014). A *mutual fund* represents a pool of both equity and fixed income assets combined based on specific risk levels and asset allocations, into which a retail investor can buy and redeem shares in keeping with the above process (EFAMA, 2017).

### 4.2 Sustainable Investing

The financial *sector* plays an important (though in many ways ancillary) role in the economy by allocating funds towards their most productive uses (Boubaker, Cumming, & Nguyen, 2018; Schoenmaker, 2017). The financial system can serve a number of functions including: i) producing information to investors about potential investments; ii) monitoring those investments and exerting corporate governance<sup>21</sup> post-investment; iii) facilitating risk management; iv) pooling private sector savings; and v) easing the exchange of goods and services (Levine, 2005). When serving its functions well, the financial system adds value to the real economy by facilitating the efficient conversion of savings into loans in order to promote sustainable economic growth (Febelfin, 2018). However, as the Financial Crisis highlighted, a

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<sup>19</sup> A subset of multiple network links that connect financial actors (Arjaliès, Grant, Hardie, MacKenzie, & Svetlova, 2017)

<sup>20</sup> In contrast, *Private* equity refers to capital that is not listed on a public exchange and is mostly comprised of funds and investors that directly invest in *private* companies.

<sup>21</sup> Corporate governance is defined as the system of rules, practices and processes by which a firm is directed and controlled

poorly functioning financial system can create *market failures* that have the potential to cause significant social, environmental and economic harm.

Sustainable finance is a nebulous field, in that there is as no precise definition of what constitutes a ‘sustainable investment activity’ (AMF, 2015), which can depend on various factors such as the type investment vehicle, type of actor, allocation channel or investment activity chosen (Paetzold & Busch, 2014). In practice, there are numerous strategies aimed at integrating material non-financial considerations into investment decisions, and even more that are pursued without expressly stating specific sustainability objectives (EFAMA, 2017).

One broad definition of ‘sustainable’ investment is any investment strategy that integrates “certain kinds of non-financial concerns—variously called ethical, social, environmental, or corporate governance criteria—in the otherwise strictly financials-driven investment process” (Sandberg, Juravle, Hedesström, & Hamilton, 2009:519). This can mean investment activity that accounts for how financing and investment decisions influence environmental and social issues, as well as how environmental and social issues might influence investment decisions and asset valuations. ‘Sustainable’ investments can also connote a more outcome-based approach to investing, and has been described as investing activities taken “for the lasting benefit of both clients and society at large” (European Political Strategy Centre (EPSC), 2017:2).

In order to shed light on the various concepts, strategies and goals that fall within the contemporary sphere of sustainable investment, it is useful to briefly explain some of its various concepts and explore how they originated, how they relate and how they can differ. In the following section, four concepts that fall within the wider framework of sustainable finance are presented: ***Socially Responsible Investment (SRI); ESG Investment; Green (thematic) Investment; and Impact Investment***, in order to delineate the ways that the financial sector has sought to integrate and understand the concept of sustainability.

#### 4.2.1 Socially Responsible Investment (SRI)

Historically, developments in the field of Socially responsible investment (SRI)<sup>22</sup> were largely driven by institutional investors, including pension funds, mutual funds and insurance companies, which are now collectively the largest *public* equity holder in global financial markets (Ryan & Schneider, 2002; Slager et al., 2012; Useem, 1996). SRI thus finds its roots largely in the investment practices of religious and other ethically focused organisations, who felt it part of their mandate to invest their money in a way that aligned with the underlying principles of their organisation (Camilleri, 2017; Miller, 1992). Two examples of how SRI was first incorporated into investment strategies are (i) divestment; and (ii) norms-based (exclusionary) screening<sup>23</sup>.

Mainly used by institutional investors, ***divestment*** is the act of removing stocks from a portfolio based on mainly ethical, non-financial objections to certain business activities of a corporation, to signal that financing those activities are not considered socially acceptable (Ritchie & Dowlatabadi, 2015). Divestment was a practice that normally applied ethical rather than financial considerations, as organisations did not wish to be seen as affiliated with certain

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<sup>22</sup> It should be noted that the term ‘Socially Responsible Investing’ has taken on multiple forms since its origin a century ago, such as ‘Socially Responsible Investing’, ‘Responsible Investing’ and ‘Ethical Investing’ but for simplicity, the term Socially Responsible Investing will be used exclusively throughout this thesis.

<sup>23</sup> Also referred to as ‘portfolio exclusion’ or ‘exclusion’.

sectors such as the tobacco industry or weapons manufacturing, even though they remained profitable in the short-term.

‘**Norms-based screening**’ involves assessing each company held in an investment portfolio against specific standards of Environmental, Social and Governance performance, ordinarily based on international norms set by organisations or institutions such as the United Nations Global Compact (UNGC), and the OECD Guidelines for Multinational Corporations and International Treaties. Mackenzie (1998) posited two segments of the ethical screening fund market when it first rose to prominence: market-led and deliberative, the former being driven by market demand and consumer needs, while the latter using selection criteria based on ethical deliberation<sup>24</sup>. Norms-based screening is quite similar to ESG-based screening (discussed in the following section), however a key distinction is that norms-based screening is not ordinarily centred around the ‘investment case’ for ethical investment but is rather done for the purpose of values alignment or reputational risk management (Vezér, David, Ranney, & Morrow, 2017).

### 4.2.2 ESG Investing

In contrast to SRI, ‘ESG Investing’ is a process that has emerged over the past decade and has been promoted by various interest groups and industry coalitions within the financial sector such as the United Nations Principles for Responsible Investment (UNPRI)<sup>25</sup>. While SRI has traditionally been ethically motivated and thus principally separate from concerns of financial performance (Beunza & Ferraro, 2018; Mackenzie, 1998), ESG Investing has been more closely associated with mainstream financial practices. The umbrella term ‘ESG Investing’ has been used to define: “a practice that seeks to integrate considerations related to Environment, Social and Governance (ESG) factors into the investment process, with the primary aim of providing positive financial returns to investors” (Beunza & Ferraro, 2018:6). ESG Investing places a greater emphasis on financial performance than SRI, although in relation to mainstream investments which do not incorporate such considerations, financial returns are usually expected to materialize over a longer time horizon (Amaeshi, 2010; Beunza & Ferraro, 2018).

There are many variations of this type of strategy, such as those that focus on investments considered to be ‘*best-in-class*’ or ‘*best-in-universe*’, as well as those exhibiting ‘*best-efforts*’. The French Financial Markets Authority (AMF, 2015) provides the following description of these approaches:

**Best-in-class:** aims to select/weigh the best issuers in each sector, in theory without excluding any sectors in constructing an investment portfolio;

**Best-in-universe:** aims to select/weight the best issuers in the initial universe. Unlike the best-in-class approach, certain sectors may be excluded if their contribution to sustainable development is not sufficient relative to issuers in other sectors represented in the initial universe;

**Best-efforts:** this approach seeks to include in the portfolio only issuers that have made the greatest sustainable development effort<sup>26</sup>.

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<sup>24</sup> In Mackenzie’s distinction, he viewed the deliberative funds as ‘leaders’ in the ethical sector and the market-led funds as ‘followers’ (Mackenzie, 1998).

<sup>25</sup> The UNPRI is a coalition of asset owners who signed a commitment to invest responsibly (see: Beunza & Ferraro, (2018) Avetisyan & Ferrary, (2013)). Schoemaker (2017) lists the UNPRI as an example of a ‘long-term investor coalition’.

<sup>26</sup> Issuers that have made the most progress towards sustainability are not necessarily *best-in-universe* in ESG (AMF, 2015)

The general practice involves integrating non-financial analysis and engagement practices with an evaluation of ESG factors in order to (in theory) better capture long term returns for investors, and to benefit society by influencing the behaviour of companies (Eurosif, 2016). Collectively, these strategies are referred to as ‘ESG integration’.

### **Engagement**

Another aspect of ESG Investing relates to how shareholders chose to influence company behaviour through corporate governance practices. Investors faced with corporate behaviour they deem inappropriate are often left with two choices, they can either: (i) threaten to divest from the company; or (ii) engage with management to try to institute positive change (Schoenmaker, 2017). The latter strategy, referred to as ‘shareholder engagement’ allows investors to ensure that the companies they invest in do not engage in unethical practices or are not exposed to unnecessary business risk, and the term can refer to any dialogue between investors and investee companies on a broad range of ESG issues (Schoenmaker, 2017).

### **Thematic Investment**

Thematic Investing is a type of investment approach used to focus portfolios on certain social environmental or governance themes with the intention of focusing an investment universe towards specific sectors, based on a belief in the superior performance or quality of these sectors or as a means to mitigate broader economic risks (Eurosif, 2016). Because the strategy can be deployed for financial return purposes, impact related purposes, or a combination of both (Eurosif, 2016), it has often been subsumed within the larger context of ESG Investing though on occasion it has been associated with the more narrowly-focused ‘Impact Investment’ universe (described below). Environmentally-themed investment strategies can involve restricting an investment portfolio to environmental sectors such as renewable energy, resource efficiency, water, food, and pollution control or in ‘green-themed’ investment vehicles such as ‘green bonds’<sup>27</sup> (Valborg, Clements-Hunt, Kiernan, & Marais, 2017).

## **4.2.3 Impact Investment**

Impact investing, which refers to the development of investment products that actively seek to ‘make a difference’ in the real economy, is a sustainable investment strategy that has emerged mainly in the last decade (Novethic, 2017). As a result, best practices in impact investment consist of establishing social and environmental objectives specific to the companies invested in, measuring those objectives over time and reporting on performance (Novethic, 2017). The Global Impact Investing Network (GIIN), the largest global association dedicated to impact investing, defines the practice as follows: “impact investments are investments made into companies, organisations, and funds with the intention to generate measurable social and environmental impact alongside a financial return” (GIIN, 2017:58).

In addition, some impact investments measure additionality, defined as “the social or environmental impact that would not have occurred without the investment”<sup>28</sup> (Novethic Research, 2017:5). The discrepancy in measuring additionality appears to be due to practical challenges faced in implementation, and additionality is therefore not included as part of the GIIN definition. A key distinction can still be made between the approach taken by impact

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<sup>27</sup> A bond specifically earmarked to be used for climate and environmental projects.

<sup>28</sup> **Additionality** in the context of sustainable investments can also refer to whether a specific investment would not have occurred but for an investment strategy (DSI Report).

investors and others involved in ‘sustainable finance’ based on the primacy of impact generation over financial return, as well as the concept of ‘measurable’ positive impact. Defining and credibly measuring impacts, both positive and negative, is a necessary precondition of most ‘impact investment’ strategies. Positive impact investment strategies (as opposed to those that minimize either impact or the risks derived from impact, such as ESG integration or negative screening) are comprised of three pillars (Novethic, 2017):

- a) Impact *Motivation*: Intentionality of objectives, targets and indicators
- b) Impact *Commitment*: Outcome monitoring
- c) Impact *Certification*: Transparency, trust and verification, and certification

Traditionally, impact investing had been primarily associated with non-*publicly* traded assets such as private equity, real assets and private debt, and has traditionally had a narrow focus on a few sectors such as micro-finance, property, energy, health, food and education (Novethic, 2017).

#### 4.2.4 Green Investments

‘Green investment’ can either refer to a broader set of sustainable investment strategies (e.g. as the ‘E’ in ESG investing) or its own category of thematic or impact investment (e.g. ‘green thematic investing’ and ‘environmental impact investing’), depending on the parameters set in defining the term (UNEP Finance Initiative, 2016). The sustainable finance advisory firm Novethic provides a framework of five categories, primarily of the standalone variety of ‘green’ investment, based on fund management methods and marketing classification: (i) renewable energies funds; (ii) climate funds; (iii) water funds; (iv) environment funds; and (v) sustainability, the latter category comprising theme-based funds that combine both environmental and social themes in their methods and classification (Novethic Research, 2018).

As ‘green investments’ have historically been embedded in the broader approaches of SRI and ESG investing, it is important to distinguish between the two primary forms through which it factors into mainstream investment strategy: green *assets* and green *overlays*. In an investment context, *green assets* are those investments that are in some way defined as ‘green’, such as a renewable energy company, a green infrastructure project or carbon credits (Inderst et al., 2012). By contrast, *green overlays* refer to the integration of climate or environmentally related elements in a general investment approach (Inderst et al., 2012). A ‘green’ investment can include various combinations of green assets and overlays, which can either make up all or only a portion of the fund’s overall portfolio. Figure 4-1 presents a standard representation of the continuum:



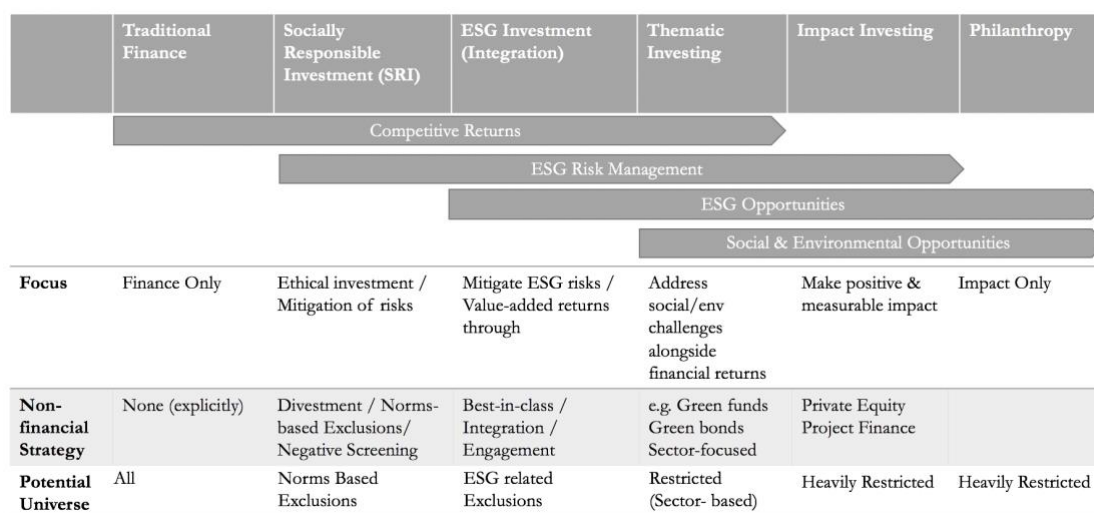


Figure 4-1 Continuum of Sustainable Investment Strategies

Source: Author's Own (Adapted from 'The Bridges Spectrum of Capital', 2015)

### 4.2.5 EU Sustainable Investment Market

According to the Global Sustainable Investment Alliance (2016), approximately €19,8 trillion in investment assets were 'responsibly' managed globally in 2016, with over two-thirds of those assets (€13 trillion) subject to negative (SRI) screening and approximately 45% (€8,9 trillion) subject to ESG integration. Europe is currently the largest market for sustainable investments, with €10.3 trillion in sustainable investment assets, approximately €9.5 trillion of which is subject to negative (SRI) screening, €4,7 trillion subject to norms-based (SRI) screening, and €2,47 trillion subject to ESG integration<sup>29</sup>.

2016 saw significant growth in sustainable investing among the retail investment sector, which grew from 3.4% to 22% of the sustainable investment market (Eurosif, 2016). The remaining 78% of the sustainable investment market is made up of institutional investors, a disparity not entirely attributable to asset distribution. Recent estimates suggest that institutions govern an estimated €69 trillion in assets compared with €43 trillion in private financial wealth (Çelik & Isaksson, 2014; Paetzold & Busch, 2014; Shorrocks, Davies, & Lluberas, 2013). In Europe, according to a recent study, the 'green fund' market consisted of 176 individual funds representing over €32 billion in AuM in 2017 (Novethic, 2017). Figure 4-2 provides an overview of the EU sustainable investment market as of 2016.

<sup>29</sup> Note that many funds have overlapping and complimentary strategies, which is why these individual strategy figures are larger than the total market for sustainable investment.

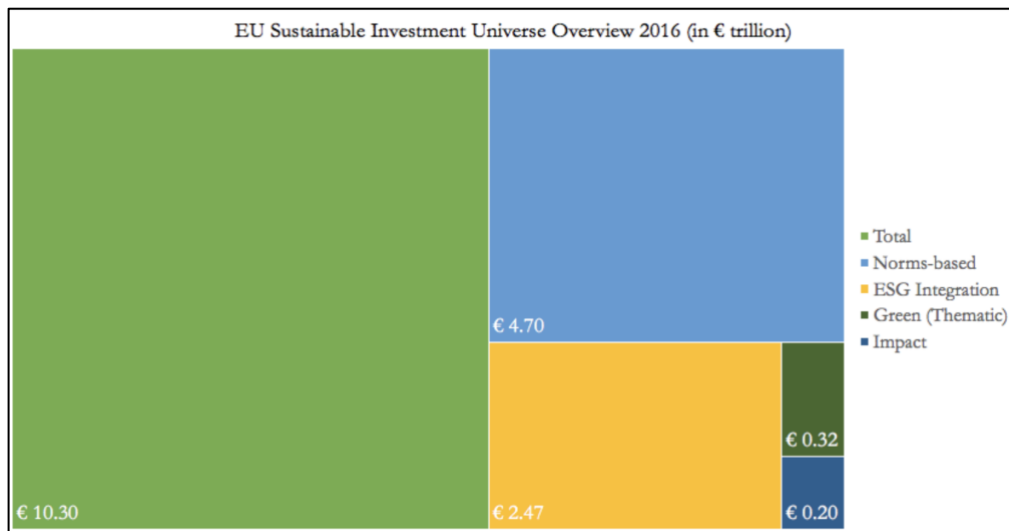


Figure 4-2 Sustainable Investment Universe Overview (AuM in €)

Source: Author's Own with data from multiple sources

### 4.3 Context Analysis

This section presents the findings of the EU sustainable investment context analysis. The analysis drew from practitioner interviews, academic literature, prior empirical research and market reports to identify the key drivers and barriers that might impact the effectiveness of an EU-wide eco-label.

Prior research has described the rise of sustainable finance as a shift in the prevailing industry logic of the financial sector. Arjaliès (2014:9) for example, describes the purely financial logic as “the logic of investing for financial return only” and the ‘SRI logic’ as “the aim of restoring a long-term perspective to investment by integrating SRI criteria deemed essential for the long-term survival of the company/country”. Similarly, many of the conceptualizations of the various strategies that fall within the broad category of ‘sustainable investment’ are often presented along a continuum (similar to Figure 4-1 above): grounded on one end by an approach that omits sustainability concerns entirely (often referred to as the ‘mainstream’ or ‘traditional’ finance end of the spectrum), and at the other, by one that omits considerations of financial return in the investment process entirely (i.e. pure philanthropy).

Some of the interviewees viewed the financial industry as split between concepts of morality, impact and return when it comes to prioritizing sustainability within finance (I4, I12), and that may be due to the fact that its historical development has been both regionally and conceptually diverse (Arjaliès, 2010). This range of motivations among investment professionals can lead to the formation of various objectives for financial institutions in adopting sustainable investment strategies, which could entail potentially overlapping management strategies (Triodos Investment Management & ABN AMRO, 2016). For example, using non-financial data to supplement financial analysis is seen by many as a business objective as it serves as a form of both risk and opportunity management. Conversely, making positive contributions to environmental or social challenges, such as sustainable development goals or supporting the transition to a low-carbon economy, are often seen as broader societal objectives (Triodos Investment Management & ABN AMRO, 2016).

### 4.3.1 Drivers

Industry professionals have noticed a change in attitude towards sustainable investing over the last several years (Robinson, 2018; I6). Non-financial considerations are becoming more and more integrated into investment strategies (I7), and according to multiple interviewees and reports, many strategies associated with incorporating non-financial aspects into investment decisions, such as norms-based exclusions and ESG integration have gained enough of a foothold in the market that they have become commonplace among mainstream investment professionals (I4, I6, I7, I12). There also seems to be increased interest among retail investors, as a 2017 study conducted by Natixis, which surveyed over 7000 investors and investment professionals in 22 countries found that the majority of investors want their capital invested in products with positive environmental or social impacts (Anuschka Hilke, Leo Theobaldt, & Stan Dupré, 2017). Another market survey conducted by Schroders in 2017 found SRI was the most important topic for investors seeking out further information from investment professionals (Schroders, 2017).

According to many interviewees and reports, two international events in particular, the Paris Climate Accord (COP21) and the Sustainable Development Goals (SDGs), were the tipping point for the investment industry with respect to sustainable investing generally, and ‘green investment’ in particular, and a significant reason why climate change and sustainable development have become important topics within the industry (Eurosif, 2016; I4, I10, I11). As one example of this growing interest, the UNPRI, which has experienced steady membership growth since its inception in 2006, has experienced even greater membership rates in the wake of the Paris Accord and the implementation of the SDGs. Figure 4-3 provides a breakdown of UNPRI signatories by year since 2006 until September 2018.

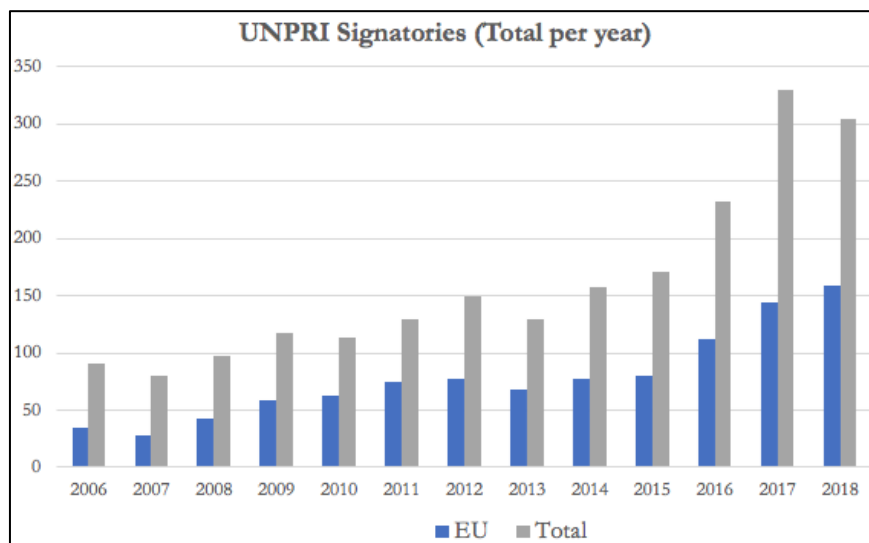


Figure 4-3 UNPRI Signatories per year 2006-2018

Source: Author's Own (data obtained from UNPRI website)

To that end, interviewees were of the view that international agreements such as the SDGs can contribute positively to shifting the financial sector to a more ‘impact focused’ mindset and that it may become the main framework through which investors determine their sustainable investment strategies (I7, I4, I10, I11). As one interviewee noted, while the strategic focus is still primary process related, “there is an added component of looking towards the SDGs” as guidelines for best practices in impact measurement and reporting (I10). For example, 60% of

the respondents to the GIIN's Annual Impact Investor Survey either use or plan to use the SDGs in their impact strategy development (GIIN, 2017). Prior to the SDGs, international initiatives such as the UNGC were widely used by financial industry as ethical guidelines, but primarily for setting standards with respect to negative screening and exclusions, thus making them hard to market and advertise to clients for many investment professionals (I10).

### **Corporate Disclosure**

A topic that has received increasing attention among investors, public policymakers and the general public is corporate environmental disclosure (de Villiers & Van Staden, 2011). Non-financial corporate reporting is seen as an "essential element of the material disclosure process" among asset managers and the quality of sustainability reporting by asset managers is seen as closely linked to the quality of the data made available by corporations (AMF, 2015).

The Task Force on Climate-Related Financial Disclosures (TCFD) was established in 2015 by Mark Carney in response to the G20's request to better understand the financial implications of climate change (Yumasheva & Dauth, 2018). By 2018, there were over 200 signatories to the TCFD accounting for \$44 billion in average market capitalization per company (Yumasheva & Dauth, 2018). The perception regarding the TCFD is that it has helped increase the amount of information around climate change and its potential impact on investment strategies and financial stability, which has meshed well with increased pressure from shareholders to produce increased voluntary corporate climate risk disclosure (I4). An encouraging trend observed by one interviewee is that companies are applying a more future-oriented approach to setting Key Performance Indicators (KPIs), choosing to set and report on longer-term targets that apply outside current quarters or given years (I9).

Currently, EU-level corporate non-financial disclosure requirements focus on the disclosure of non-financial matters, and particularly on the impact that companies have on the environment (TCFD, 2017). In many cases, however, smaller companies (which are more commonly held assets in the private equity and venture capital sectors) do not always have the resources available to provide fulsome non-financial data, nor do they face the same regulatory pressures as large companies to do so (I12). In contrast, due to the more direct link between venture capitalists and smaller companies, it can be easier to specify the type of information and reporting required from investors, which can serve to shrink the information supply chain (I12).

### **The Market for Retail Impact Investments**

Some interviewees saw the retail investment sector as a potentially large driver of the impact investment market in future, due to the lack of constraints imposed on them as compared to institutional investors (I11, I4). Whereas institutional investors have been the drivers of sustainable investing in the past, retail investors such as private households and high-net worth individuals (HNWIs) are not as constrained by regulatory investment requirements and are therefore more open in general to alternative investments with different risk profiles (Eurosif, 2014). A study conducted by the European Supervisory Authorities (ESA) demonstrated that retail investors are more likely than institutional investors to invest in ESG and impact investment products in order to make an impact on the real economy rather than as a means of avoiding risk (European Political Strategy Centre (EPSC), 2017). Further, while institutional investors are the largest participants in the SRI, ESG and Thematic investment markets, the impact investing market is characterised by a high number of individual investors, especially through family offices and HNWIs (Novethic, 2017).

## 4.3.2 Barriers

### **Green Fund Positioning**

Despite momentum for environmentally-friendly investment, some see the challenge in mobilizing sufficient capital towards green investments that impact the real economy as one of shifting the sustainable investment market from a focus on risk mitigation towards a focus on deriving positive social and environmental results (UNEP, 2017; I7; I12). Mobilizing and directing capital towards ‘green’ investments appears to pose a significant challenge for investors as certain green investment strategies represent a departure from many more mainstream SRI and ESG investment practices (Jégourel & Maveyraud, 2015). For instance, there are considerably more SRI funds than purely ‘green funds’ on the market (I7), and despite impressive recent growth figures<sup>30</sup>, to date private capital in ‘green investments’ remains marginal compared to general capital deployment. Currently, less than 1% of holdings by global institutional investors are in environmentally-friendly infrastructure assets, and only a small fraction of bank lending is explicitly classified as ‘green’ according to national definitions<sup>31</sup> (European Political Strategy Centre (EPSC), 2017).

In addition to concerns over the financial performance of these green investments, there are practical implications associated with certain impact investment strategies, particularly those that include minimum requirements for including purely green companies or projects (‘pure-play’ assets) that could restrict uptake. As an example, a market survey conducted by Eurosif in 2016 found that energy efficiency and renewable energy were the most favoured investor themes at the EU level. Despite that enthusiasm, a market study found that within the green thematic fund market (which totalled €32,2 billion in 2017), thematic funds dedicated to renewable energies failed to surpass €1 billion in AuM in 2017. One of the primary factors noted in the study was the limited number of listed ‘pure players’ in the renewable energy sector, which necessarily restricted the number of assets that are eligible for inclusion in certain impact portfolios (Eurosif, 2016).

Traditional impact investment funds are usually confined to investing in new ventures and projects with low Return on Investment (ROI) (e.g. due to the priority given to social outcomes) or high risk (e.g. due to investment in new technology) (2DII, 2018; I12). This practice leads to products with a very specific profile that only target a niche market (I10). The penetration of such products is, in most markets, below 1% (Eurosif, 2016; GIIN, 2017). The combined effect of these two challenges is that both ‘pure-play’ green investments and environmental impact investments remain markedly small subsectors of the sustainable investment universe.

Some have suggested that impact investments will not be able to compete with more mainstream investment vehicles in terms of financial performance and will thus remain a ‘niche’ sustainable investment vehicle (EFAMA, 2018; I10). Though conclusive evidence to the contrary has been difficult to obtain, Novethic, the sustainable investment consultant company responsible for auditing the TEEC Label, has found that the early feedback from asset managers with respect to green impact funds has been positive, suggesting that these products can be competitive, or at least, that universe-restricting strategies are not necessarily

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<sup>30</sup> Green funds expanded by 49% in AUM in 2017 from the previous year, which is a growth rate four times higher than the overall rate of European listed funds (12%) (Novethic, 2018).

<sup>31</sup> That does not preclude the fact that many ‘green’ investments are undertaken using standard financial instruments (EPSC, 2017).

a performance handicap (I7). One interviewee (I5) noted a ‘small shift’ in the sustainable investment market, with more investment products applying stricter impact criteria as a result of SDG alignment, which necessarily results in a more limited investment universe. Still, the perception of impact investments as *financial return agnostic* at most remains among many industry professionals.

### **Complexity**

The financial system in general can be challenging to navigate for many retail investors who must deal with a number of actors across the investment chain and a growing number of investment products. This can create and exacerbate confusion among investors, who face challenges matching the outcomes of a particular financial service or product with the inputs put forward by financial services intermediaries (Adrian Blundell-Wignall, 2016; Battiston et al., 2016).

Complex relationships along the investment chain, including the exchange of information between companies, asset managers and financial analysts all pose the risk of exacerbating information asymmetries for retail investors. As one example, the risk-adjusted returns of a fund (which has been used as an analogy for the quality of a durable or consumable good) can remain opaque to investors for a long period of time, and in most instances, ‘causal ambiguity’ makes it exceedingly difficult to connect the outcomes with the work of an asset manager (de Jager, 2017). Complexity and ambiguity can thus act to increase information asymmetry between providers and consumers of financial services, which can inhibit the effectiveness of competition among ‘responsible’ and ‘irresponsible’ asset managers (Ménard & Shirley, 2008).

### **Participation Costs**

In the context of asset management fee structures, specifically related to ‘actively’ and ‘passively’ managed investment funds, investors may be dissuaded to participate in the sustainable investment market due to increased participation costs. Asset managers traditionally charge fees to asset owners, primarily based on the volume of assets under management (Arjaliès et al., 2017), such as brokerage fees, costs for setting up accounts, annual costs for fund managers or costs linked to trading volume (Gutsche & Zwergel, 2016). The conventional structure is such that active, more sophisticated portfolio management practices will elicit a higher fee for managers, while funds that mostly follow indexes (referred to as ‘passive funds’) have far lower fees (Arjaliès et al., 2017).

The current market has seen increased attention being paid to high transaction costs associated with indirect stockholding (e.g. investing through actively managed mutual funds) (Gutsche & Zwergel, 2016). One indirect result of investors’ unwillingness to pay high management fees has been increased demand for passively managed funds, and retail investors frequently cite “liquidity, transparency and cost advantages” as reasons for their preferability over actively managed funds (Inderst et al., 2012:21). In 2016 for example, the global market for Exchange Traded Funds (ETFs), a common form of passively managed funds, had grown to over €3 trillion in total assets, whereas it had represented €180 billion in 2003<sup>32</sup>.

### **Heterogeneous Investor Needs**

Studies have shown the important role that asset managers can play in drawing the retail investment market towards sustainable investments (Hummels & Timmer, 2004; Nilsson,

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<sup>32</sup> As another example, by 2013 ETFs were the most popular type of exchange-traded product on the Scandinavian market (Nordic Eco-labelling, 2016)

2010; Paetzold & Busch, 2014). However, prior studies, such as the 2015 study by the French Social Investment Forum (FIR), have also found that asset managers can be a major bottleneck in the uptake of ‘green demand’ on the market (2DII, 2017). There appears to be a mismatch between customer demand and assets managed with clear strategies addressing environmental impact objectives, which can be attributed to a number of market barriers that create structural barriers for market growth (2DII, 2017). Two such barriers discussed with interviewees were (i) heterogeneous investment needs; and (ii) misaligned incentive structures in the market.

A relational tension exists between investors and managers due to the *heterogeneity* of investor needs and wants (Arjaliès, 2010). Retail investors have diverse needs and characteristics including “their reasons for investing, their investment time-horizons, their ‘sophistication’ (e.g. their understanding of the complexities of financial markets) and, closely related, their information-gathering and information-processing capacities” (Arjaliès et al., 2017). The heterogeneity of needs “can be both latent and multifaceted at times”<sup>33</sup> (Triodos, 2017) and asset managers may only be able to cater to the sustainable investment needs and interests of their clients if they are themselves well educated in the area (Triodos, 2017). However, due to differing investor preferences, developing a “one size fits all” strategy for developing impact investment products may not be possible even with increased asset manager knowledge (Paetzold & Busch, 2014). According to one interviewee, SDG alignment may allow for more specific design and marketing of sustainable investment portfolios, which can augment sales and “allow for asset managers to focus on a few of the SDGs, allowing them to fit ‘the identity of certain organisations into the product’” (I9).

### **Short Termism**

A perceived challenge for sustainable investment is the outdated incentive structures that propagate *short termism* in the market. Whereas ‘long-termism’ is described as “the social good of corporate wealth creation for all economic stakeholders in the long term” (Chiu, 2018:12), ‘short-termism’ refers to an excessive focus on short-term financial return at the expense of long-term interests, a phenomenon referred to as the ‘tragedy of the horizon’<sup>34</sup> (Carney, 2015). The challenge of *short-termism* is particularly acute in the financial sector as short-term financial incentives are often misaligned with long-term social and environmental outcomes (Carney, 2015; Schoenmaker, 2017). According to some, capital markets continue to reward highly liquid, leveraged trading over the prospects of more sustainable longer-term returns.

In the current market, “long-term sustainability aspects [are] tagged as externalities which clouds their measurement on market indices, benchmarks, market share, personal security, success, and reputation, as well as regulatory compliance” (Lehner, 2016:309). This can create tension between investors and companies as well, as investors react to negative short-term corporate performance (either through divestment or engagement), and corporations subsequently attune their corporate strategies to short-term and financially-driven objectives and outcomes (Chiu, 2018).

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<sup>33</sup> A 2017 study showed that 72% of French retail investors want sustainability issues to be integrated in their savings funds, but 66% had never heard of SRI. Similar results were found in the German retail market in March 2017 (European Commission, 2018).

<sup>34</sup> An alternative conceptualization is that risks that are material for a physical asset (e.g. power plant) or a company (e.g. electric utility) are not necessarily material for their investors and not necessarily priced-in by financial analysts (Carney, 2015)

In response to a growing concern regarding this challenge<sup>35</sup>, several interviewees observed that asset managers appeared to be placing a greater focus on potential value added through investments over the long-term (I5, I12, I13, I10). Despite the positive trend, the level of loyalty that owners exhibit towards funds that underperform in the short-term may still constrain asset managers in their ability to align investment strategies with their clients' long-term financial and non-financial interests. Research has shown that retail investors in particular can be quick to exit from funds or sectors based on recent poor performance (Arjaliès et al., 2017).

### **Impact Related Challenges**

While increased general knowledge related to environmental challenges has led to a perceptible attitude change, it remains possible that some organisations who have signalled an intention to improve the sustainability of their practices are trying to save face as a means of protecting their reputation (I4). In many observed cases, large financial institutions with multiple funds and investment products can appear ambivalent towards environmental impacts when examining their investment portfolio as a whole, as they simultaneously support positive environmental initiatives and damaging projects that harm the environment (Eurosif, 2016).

Further, many funds and products that claim to make a positive environmental impact or to contribute to the SDGs do not actually measure their impacts, and instead limit measurements to the revenue exposure of the companies in the portfolio to 'sustainable' or 'impact' themes related to the SDGs (e.g. nutrition, health, education, energy efficiency, renewable energy, water treatment) (Novethic, 2017). According to Novethic (2017), many funds that are labelled either 'impact' or 'SDG aligned' are more accurately described as multi-thematic investment funds. Similarly, a 2016 study published by the Dutch Responsible Investment Forum (VBDO) found that of the investments reported by its members as 'impact investments', the majority were more accurately categorized under other sustainable investment strategies such as thematic investments (UNEP Finance Initiative, 2016).

### **Additionality**

Prior studies have observed that greater investment steered towards sustainable investments may not necessarily spur on increased sustainable development (Busch, Bauer, & Orlitzky, 2016). These concerns raise questions about the extent to which certain green financial instruments (in particular those that focus on green overlays) actually divert capital towards 'green' investments. One interviewee (I12) noted that, while *best-in-class* ESG investing can be useful to optimise the risk profile of a portfolio, it does not necessarily optimise environmental performance since investee companies are not incentivised to create new and sustainable products and processes (see also: Natixis CIB, 2017). Further, many publicly traded equities may only contribute *indirectly* to the 'green finance gap', as opposed to other investment vehicles, such as project funding through private equity or bonds which can directly fund an environmental or climate related project (Inderst et al., 2012). As one example, Figure 4-4 provides an overview of the type of products normally included within a standard UCITS investment fund portfolio, primarily publicly listed equity and debt, as well as those investments that might directly target climate-friendly infrastructure.

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<sup>35</sup> Confronting the challenge of 'short-termism' was one of the cross-cutting EU policy recommendations made by the HLEG (European Commission, 2018)



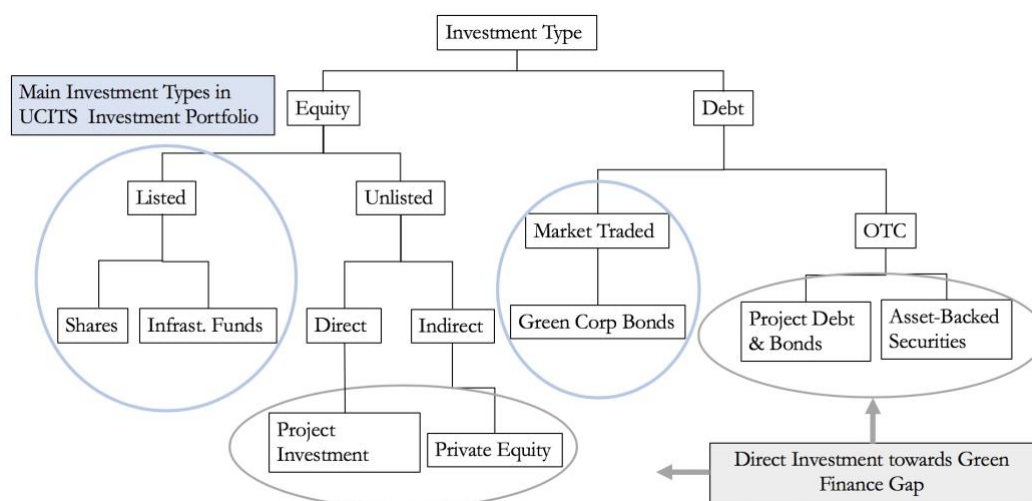


Figure 4-4 Direct and Indirect Investments in ‘Climate Finance Gap’

Source: Adapted from Inderst et al., 2012

Questions of additionality have also been raised with respect to more impact-focused strategies such as thematic investing, impact investing and green bonds. Perceptions with respect to additionality challenges include whether green bonds actually increase capital flows towards ‘green’ projects (I4), and whether impact investment strategies produce positive impacts when applied within the context of publicly traded equity and debt (I12). The 2DII found that, of the ‘impact’ products examined in a 2017 report, most did not appear to make any impact on the real economy, despite the fact that perceived carbon intensity reductions (CO<sub>2</sub> per € of AuM) were reported in such a way as to suggest overall emissions reductions had been achieved (2DII, 2018).

### 4.3.3 Summary

The financial sector is currently experiencing an increased awareness in sustainable investment strategies, which seems to be translating into greater participation in the sustainable investment market. Further, given concerns regarding the potential for incomplete, inaccurate or immaterial information to negatively impact investment portfolios, investors and investment professionals appear to be demanding improved disclosure from companies. While retail investors are a small player in the sustainable investment market compared to institutional investors, they also appear less limited in their ability to invest in less mainstream investments due to regulatory constraints or fiduciary duties<sup>36</sup>.

Despite these encouraging trends, demand for more sustainability and transparency across the investment chain has not produced a proportional increase in demand for impact and green investments. Further, integrating sustainability within the financial sector presents system-wide challenges such as complexity across the investment chain, heterogeneous investor needs and misaligned incentive structures, and a lack of enthusiasm among investors for higher administrative costs associated with active fund management. Lastly, the investment sector also faces practical challenges regarding the connection between industry practices and tangible, measurable environmental impact.

<sup>36</sup> Duties of loyalty and prudence that institutional investors (and asset managers) owe to their clients/investors

## 5 EU Label Analysis

As a second component of the conceptual framework, alternative program outputs and underlying causal mechanisms were developed and applied to three existing eco-labels for investment products in the EU: the Nordic Swan label (Scandinavia), the Luxflag Environment Label (Luxembourg) and the TEEC Label (France). Section 5.1 presents the three labels examined

### 5.1 Label Programs

#### 5.1.1 LuxFlag Environment Label

The Luxembourg investment fund industry is the largest in Europe and the second-largest worldwide after the United States by fund domiciliation<sup>37</sup>. Luxembourg is also the leading European domicile for responsible investment funds, accounting for 31% of funds and 39% of all AuM in Europe (LuxFlag, n.d.). LuxFlag is an independent, non-profit association created in Luxembourg in July 2006. LuxFlag launched its first label, the microfinance label, in 2007, and has since launched four additional fund labels related to various aspects of non-financial performance. By the end of 2017, LuxFlag had issued labels to 80 investment vehicles worth over €31 billion, which represented a 54% increase from 2016. LuxFlag Labels are available for internationally distributed vehicles irrespective of their country of domicile or issuance. LuxFlag offers five different labels including the Microfinance (32 labelled funds), ESG (13), Climate Finance (4), Green Bond (18) and Environment (11) label<sup>38</sup>.

The LuxFlag Environment Label was launched in June 2011, and covers a broad range of investments, although the majority of investments under the Environment Label are in listed companies<sup>39</sup>. The 11 Funds that have received the Environment Label to date are issued by 7 different asset management companies.

#### **Product Scope**

With respect to ESG investment strategies, no preference is given to a particular ESG strategy, although they do require that certain *negative* strategies such as single exclusion and engagement be used in conjunction with other *positive* strategy (I9). As a result, best-in-class and themed investment approaches that include a focus on return as well as impact are the most commonly applied. To be eligible, fund managers are required to set out their ESG strategy although specific directions are not provided, save for reference to investment fund involvement and commitment to relevant associations such as the UNPRI (LuxFlag, 2018), however “the applicant must screen 100% of its invested portfolio according to the selected ESG strategies” (I9).

#### **Output: Certification Criteria**

To be granted a LuxFlag Label, applicant funds need to meet predefined eligibility criteria, which are assessed by independent Eligibility Committees composed of industry experts,

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<sup>37</sup> Domiciliation refers to where the fund is registered, rather than the asset manager or asset owner’s country of origin.

<sup>38</sup> Launch dates of each label are: 2011 - The Environment Label; 2014 - The ESG Label; 2016 - the Climate Finance Label; and 2017 - the Green Bond Label.

<sup>39</sup> In addition to the Environment Label, LuxFlag also offers a ‘Climate Label’, which is a climate impact label accessible only to pure-play impact-measuring funds contributing to global climate change action, such as direct investments in infrastructure and public finance projects and investments.

academics and analysts<sup>40</sup>. Minimum requirements are that at least 75% of a fund’s total assets are comprised of companies that support “environment-friendly products, services and practices”. The eligibility criteria for the Environment Label require eligible funds to have a portfolio of investments in environment-related sectors<sup>41</sup> and avoid investments in controversial sectors. An ‘environment-friendly’ company is defined under the criteria as a company with at minimum 20% of its total turnover (the amount of money taken by a business in a particular period) coming directly from environmental activities (LuxFlag, 2018). There are exceptions to this minimum requirement related to weighted revenue turnover, and threshold requirements where the Fund provides direct or indirect credit funding to companies. As opposed to the LuxFlag Climate Label, the LuxFlag Environment Label has limited impact measurement requirements (LuxFlag, n.d.)

### **Output: Monitoring and Compliance**

LuxFlag fund labels are valid for a period of one year and can be renewed on expiry, although LuxFlag reviews applications from investment funds at the end of each quarter. The application review is conducted by an independent third-party auditor, who provides an audit report detailing a fund’s investment procedures. Each labelled fund has to submit a compliance letter after six months, and on evidence of non-compliance with the eligibility criteria, the application is kept on hold until full compliance can be confirmed.

### **Outcomes**

In order to achieve its general mission, which is “to support sustainable finance, encourage fund managers to develop responsible investment products and advance market standards” (I9), LuxFlag aims to reassure investors that a fund which receives its label actually invests its assets in environment-related sectors in a responsible manner (I9). The Environment Label aims to generate “financial and non-financial return through mixed or sector-specific environment strategies”, as well as an increase in both asset and sector performance (LuxFlag, n.d.).

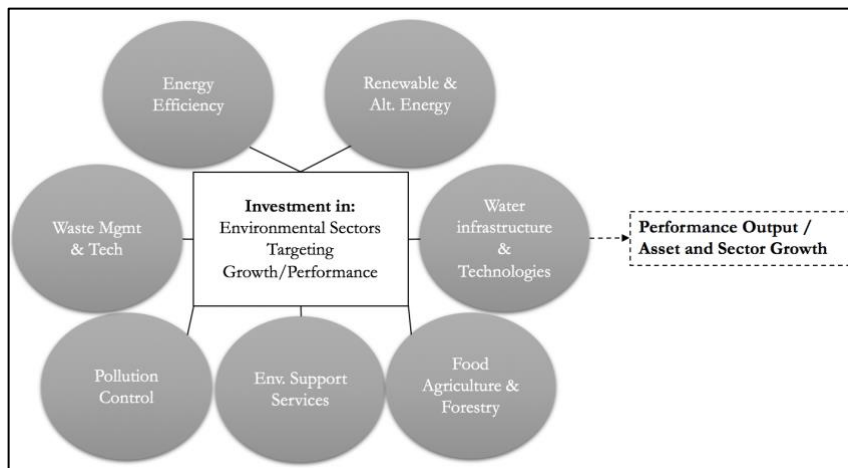


Figure 5-1 LuxFlag Environment Label Strategy Overview

Source: Adapted from LuxFlag, 2017

<sup>40</sup> As of 2017 the Eligibility Committee was made up of 19 members (LuxFlag Annual Report, 2017)

<sup>41</sup> As defined by a globally recognized classification system (e.g. FTSE Environmental Markets Classification System)

To do so, LuxFlag labelled investment funds are comprised primarily of assets in profitable companies that support or provide environmentally-friendly products or services (LuxFlag, n.d.). The Environment Label is intended to provide investors with a “large palette of environment funds” in order to foster environmental innovation and grow environmental sectors. Figure 5-1 provides an overview of the Environment Label’s overall approach.

Most of the funds under the Environment Label are invested in listed companies and funds take a very sector-specific approach to their investment strategy. One example is the Triodos Renewables Europe Fund (Renewables Fund) founded in 2006, which aims at “directly investing in small to medium-sized clean energy projects throughout Europe” (Triodos Investment Management, n.d.) in order to close the financing gap between micro and utility-size projects. According to Triodos, the Renewables Fund’s portfolio produced 418 GWh of green and renewable electricity in 2017, reducing CO<sub>2</sub> emissions by 248,643 tonnes (Triodos Investment Management, n.d.).

### 5.1.2 Nordic Swan Label

There are more than 6,000 UCITS funds<sup>42</sup> on the Nordic market, and in some countries such as Norway, at least 80% of all capital is invested in the stock market (Nordic Eco-labelling, 2016). The SRI market is not governed by an explicit legal framework although it is considered to be mature, driven in large part by institutional investors and ethical strategies such as exclusions and norms-based screening (Eurosif, 2016). According to a recent market survey conducted by Nordic Swan in 2014, 80% of Swedish investors indicated they were “interested in placing a part of their savings in a sustainable fund” (Nordic Eco-labelling, 2014).

The Nordic Swan label was founded by the Nordic Council of Ministers in 1989, to “assist consumers in making active choices that would benefit the environment” (Boyd, 2017). The Nordic Eco-label is well-known amongst Nordic countries with a 94% recognition level among consumers. Nordic Swan product groups are selected based on the parameters of *relevance*, *differentiation potential*, and *steerability*, which are considered necessary preconditions to be able to achieve environmental gains (Nordic Eco-labelling, 2016). Eco-labelling criteria for all product groups are developed in compliance with ISO-14024 standards in an open process, and relevant aspects are selected based on four main environmental categories: (i) energy variations and climate effects; (ii) chemicals; (iii) biodiversity and resource utilization; and (iv) waste (Nordic Eco-labelling, 2016).

Nordic Swan had considered implementing an eco-label for investment products as early as 2001 when it conducted a pre-study to determine market readiness (I6). The criteria for being awarded the Nordic Swan label were confirmed in June 2017 following two years of development and consultation led by the Nordic Eco-labelling organisation (Boyd, 2017).

#### **Product Scope**

To be eligible to receive a Nordic Swan Label, a fund must be compliant with the UCITS Directive and distributed in one or more of the Nordic countries. At least 50% of its assets must be held in equities, corporate debt and/or qualified non-corporate green bonds. Index funds are also eligible for the label provided they are based (at least in part) on an index that has been found compliant through a Nordic Eco-labelling evaluation. In that respect, the

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<sup>42</sup> UCITS Funds are collective investment funds operating under the Undertakings for Collective Investments in Transferable Securities (UCITS; 2009/65/EC) and are the primary investment vehicles for retail investors in the EU.

Nordic Swan label includes all categories of mainstream ESG Investment products, as well as certain SRI investments that incorporate both exclusions and active engagement strategies.

### **Output: Certification Criteria**

The criteria for a Nordic Swan Eco-labelled fund are a combination of obligatory requirements that must be met at all times, as well as point-score requirements that allow for greater flexibility in developing a portfolio (Nordic Eco-labelling, 2016). Further, non-corporate green bonds must adhere to the 2017 or later edition of the Green Bond Principles (GBP) and be third-party verified. Nordic Swan criteria are based on general provisions as well as four specific activity categories: (i) exclusion criteria; (ii) inclusion criteria; (iii) active ownership (engagement); (iv) reporting and transparency; and (v) quality and regulatory requirements (Nordic Eco-labelling, 2017).

Environmentally related exclusion criteria include mandatory restrictions on the fossil fuel (and nuclear) extraction, refinement and generation sectors (threshold with exceptions of 5% revenue derived from those activities) as well as optional restrictions on Genetically Modified Organisms (GMO) related companies (i.e. companies that derive more than 5% of revenue from GMO crop production) (Nordic Eco-labelling, 2017). Inclusion criteria require that 90% of all direct holdings have undergone an ESG analysis within the previous 12 months, either conducted by a third-party or by the fund manager directly. They also require that a fund is invested in assets with strong sustainability ratings, and thus require at least 50% of the assets included in a fund be invested in holdings with “strong ESG practices” as identified by the analysis (Nordic Eco-labelling, 2017:12). Lastly, the label seeks to attract funds that promote companies “in transition to a more sustainable business” (Nordic Eco-labelling, 2017:3). The Nordic Swan label also requires that a labelled fund has a management system in place to handle compliance with Nordic Swan requirements, as well as appointed contact persons to handle communication between the fund, the label issuer and the public.

### **Output: Monitoring & Compliance**

Eligibility criteria are valid for at least three years, which is the minimum licensing period, and revised criteria are published at least a year in advance of the expiry period (Nordic Eco-labelling, 2017) (I6). Nordic Swan includes as part of its criteria, the option to inspect funds for compliance at any time during the licensing period, which may include an on-site inspection. Nordic Swan may also inspect fund compliance through ‘random samples’ taken from a fund’s website, and if the fund is found to be non-compliant based on that sample, they may be charged for the cost of the analysis (Nordic Eco-labelling, 2017).

The verification and auditing processes for investment funds can be overly burdensome with respect to measuring the sustainability of a fund’s underlying assets (companies, financed projects, etc.) which can often result in incomplete information (I6). To address this problem, Nordic Swan conducts an on-site audit of the asset manager only (I6). Fund managers are also required to perform an ‘internal audit’, which can be performed either by the company or an external organisation<sup>43</sup>, to ensure that a labelled fund is compliant with the Nordic Swan criteria every 12 months. All changes made to the fund and its marketing that have a bearing on Nordic Eco-labelling requirements are expected to be provided to Nordic Swan in writing (Nordic Eco-labelling, 2017). Further, asset managers are expected to report on all holdings in the labelled funds (both direct and indirect) at least once per quarter.

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<sup>43</sup>Third-party verification of sustainability reports is not a mandatory requirement but is considered a point-score requirement.

The Nordic Swan criteria (2017:3) provides the following disclaimer: “A Nordic Swan Eco-labelled fund is managed so that it can influence companies and capital markets in a more sustainable direction. Requirements and the certification process cover the investment fund on an overall basis and are therefore no guarantee for each individual holding”. Nordic Swan requires asset managers of labelled funds to answer all ESG-related questions posed by retail investors about holdings in the fund within two weeks (Nordic Eco-labelling, 2016).

### **Outcomes**

The stated aims of the Nordic Swan Label are to: (i) reduce Nordic investors’ investments in unsustainable companies; (ii) increase investments in companies with good sustainability performance; (iii) influence and encourage greater SDG accountability among companies through engagement strategies; (iv) increase visibility and engagement in sustainability issues by the financial industry through transparency and dialogue with the investors; and (v) stimulate increased traceability between the investor’s capital and concrete investments in sustainable projects, for example through green bonds (Nordic Eco-labelling, 2014). To do so, it aims to provide asset managers with a “simple way of communicating environmental work and commitment to customers” (Nordic Eco-labelling, 2017:4) as verified by a third party.

The Nordic Swan label places particular emphasis on altering behaviour of the underlying companies that make up a fund’s portfolio as well as the portfolio itself (“The Nordic Swan label is a means to influence the underlying companies that make up a fund” (I6)). To do so, the Nordic Swan Label aims to alter the conditions set by companies with respect to: (i) data gathering; (ii) disclosure; and (iii) reporting, which can translate into further change towards impact (“it is more about increasing transparency, materiality and reliability of disclosure between the various stakeholders involved in the equity market” (I6)). Capturing a pre-specified percentage of the Scandinavian fund market does not yet appear to be a specific aim of the Nordic Swan Label (I6). The Nordic Swan Label also includes criteria with respect to active ownership (engagement) in order to increase dialogue between asset managers and underlying companies. During the initial label development stages, the responsible body considered excluding non-verified indirect holdings from label eligibility entirely due to transparency concerns, however that was found to be too restrictive by the criteria reference group (Nordic Eco-labelling, 2016).

### **5.1.3 France TEEC Label**

The SRI sector in France has been a large proponent of sustainable investing for many years, as the French SRI sector has emerged over the past decade as one of the most dynamic SRI ‘movements’ in Europe (Arjaliès, 2010). According to Novethic, sustainability themed AuM<sup>44</sup> rose in France from €3.9 billion in 2003 to €222.9 billion by 2014, driven primarily by increased participation from institutional investors, who represent 82% of the SRI market. According to Novethic and the AMF, Of the 97% of assets classified as ESG, 90% adhered to a *best-in-class* methodology and 7% to a *best-in-universe* methodology (AMF, 2015).

On September 28, 2015, the Minister for Finance and Public Accounts announced the creation of an SRI label backed by the public authorities, while the Minister for Ecology, Sustainable Development and Energy launched the consultation procedure for documents concerning the creation of an “Energy Transition and Climate” label (TEEC Label) (AMF, 2015)<sup>45</sup>. Prior to

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<sup>44</sup> Including all funds, mandates and direct portfolio management combined

<sup>45</sup> The TEEC label was intentionally launched during the Paris Climate Accord (I6)

2015, the French SRI sector had been served by the Novethic SRI label, launched in 2009, and the Novethic Green Fund Label, launched in 2013 (Novethic Research, 2014). Both labels were discontinued when the government labels were launched, although Novethic has remained involved in the process as label auditors.

### **Product Scope**

While aligned with French legal standards, the TEEC Label can be applied to financial funds from other countries both within and outside the EU (FMEES, 2018a). As opposed to most other investment labels, the TEEC Label also allows for inclusion of certain Alternative Investment Funds (AIFs) (those with no major leverage effects)<sup>46</sup> in addition to UCITS funds (FMEES, 2018).

### **Output: Certification Criteria**

The methodology employed by the TEEC Label for fund construction has two broad dimensions: (i) a sufficient threshold for green investments within investment products; and, (ii) fund diversification (I7). To do so, it sets out eligibility criteria for funds based on three pillars:

1. Fund objectives and methodology for the selection of assets;
2. ESG consideration in the construction and life of the portfolio (including exclusions);
3. Highlighting positive impacts on energy and ecological transition

The first two pillars of the TEEC eligibility criteria relate to designing, setting and reporting on fund environmental strategies, while the third pillar relates to the impact actually made by the fund. The third pillar sets out requirements for positive environmental impact measurement and reporting that a fund is expected to make, and eligible activity criteria are determined according to a taxonomy included as part of the label's guidelines. With respect to reporting criteria, fund managers are expected to provide, along with impact measurement information, indicator verification certificates produced by independent third-party organisations where appropriate (FMEES, 2018). According to the TEEC taxonomy, activities that fall within the scope of the energy and ecological transition, contributing directly or indirectly to "green growth" are classified under the following categories: renewable energies development (e.g. wind, solar, geothermic); energy efficiency in industrial buildings and processes; the circular economy; clean transport; agriculture and forestry; and infrastructure for climate change adaptation (FMEES, 2018).

The TEEC Label uses a taxonomy to define standards for what can be considered an eligible 'eco-activity'. This taxonomy is based on the Climate Bond Initiative (CBI) taxonomy and grouped into eight different categories<sup>47</sup>. The TEEC excludes investments into the fossil fuel and nuclear energy sectors (I7). The TEEC Label also classifies companies according to three categories depending on the intensity of the 'green share' of their activities: Type-I issuers (companies with greater than 50% turnover in eco-activities); Type-II issuers (10%-50% turnover in eco-activities); and Type-III issuers (less than 10% turnover in eco-activities) (FMEES, 2018). The TEEC Label sets different portfolio requirements for listed security,

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<sup>46</sup> As well as 'in-formation' private equity and infrastructure AIFs

<sup>47</sup> Energy, Building, Waste management/pollution control, Industry, Transport, Information and Communications Technology, Agriculture & Forestry, and Adaptation.

unlisted security and bond funds, with listed security funds only required to have 20% investment in Type-I issuers (compared with 75% and 83.6% for unlisted and bond funds respectively).

### **Output: Monitoring & Compliance**

The TEEC Label does not have any pre-determined criteria revision timelines, as revisions may occur as the Label Committee deems necessary (FMEES, 2018). The label auditors also carry out a ‘renewal audit’ scheduled one-year after the initial certification audit, and re-certification audits whenever a fund changes its investment policy or fund regulations are amended (FMEES, 2018). Lastly, the certification body may carry out ‘supplementary audits’ of the labelled funds, which are deemed necessary based on risk analyses, and which evaluate previous monitoring and fund non-compliance (FMEES, 2018b).

### **Outcomes**

The overall objective of the TEEC Label is to promote the uptake in “green” funds in order to “steer savings towards energy and ecological transition and the fight against climate change, either by drawing attention to existing investment funds or by giving rise to the creation of such funds” (FMEES, 2018:3). The TEEC Label was introduced for the purpose of targeting specific thematic funds within the larger context of sustainable investments, and designed to clearly identify ‘green’ investments (I7). To do so, the TEEC label aims to specifically identify investment funds (equity funds, green bond funds, infrastructure funds and private equity) that contribute to the energy and ecological transition.

The TEEC Label also aims to provide investors with a guarantee of “the quality and transparency of the environmental characteristics of the funds distinguished in this way and of their contribution to the energy and ecological transition and the fight against climate change” (FMEES, 2018:3). Similarly, one of the primary objectives of the TEEC Label is to facilitate fund compliance with legal requirements in order to allow asset managers to demonstrate portfolio alignment with national and international targets, As specified under Law no. 2015992 on Energy Transition for Green Growth, adopted in France in 2015.

## **5.2 Label Analysis**

This section summarizes the alternative causal mechanisms and relevant contextual factors that might apply to the current case and represents the second step in the reverse logic analysis.

### **5.2.1 Alternative Causal Mechanisms**

Table 1 provides a summary of the three labels examined with respect to their key outputs, including applicable product categories, criteria stringency (both with respect to process and impact) and administrative structure (monitoring scheme, criteria revision, and fees).



Table 1 Summary of the three labelling schemes

	Nordic Swan	LuxFlag Environment	TEEC Label
Fund Type	UCITS Only (Publicly Listed)	Open	Open (UCITS/AIF/Bond)
Product Categories	General – with exclusions <b>‘Best in Class’</b>	Sectoral Focus (Environmental) <b>‘Best in Universe’</b>	Activities (Taxonomy) <b>‘Best Efforts’ (with restrictions)</b>
Process Standards Criteria	Approach (ESG strategy) Methodology (analysis) Disclosure (reporting) Measurement (impact) - Voluntary	Approach (ESG strategy) Measurement (impact) - limited	Approach (strategy) Methodology (analysis) Disclosure (reporting) Measurement (impact) - strict
Impact Standards Criteria	None	Monetary (indirect)	Positive Impact (direct)
Monitoring Scheme	Internal audit / ongoing ESG analysis	Compliance report	Process and Impact
Criteria Rollover (minimum period)	3 years (lengthy)	1 year (short)	Ongoing (rolling)
Participation	Administrative fees	No fees	No fees

Source: Author’s own

## 5.2.2 Product Category Scope

Several of the policymakers interviewed noted that inherent trade-offs are likely to exist in a labelling scheme between eligibility criteria stringency and the (perceived) level of performance that eligible funds are likely to obtain, both from a restricted universe (diversification) perspective and from a scenario-building perspective<sup>48</sup> (I6, I7, I9).

Under certain label standards that include impact measurement as a core eligibility requirement, certain sectors, such as the oil and gas sector, may become un-investible as a whole (EFAMA, 2018). While other labels that apply a broader ‘best efforts’ approach might identify and include companies that score well on ESG metrics because the company is transparent about how they manage their ESG risks and opportunities and have a plan in place for their ESG management in the future (EFAMA, 2018). In that sense, the label would evaluate the ‘direction-of-travel’ of the companies and to a lesser extent, impacts.

Some argue that a *best-in-class* ESG investment strategy, which focuses investments towards companies that are leaders in their industries in terms of meeting ESG criteria, while useful to optimise the risk profile of a portfolio, does not necessarily optimise environmental performance because investee companies are not incentivised to create new and sustainable products and processes (Natixis, 2017; I12). Further, negative SRI strategies such as exclusions and screening run the risk of excluding large parts of the market and as such can create unintentional industry bias, concentration risk<sup>49</sup> and factor risks within a portfolio (Natixis CIB, 2017).

<sup>48</sup> As one example, the Nordic Swan criteria were developed with the express intention to not “limit the investment universe to such a degree that the risk increases to an unacceptable level” (Nordic Swan Consultation Background)

<sup>49</sup> Concentration risk is the potential for a loss in value of an investment portfolio or a financial institution when an individual or group of exposures move together in an unfavourable direction.

Creating an impact investment fund can cause various financial and regulatory obstacles, particularly those related to portfolio risk profiles (Novethic, 2017). In response, labels that apply to a broad range of investment vehicles, such as the Nordic Swan, are less prescriptive with respect to the strategies used by asset managers, and no preference is given for one over the other (I6). While this approach will attract a higher number of participant funds, it can raise questions for those in the market who do not believe that all sustainable investment strategies are capable of generating positive impact. For instance, many investors who responded to the 2017 GIIN annual impact investor survey did not believe it possible to generate impacts on *public* equity markets “without owning a sufficiently large share of the companies’ capital to influence them via engagement”<sup>50</sup> (GIIN, 2017:XIII).

### 5.2.3 Eligibility Criteria Alternatives

#### **Process Criteria**

The common thread among all labels examined is that, rather than setting precise definitions of what is considered to be best practices for ESG strategies, they consider transparency and disclosure obligations to be necessary pre-conditions to sustainable investment strategies. In terms of transforming or improving sustainable investment processes among asset managers, the LuxFlag Environment Label and Nordic Swan Eco-label have similar though slightly modified objectives: driving market transformation towards greater ESG integration through increased uptake of funds that use ESG strategies. To do so, the Nordic Swan traditionally reviews funds seeking certification based on their processes and standards with respect to ESG integration. The label thus serves to confirm a certain level of transparency about the investment fund’s processes as a means to reassure investors.

Two other labels discussed in the interviews also applied similar strategies with respect to improving processes through label standards. For example, the CIEL label, sought to “develop a sufficiently large basis of asset managers and funds to spur the field into action” through improved ESG process transparency and robustness (I6). Another example was Forum Ethibel, which operates an ESG Index and provides two labels (the Pioneer and Excellence Labels) in Belgium, operates under the motto “no sustainability without transparency” (Forum Ethibel, 2017). Of note, the CIEL Label was discontinued upon the launch of the TEEC Label in France due to perceptions that the SRI market in France had matured and that ESG strategies such as ‘best-in-class’ had become mainstream among asset managers (I6).

#### **Impact Criteria**

While a standard definition of ‘impact’ for financial products is necessary to avoid greenwashing, the stringency and precision with which a definition is set is likely to lead to one of two potential outcomes: (i) low market uptake for impact products (*strict definitions*) or (ii) limited value for investors seeking positive impact outcomes (*vague definitions*) (2DII, 2018). There does not appear to be a consensus on how to adapt the concept of ‘impact investing’, which has traditionally been concentrated in illiquid asset classes such as private equity and private debt, to *public* equity markets particularly with respect to its main characteristics: explicit intention to generate positive impact; commitment to measuring impact; and impact additionality (Novethic, 2017).

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<sup>50</sup> 16% of survey respondents made impact investments in public equities in 2016, and 9% indicated they planned to do so in future.

From a purely theoretical perspective, some have suggested that increased uptake and exposure to both green and impact investments within a larger market context can lead to increased sensitivity among investors towards environmental issues, which could accelerate investment uptake among a more mainstream audience (Inderst et al., 2012). Further, higher issuance volume and market uptake is believed to enable greater data quality and process transparency, which in turn can motivate improved assessment standards and quality among industry professionals (I4). In contrast, rather than focusing on market uptake, the TEEC Label aims to influence market impact through a ‘top-of-class’ approach to criteria formation, which sets leading standards and an increasingly high bar with respect to a fund’s performance on environmental aspects (I6).

## 5.2.4 Alternative Administrative Structures

### **Monitoring & Reporting**

Any investor seeking information about a financial product needs access to a number of important documents (AMF, 2015), and thus the issue of investor access to proper documentation is an extension of the transparency question. The Ethibel Forum imposes requirements on funds to make disclosure both accessible and understandable, as the pervasive use of financial jargon in the industry is particularly problematic for retail investors (I9), while the Nordic Swan sets stringent requirements with respect to response times to investors ESG related questions. There appear to be a large swath of approaches to label governance and oversight as some labels rely on financial auditors (TEEC), outside evaluators (Ethibel), and internal auditing boards (Nordic Swan). Some certification bodies such as Novethic have tried to maintain credible auditing practices through compliance with ISO standards (such as ISO 14001) in their auditing processes (I6).

### **Criteria Revision**

Setting and revising standards and criteria for sustainable financial products and services will require fast turnaround times, as definitions on what to measure and how to measure it are different across market segments and are constantly evolving (I4). Of the labels examined<sup>51</sup>, criteria relevance periods were between 1 year and 18 months, with the notable exception of the Nordic Swan, which revises criteria every 3 years and is required to provide participating managers with updated criteria a year prior to revision (I5). According to one interview, carbon foot printing is now seen as an out-of-date reporting criterion, and many investment managers and companies are moving to Scale 1-3 emissions protocols, suggesting that many investors see ‘*avoided emissions*’ as an area for potential innovation (I4). However, the same interviewee noted that actual trends in investment impact measurement were difficult to quantitatively assess (I4).

## 5.2.5 Summary

A common thread among all labels evaluated is their intention to increase the visibility of sustainable finance activities through third-party certification from a reputable and recognizable label provider, which is intended to provide a competitive advantage for asset managers. In return, these labels can also provide consumers with greater transparency and clarity with respect to the sustainable investment strategies used in portfolio formation and thereby reduce information asymmetry. Similarly, under the assumption that increased transparency leads to greater market participation, process standards criteria are intended to

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<sup>51</sup> Which included the three labels discussed in this thesis, as well as the LuxFlag Climate and ESG Labels, and the Ethibel Pioneer Label.

improve sustainable investment strategies as more producers enter the market, and greater harmonization in sustainable strategies occurs.

A visual summary of the program theory of each of the labels above according to the empirical findings is provided in Appendix F. The figures serve as a visual representation of the problems and outputs discussed, as well as the initial and intermediate outcomes intended by the label designs that were identified through the research.

## 6 Evaluation

This chapter re-visits the eco-label program theory in order to compare alternative mechanisms based on their potential to impact the target area (i.e. participating asset managers and retail investors) as well as their potential to create indirect effects across and outside the target area. Section 6.1 provides an overview of the potential direct effects of an EU-wide eco-label based on alternative causal mechanisms, section 6.2 discusses indirect effects, and section 6.3 discusses potential perverse outcomes that may arise from program implementation. All three sections include a discussion of how factors identified in the context analysis (section 5.2) might enable or impede alternative mechanisms in achieving or avoiding certain outcomes. Finally, section 6.3 provides a normative criteria evaluation of the various alternative outcomes.

### 6.1 Side Effects Evaluation

#### 6.1.1 Direct Effects

##### **Goal 1: Reduced Information Asymmetry**

*Summary: A credible label for investment products may trigger a reduction in information search costs for retail investors seeking to invest in sustainable investments by converting credence attributes into search attributes. However, their effectiveness in doing so may be limited by system complexity, which can create challenges for label providers in setting accurate quality standards and thus limit their ability to identify the most environmentally friendly investment products for investors.*

Information asymmetry is generally said to exist where sellers and buyers<sup>52</sup> possess different knowledge levels about the search, experience, and credence characteristics of a certain product (Sammer & Wüstenhagen, 2006). In most consumer purchases, a product's desirable attributes can either be ascertained before purchase, in which case the product is described as a 'search good', or they can be verified after purchase, in which case the product is termed an 'experience good'. In either case, the pre- or post-consumption revelation of positive attributes normally leads to the development of two distinct mechanisms that mitigate information problems, namely "trust" and "reputation".

However, products that are purchased based on their environmentally preferable attributes are typically considered 'credence goods', which are purchased for attributes that cannot be verified either pre- or post-consumption<sup>53</sup> (Bonroy & Constantatos, 2012). In this context, neither trust nor reputation are able to completely mitigate information problems, and producers can thus use these information asymmetries to provide false information to consumers in order to maximize utility. Without an institutional setup that can correct these information asymmetry challenges, consumers are left with a problem of *adverse selection* in their purchasing decisions (Sønderskov & Daugbjerg, 2011).

A product label can help overcome informational asymmetry through the conversion of a credence attribute, such as the sustainability of a product, into a search attribute (Caswell & Mojduszka, 1996; Caswell & Padberg, 1992; Gutsche & Zwergel, 2016). In affixing a label to a product, the certifying agency performs two functions: (i) it defines a "quality level" which is the presence (or absence) of a pre-defined criterion of a product; and (ii) it certifies whether

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<sup>52</sup> Or similarly, principals and agents

<sup>53</sup> In contrast, 'search goods' refer to products whose desirable attributes can be easily ascertained before purchase, while 'experience goods' refer to products which possess desirable attributes that can only be verified after purchase

the quality of the product reaches a minimum pre-defined level (Bonroy & Constantatos, 2012).

Sustainable investments are generally considered ‘credence goods’ as it is virtually impossible for investors to assess whether or not the assets included in an investment portfolio are actually ‘sustainable’ without paying significant search costs (see: Entine, 2003; Gutsche & Zwergel, 2016; Nilsson, Siegl, & Korling, 2012). As a result, retail investors often face unnecessarily high initial search costs in pursuit of ‘sustainable’ investments (European Commission (EC), 2018). Information asymmetries of this sort can produce sub-optimal outcomes for consumers who prefer environmentally friendly products, which in the context of sustainable investments means investors who prefer to support sustainable companies or projects (Darnall & Aragón-Correa, 2014). Eco-labels can potentially drive a reduction in information search costs associated with finding the most sustainable investment products by providing clear and credible information to investors. As such, through reducing information asymmetries, eco-labels can reduce barriers to participate in the market and ultimately trigger increased participation. Prior research has indicated that labels for investment products that can certify either the sustainability of an investment, the transparency of its processes or a combination of both can help alleviate search costs that would otherwise dissuade participation (Gutsche & Zwergel, 2016).

### **Barrier: Complexity**

A pre-condition to an effective labelling scheme is that consumers must be able to have (or easily acquire) a reasonably good knowledge of the standards underpinning the eco-label if they desire to, which would allow them to differentiate between the attributes of labelled and non-labelling products (Daugbjerg, Smed, Andersen, & Schwartzman, 2014; Teisl, Roe, & Hicks, 2002; Thøgersen, 2000). Without clear, communicable information regarding the environmental performance of a product, an eco-label is limited in its ability to minimize information asymmetry. This challenge can arise for labelling organisations due to the complex nature of the products themselves, as well as system-wide challenges that make assessing environmental performance from an overall life-cycle perspective difficult.

With respect to mainstream sustainable investments (e.g. SRI and ESG investment products), some point to the lack of differentiation among ‘sustainable’ investments and general investment products with respect to underlying asset composition as a particular challenge for retail investors (I11). Similarly, prior studies have found that highly similar sustainable investment approaches can result in the construction of vastly dissimilar portfolios while conversely, broad similarities can sometimes be found between a portfolio managed to an SRI standard and a traditional non-SRI portfolio (AMF, 2015). For eco-labelled investment products, criteria related to non-financial analysis processes might increase transparency and clarity for investors but may not lead to the construction of different products in the eyes of retail investors.

Another challenge for sustainable investments has been the lack of standardized non-financial performance reporting, which is seen as one of the primary drivers of cost and inefficiency in the sustainable investment market (BDSC, 2017), which can create confusion and barriers to entry for many asset managers as well as investors (European Commission, 2018; Natixis, 2017; I6). The process of determining and measuring the sustainability of an activity performed by a company can also be very extensive. For example, a UCITS fund often consists of hundreds of financial instruments which lead to multiple ‘activities’ and measuring overall portfolio sustainability is seen as both costly and burdensome (EFAMA, 2018). Further, ESG Investing

requires specialized research skills, experience and sophisticated metrics (Novethic, 2018), which may not be as prevalent in markets less familiar with the concept.

## **Goal 2: Environmental Competitive Advantage**

**Summary:** *Certain product scopes (such as those inclusive of ESG and SRI investments) and investment products (such as those comprised of publicly traded debt and equity), appear to have a higher potential to trigger new investments based on their financial viability<sup>54</sup> than more targeted investment strategies, such as green thematic and impact investing. However, there appears to be a latent and unserved demand among retail investors for products identified as generating a positive impact. **Price premiums** for more active fund management associated with high label compliance costs is likely to deter uptake among asset managers, which may be offset by improved **fund loyalty** among labelled impact investments. Lastly, while marketing the sustainability of an investment fund can cause practical challenges, **positive impact marketing** aligned with international targets such as the SDGs may create opportunities for asset managers and improve uptake for labels incorporating impact measurement criteria.*

As noted in Chapter 3, to attract a large segment of a market, outside of those who are willing to purchase environmentally friendly products for altruistic reasons, an eco-label must be able to convey additional benefits that are indirectly related to environmental performance at a cost less than expected benefits of participating in the eco-label scheme (Dendler, 2013; Pedersen & Neergaard, 2006). A credible label from a third-party provider can provide benefits to producers where the costs of producer **participation** are outweighed by either the increased **demand** for the product, or the increased **price premium** that consumers are willing to pay for the product or service. Additionally, producers may be motivated to participate in eco-label programs when they see positive economic value and potential *competitive advantages* in green niches, green PR-making, or in minimizing the risk of negative publicity (Boström & Klintman, 2008).

### **Mechanism 2-A: Price Premiums**

The general trend in the financial sector appears to be that investors are becoming more and more interested in sustainable investment strategies. However, the extent to which that demand will translate into consumer uptake in eco-labelled funds, particularly in labelling schemes which emphasize impact measurement or universe restrictions (such as impact and thematic investing), is difficult to determine at this stage.

For instance, the specific focus of the TEEC label on impact reporting and a pre-determined taxonomy of eligible sustainable activities appears to limit the direct uptake among asset managers. Prior to the introduction of the TEEC Label, Novethic's SRI Label, which had been in operation since 2009, had certified 113 funds from 38 different asset managers across numerous EU countries (Novethic, 2018). In contrast, Novethic's 'Green Fund' Label, which was applicable to funds that had a clear environmental objective, considered to be a more 'niche' product, had certified 7 funds, from 3 asset managers. Similarly, as of September 2017, the TEEC Label had been awarded to 15 funds, and 22 as of July 2018. Of the roughly 2000 funds that could potentially qualify for the Nordic Swan label in the Nordic region, only 19 are currently certified (I6). Similarly, the LuxFlag Environment Label has certified 11 funds, and other LuxFlag labels have similar participation rates.

As noted in a recent EU Synthesis Report on Eco-labelling (2017), measuring the commercial impact of eco-labelling schemes is difficult to track due to lack of data collection regarding the

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<sup>54</sup> i.e. their perceived ability to generate competitive risk-adjusted returns

number of EU products actually sold in the market. For investment eco-labels, overcoming that challenge will likely be less burdensome as collecting data regarding the number of labelled funds and assets under management (AuM) of those funds is a more straightforward process. As will be discussed below, however, measuring actual investment *additionality* is likely to provide additional challenges towards measuring the overall impact of fund and label performance.

### **Challenge: Participation Costs**

A challenge for the sustainable investment industry with respect to increased management fees relates to '*participation costs*', which suggest that individuals only join a market or actively shift assets within their portfolio if the costs of doing so are not perceived as too high. Vissing-Jorgensen (2004) describes *participation costs* as both search costs related to information seeking and transaction costs that occur in the form of initial costs faced by new investors, and recurring periodical costs that have to be borne by all market participants such as management fees for actively managed funds (Favilukis, 2013; Gutsche & Zwergel, 2016; Vissing-Jorgensen, 2004). While eco-labels might be effective in helping to avoid, reduce or eliminate search costs, the presence of transaction costs may pose challenges for label providers.

Price premiums for eco-label certification are contentious for many in the financial sector as more and more "asset managers are required to justify the premiums and fees they charge for active fund management to their clients" (I6). Many existing labels in Europe are managed by non-profit organisations (such as Ethibel and LuxFlag) and are able to offer far lower fees for certification, labelling and research than other, larger for-profit players in the area (I9). Similarly, the TEEC Label does not charge any application or auditing costs to applicant funds. Further, finding suitable 'green' assets may be a challenge for asset managers. Despite the rise in popularity for investments that aim to make positive impacts, many market actors suggest that low-carbon investment opportunities are limited and channelling funds towards them can lead to 'high fees and huge transaction costs' (Eurosif, 2016).

An alternative means for evaluating the price premiums that asset managers can expect from labelling their sustainable investment funds may be through examining the label's effects on '*fund loyalty*'. Peifer (2016:636) defines *fund loyalty* as "the continued investment in a mutual fund despite the belief that one is earning a lower return on investment". In his study analysing fund loyalty among dual owners (i.e. retail investors who invest in both conventional and socially responsible funds), Peifer (2016) found empirical evidence to suggest that owners were more loyal towards their sustainable funds than their conventional funds. The net effect of more *patient* capital for asset managers could be significant, as short-term focused investor behaviour can limit their ability to manage a portfolio with a longer-term focus.

### **Mechanism 2-B: Credible Green Marketing**

The ability and desire to promote positive impacts from investments appears to be growing, due primarily to the SDGs. Investment vehicles focusing on companies that aim for a positive environmental impact rather than avoided negative impacts may encourage uptake among retail investors. "Seeking to invest in companies that focus on renewable energy, energy efficiency and that measure impact can be a productive means to encourage uptake" (I6). The SDGs have made positive impact reporting and marketing a more attractive prospect than prior international initiatives such as the UNGC. As one interviewee noted, the SDGs are becoming more and more embedded in the financial sector (I9). Asset managers and banks are devoting more energy towards developing investment products based on the SDGs, which have a big focus on the 'positive contributions' that a fund can make (I9).



In the absence of commercial or marketing incentives for sustainable investment products, asset managers and financial advisors have little reasons to promote them (2DII, 2018) and historically, strategies that focused on negative practices such as screening and exclusions (using the UNGC principles for example) have been difficult to market for asset managers (I9). As a result, few asset managers would traditionally report on their sustainability practices prior to the SDGs or would only attribute a few lines to those practices in their annual reports, even though most asset managers were incorporating ESG considerations (I9). Effective label marketing can also present challenges for both responsible bodies and fund managers. As one interviewee noted, it is harder to promote the environmentally positive aspects of an investment product compared to a tangible good as “products are not tangible and thus it is harder to promote their ‘environmentally friendly’ aspects” such as being ‘chemical free’ (I6).

### **Goal 3: Positive Environmental Impacts**

***Summary:** impact measurement methodologies for investment portfolios applied by asset managers, ESG analysts and fund labels have had **varied success** thus far in terms of identifying and quantifying material environmental performance aspects and identifying the most environmentally friendly investment products. Conversely, increased methodology transparency, uptake in impact investments, corporate disclosure and negative impact reporting may all help alleviate existing challenges and help produce **additionality** among impact investments.*

A critical condition of an effective eco-label program is the notion that products within a selected product group actually do have varying levels of environmental impact, and those levels are discernible by label providers (Thidell, 2009). Otherwise eco-labels may drive consumers towards less environmentally impactful purchases than they otherwise would have made without the eco-label. If eco-label programs are unable to accurately direct consumers towards the products in a category that are the most ‘environmentally friendly’, overall environmental impacts are likely to be at best minimal and at worst negative. An overly narrow scope of reporting requirements or focus on one particular environmental category at the expense of others (such as climate change) may also incentivize ‘burden shifting’, where producers report reduced product impacts that have, in fact, been transferred to another aspect or organisation that falls outside of the boundaries measured (Frydendal et al., 2018).

### **Challenge: Impact Measurement**

Inconsistent impact measurement methodologies are likely to impact the credibility of ‘impact investment’ funds (Novethic, 2017), which may in-turn impact the credibility of a labelling program under which they are certified. To combat these challenges, the 2DII suggests greater transparency requirements for packaged investment products with respect to exposure to climate-relevant activities (e.g. renewables, coal, etc.), assessments of how the investee companies are aligned with climate goals and the asset manager’s use of voting rights towards climate-related goals (2DII, 2018).

One reason noted for impact measurement difficulties with respect to existing labelled funds was the “relatively small sample size and the inconsistent asset classes to which these funds belong” (I6). Secondary financial markets can also create challenges in identifying tangible impacts, and thus products traded on these markets (e.g. asset-backed securities, derivatives, etc.) are seen as questionable when included in thematic and impact investment portfolios, despite their use by asset managers for ‘asset allocation’ (i.e. balancing risk and reward according to an investor’s goals) (I12).

### **Challenge: Additionality**

Given that investment products are indirectly associated with the real economy, there is no guarantee that improved sustainable investment practices will produce a positive environmental outcome. This can create challenges for eco-labels in identifying the most effective means of bringing about positive environmental outcomes through market-based activities. Questions surrounding the **additionality** that sustainable investments create have centred on two focal points: (i) the idea that a specific investment would not have occurred but for an investment strategy; and (ii) that a given outcome would not have occurred but for the investment (Triodos Investment Management & ABN AMRO, 2016).

To address that challenge, the UNEPFI discuss three different approaches to achieving tangible impacts through investment practices: *individual actor positioning*, *critical mass positioning*, and *signalling*. *Individual actor positioning* can yield beneficial impacts when investors are willing to participate in illiquid markets that attract higher transaction costs or produce below-market returns. *Critical mass positioning* occurs when a sufficient number of investors engage in activities that influence investee (corporate) behaviour such as through divestment or engagement. Lastly, investors may achieve indirect effects through their sustainability strategies by *signalling* to other market actors about desirable practices or investments (Two Degrees Investing Initiative et al., 2015).

These questions have led to disagreement with respect to the different ways in which the sustainable investment market might lead to sustainable outcomes (Inderst et al., 2012). On the one hand, increasing green investment overlays may not result in increased direct investment in climate and environmental assets. On the other, increased focus towards ESG integration in investment strategies may spur a greater sensitivity towards environmental aspects, which can subsequently lead to more direct investment in green assets through **signalling** (Inderst et al., 2012). It is also possible that an increased focus on impact measurement related to *public* equity and corporate bonds may do little to drive an increase in demand or investment on specific projects (e.g. infrastructure) that have a tangible positive impact on environmental challenges (Natixis, 2017; I12). Similarly, aligning *public* equity and debt investments with companies that operate in a sustainable sector, such as renewable energy, may increase the value of that company or sector or attract stronger **individual positioning** in that market, but may not create or stimulate more demand for sustainable products within the real economy (I12).

Recently, some institutional investors have implemented **critical mass positioning** strategies to divest from and exclude coal, and in some cases even the broader category of fossil fuels due to growing concern for carbon emissions (Dyllick & Muff, 2016). However, studies show that divestment has a minimal direct impact on corporate behaviour<sup>55</sup> as the equilibrium of the financial market dictates that for every seller there is also a buyer of corporate stocks<sup>56</sup> (Schoenmaker, 2017). Further, there appears to be a general agreement among the investment community that once a shareholder has divested or excluded a company, the shareholder loses the ability to influence the company towards improvement (Valborg et al., 2017). Engagement is seen by many as a powerful form of **critical mass positioning** to improve corporate ESG

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<sup>55</sup> From a general equilibrium perspective, which suggests that there is a willing buyer for every share a financial institution sells, enough divestment from a company may affect its share price, raising the cost of new capital. However, in practice, this is a minor source of corporate funding compared to retained earnings and debt financing (Schoenmaker, 2017; Skancke, 2016).

<sup>56</sup> While divestment may impact a company's ability to raise financing through issuing new shares, it is a relatively small source of funding compared with retained earnings and debt financing (Schoenmaker, 2017).

standards and eliminate environmental and social externalities (Skancke, 2016). However, the primary criticism of the practice is that meaningful engagement normally requires significant equity ownership in a company that employs unethical or unsustainable business practices.

## 6.1.2 Indirect Effects

### **Goal 1: Increased Market Participation**

The institutionalisation of eco-label programs is largely influenced by the market's trust in the labelling program (Dendler, 2013) as consumers will use a label in their purchasing decisions only if they trust it (Thøgersen, 2000). According to Suchman (1995), *exchange legitimacy* will be conveyed to an organisation or government program based on its expected value to specific constituents. While this aspect relates primarily to notions of self-interested calculations, in some instances the perception of pure *exchange legitimacy* may be coloured by cultural notions of appropriateness. From a *social norms* perspective, improving trust among consumers and the acceptability of industry practices is a key component of improving the trustworthiness of 'green' claims made by actors within and the overall legitimacy of the industry among market actors. An eco-label program can be said to enhance or restore *structural (and procedural) legitimacy* within an industry to the extent that it can either create, re-establish or enhance societal trust that organisations have institutionalized sustainable practices and behavioural norms.

Organisational integrity can also be derived from non-outcome related aspects of the organisation's operations, such as 'procedural legitimacy', when an organisation adopts socially accepted techniques and procedures. According to Suchman (1995:580), the more difficult a clear measurement of a positive consequence, the more important procedural legitimacy becomes in securing social acceptability of the techniques and procedures of a scheme as "sound practices may serve to demonstrate that the organisation is making a good-faith effort to achieve valued, albeit invisible, ends". As Janney et al. (2009:410) argue, "people cannot directly observe the integrity of a firm, but they can observe behaviours they believe are reasonably accurate predictors of integrity. If firms can identify accurate signals of integrity, then employing them is an efficient way to convey their level of integrity to exchange partners".

### **Mechanism 1-A: Increased Trust**

*Summary: a lack of trust among retail investors in the financial marketplace appears to have had a spill over effect on the perceived trustworthiness of sustainable investment claims made by asset managers. Increased process transparency and clarity provided by credible third-party certified reporting requirements may re-establish or enhance trust among retail investors in sustainable investment products, particularly given the difficulty that retail investors have in directly observing the performance of asset managers.*

The issue of trustworthiness figures prominently in the literature on eco-labelling (e.g. Boström 2006; Boström and Klintman 2008; Nilsson et al. 2004; Thøgersen 2000). Consumer perceptions of the trustworthiness of an industry or organisation, which can be influenced by industry norms, corporate social responsibility, or corporate history, can influence their perceptions related to organisational claims regarding the environmental friendliness of their products. Based on those factors, consumers might assign different motives to environmental efforts and either develop trust in the claims made by producers or develop 'green scepticism' based on the expectation that producers' claims are disingenuous (Leonidou & Skarmas, 2017). Eco-labels can be effective for promoting or restoring *trust* among market actors regarding claims made about environmental performance, as the certification of green claims by an independent third party can serve to eliminate or minimize 'green scepticism' (Rasche, 2009).

In the context of the financial sector, trust is a significant source of relational tension between retail investors and asset managers. According to the Edelman Trust Survey (2018)<sup>57</sup>, the financial services sector was the least trusted business sector globally in both 2017 and 2018 (Edelman, 2017; 2018). According to one interviewee, the general weariness that investors have for the investment market leads many to question whether funds marketed as sustainable are, in fact, sustainable (I4). A study by Paetzold & Busch (2014) found that respondents perceived that investment advisors deliberately withhold information about sustainable investments as well as related information about firms. Some studies have suggested that, as the general legitimacy of the work of asset managers becomes increasingly challenged, increased focus on non-financial aspects of investments (such as sustainability considerations) can be a necessary pre-condition to maintaining trust in the eyes of many investors (Hackethal, Haliassos, & Jappelli, 2012).

## **Goal 2: Greater Supply Chain Information Flow**

**Summary:** *Greater supply chain transparency is seen as an essential requirement to re-establishing investor trust in the marketplace and improve sustainable investment processes and practices. Asset managers can improve transparency directly through greater reporting on their sustainable investment strategies, or indirectly through demanding material environmental impact reporting from companies. Material and quantitative impact measurements from companies are preferred among investment professionals.*

Investors seeking to invest in ‘sustainable’ funds face a multi-layered information asymmetry problem, which occurs between (i) investors and asset managers; (ii) between asset managers and companies; and (iii) between multiple actors across the investment chain (Rhodes, 2010). Thus, increasing the information flow and quality across the entire supply chain can be seen as a significant potential indirect effect of eco-labelling programs.

### **Mechanism 2-A: Asset Manager Transparency**

Asset managers are normally tasked with establishing a definition of ‘sustainable’ in creating funds or portfolios, and currently identifying the “most sustainable” funds is complicated given the various definitions, strategies and methodologies used (I5). Without proper oversight from a standards agency or independent auditors, it is possible that green investment impacts will be diluted through imprecise definitions or inaccurate reporting practices, as prior studies have shown an observable difference as to how asset managers market certain fund strategies and how the funds actually perform. For instance, various asset managers offer solutions that are variously (and inconsistently) labelled SRI, ESG, Impact Investing or otherwise (Natixis, 2017). A recent market survey of the ‘green fund’ market conducted by Novethic found that, of the 222 funds listed as ‘green’, 50 of those funds did not meet the criteria (the fund’s ‘green’ focus was globally inconsistent with the strategy implemented) (Novethic, 2018).

Increased transparency is seen as essential to correct current misalignment between investors and asset managers incentives, and efforts to increase market transparency have been made in large part “to remove any misalignment between an investor seeking sustainable, long term returns, and their agent who may be remunerated largely according to short term goals” (Wilder, Srivastava, Kirkwood, & Hui, 2017:5). Investment process transparency has garnered support from the asset manager’s side. For instance, as of June 2016 more than 700 of the 1,138 green, social and ethical funds domiciled in Europe had submitted to the *Eurosif Transparency Code*, which is a set of guidelines and principles regarding disclosure obligations

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<sup>57</sup> Edelman is a global communications marketing firm that has conducted global trust surveys since 2000.

related to sustainable investment practices that asset managers can voluntarily subscribe to (Eurosif, 2018).

A lack of supply of investment professionals skilled in sustainable investment strategies can have a significant impact on retail investor participation, especially since retail investors tend to exhibit high levels of loyalty to intermediaries (such as asset managers) upon whom they rely for financial advice (Arjaliès et al., 2017). The potential benefits of greater asset manager transparency, knowledge and dialogue with investors about non-financial (sustainability) issues may also be a two-way street, as increased awareness among investors of their roles in the indirect ownership of companies may lead to a deeper understanding of how ownership activities may influence companies in the portfolio (Nordic Swan, 2018).

### **Mechanism 2-B: Corporate Disclosure**

Some see corporate transparency as “the foundation on which socially responsible investment is based” (AMF, 2015:7). The quality of data made available to and from fund managers can depend largely on corporate non-financial reporting (AMF, 2015). “In markets where sustainable financial practices are maturing and moving to scale, a lack of appropriate information flow between the real economy and the financial economy is a critical challenge – with systemic implications” (UNEPFI, 2016:16). As one example, the Belgian sustainability ratings company Ethibel currently rates companies based on a scale of A-E (with M denoting that companies are part of an excluded class). While an E rating can denote that a company is performing poorly, it may also denote a lack of sufficient data available to provide a rating at all (19).

It is likely that increased company transparency alone will not be sufficient to prevent ‘greenwashing’, particularly when firm disclosures focus primarily on environmental process disclosure (i.e. the environmental practices taken by the firm) as opposed to environmental outcome reporting (Delmas, Etzion, & Nairn-Birch, 2013). As one report noted: “more disclosure does not necessarily mean good disclosure. What we need is meaningful disclosure, demonstrating the business resilience of companies due to their inherent Environmental and Social risks, as well as how they are managing such risks from a cash flow and balance sheet perspective” (EFAMA, 2018:9). Some studies have found that information disclosed by companies in the form of ‘mere narratives’ which do not reflect real substantive solutions to environmental issues are unlikely to be valued by investors (Al-Shaer, 2018). Despite recent improvement in the quantity and quality of information disclosed by companies, there is still a **data reliability bias**, as most non-financial data is obtained from the company itself and often done so without third party verification (European Commission, 2018).

Within the EU there is an increasing trend towards acknowledging the role that asset managers can have on driving sustainable corporate behaviour and performance, however EU legislators also recognize the importance of asset managers receiving clear and transparent information about environmental risks and opportunities (TCFD, 2017). The investment community may have a “positive opportunity to influence companies in a sustainable direction”<sup>58</sup> (Boyd, 2017). Studies have shown that voluntary non-financial disclosure, as opposed to information disclosed by mandatory regulation, may lead to reduced information asymmetry between

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<sup>58</sup> This process of secondary market-transformation may occur through the creation of ‘calculative infrastructures’ within organisations. External demands for calculability can create a need among organisations to establish a ‘calculative infrastructure’ (Cabantous et al., 2010; Waddock, 2008) that may involve new routines or the transformation of existing routines.

corporations and investment professionals, which in turn is likely to lead to reduced costs of external financing (Botosan, 1997; Richardson & Welker, 2001).

### **Goal 3: Harmonized Industry Standards**

***Summary:** Overly stringent criteria with respect to investment processes, reporting, asset eligibility or impact measurement are likely to receive pushback from the investment community, however 'best practices' with respect to processes are likely to garner the most support from those within the industry. Increased clarity on minimum acceptable practices and strategies with respect to environmental impact assessment may lead to more harmonized practices upstream in the investment value chain from ESG analysts and ratings providers. It is also possible that setting leading standards with respect to impact measurement and reporting may provide a template for other international policies to emulate and increase harmony across international borders.*

#### **Mechanism 3-A: Industry-Wide Reference**

In prior studies, eco-label criteria have been found to serve as an important reference point for market actors both across and within industries and in a few product groups, they have even served as *de facto* industry standards (Council, 2001; Thidell, 2009). According to some interviewees, the financial sector is largely driven by *best practices* (I4, I12). This may impact how actors respond to voluntary instruments as opposed to mandatory requirements prescribed by regulation, and the response may depend on the extent to which a regulatory body provides relevant targets and standards. Further, this has led many to suggest that, when defining industry standards regarding non-financial issues, 'best practices' should be defined on a process basis rather than on acceptable fund holdings or sustainable activities as doing so would require normative, subjective opinions and could turn green fund construction into 'box-ticking' exercises for asset managers (EFAMA, 2016; I4).

Asset managers rely heavily on ratings, data and analysis provided by ESG analysts and ratings agencies (I9). These analysts are required to form effective audit mechanisms that can confirm firm compliance, and firms must be willing and able to provide timely and accurate information based on those agreed upon parameters (Rhodes, 2016). Certain labelling organisations rely on data from ratings companies rather than seeking out the information directly, as those organisations "have both the mandate and the means to pursue information from companies and issuers" (I9).

The concerns with impact benchmarking are related to both the variety of measurement standards used and the instruments provided by ESG analysts (which makes *comparability* a challenge), as well as the proprietary nature of the information and methodologies used by these companies (which limits *transparency*). Much of the information that is made available concerning corporate ESG performance remains inaccessible to individual asset owners and civil society because of high paywalls or the complexity of reporting (BDSC, 2017). The EC has raised concerns with certain benchmark indices who seem to be following a 'business as usual' path in their methodology. This has created the effect of benchmark 'greenwashing', as currently all low-carbon indices are promoted as being equally environmentally relevant despite having different characteristics (European Commission, 2017). "Many of the indexes are aligned with climate scenarios that are in the 3, 4, or 5-degree range, which is simply not feasible under the Paris Agreement" (I4). As the 2DII notes, one potential positive side effect of generalising ESG disclosure is greater research into non-financial metrics and evaluation approaches (2DII, 2018).

### **Mechanism 3-B: Policy Synergies**

As the number of labels for investment products has increased in the EU, it has become more difficult for investors to fully understand what the label is actually certifying, as labels have not adopted the same approach or standards with respect to impact measurement (EFAMA, 2018). The lack of a prescribed standard of what constitutes an acceptable level of tangible impact from financial services has led to less than fulsome participation from asset managers in the past.

There is also a possibility of greater cohesion on the international market through harmonized standards set within the EU. As one interviewee noted, a recognisable label such as the EU Eco-label may impact international financial markets as well as domestic: “the EU eco-label has clout both within the EU, but abroad as well, and that international reach may have a positive impact on getting other jurisdictions to adopt minimum standards and best practices” (I4). As one report noted, without global harmonization in certain standards, the effects of certain ESG strategies such as exclusions are not likely to impact price security or raise cost of capital for unsustainable companies, and the effects of such practices become limited to their ‘signal value’ (Nordic Labelling, 2017).

#### **6.1.3 Perverse Outcomes**

*Summary: Funds labelled as ‘green’ or impact focused may dissuade certain market segments from participating due to perceptions of sub-standard performance, thus restricting the impact investment category to ‘niche’ status. Impact-related criteria that are insufficiently stringent can lead to impact dilution among impact investments and create performative compliance with minimal changes to asset manager practices, which would offset participation benefits. Process and impact standards that target mainstream funds may create unanticipated market segmentation, whereby smaller companies, private equity funds and venture capital assets would be unduly impacted by standards, resulting in decreased capital flows.*

Although the detrimental impacts of eco-label programs are likely be minimal due to the voluntary nature of program participation (Thidell, 2009) prior research has found that in some cases, eco-labels can lead to increased investment in non-environmentally friendly products (Dosi & Moretto, 2001), create minimal environmental impact due to weak criteria or irrelevant product groups (Grolleau et al., 2016; Karlsen, Hermansen, & Dreyer, 2012), and cause price changes that can increase environmental externalities (Greening, Greene, & Difiglio, 2000; Grolleau et al., 2016; Holm & Englund, 2009).

#### **Market Outcomes**

Eco-labels can create a *differentiation effect*, which can have a tangible effect on competition “due to allowing products to be perceived as imperfect substitutes” (Bonroy & Constantatos, 2012:10). Without the eco-label, a low-quality producer and a high-quality producer can compete on a level (albeit misleading) playing field, whereas with the benefit of the label’s segmentation, the two products now belong to distinct yet related markets. For example, ‘green’ consumption is often associated with higher costs to the consumer (Sønderskov & Daugbjerg, 2011). A related phenomenon, described as the *‘dilution problem’* was observed by Zhang et al. (2007) where consumers assume that a product that performs a single-function only (e.g. cleaning) performs that function better than a product performing the same and additional functions (e.g. reducing chemical toxicity) (Grolleau et al., 2016). As a result, while the label can provide clarity for consumers willing to spend a premium for the qualities assured by the label certification, consumers who are otherwise indifferent are now pushed towards the lower-cost (or higher performing) non-labelled product (Bonroy & Constantatos, 2012).

This trend appears to carry over into financial sector, as the prevailing view seems to be that impact investments are not able to compete with more mainstream investment vehicles in terms of financial performance and have thus maintained ‘niche’ status within the industry, with market penetration levels of impact investment products below 1% in most markets (Eurosif 2016).

### ***Environmental Impact Outcomes***

While state involvement in an eco-labelling scheme can positively influence legitimacy (Sønderskov & Daugbjerg, 2011), it has not always proven to be the case. As Boström and Klintman (2006) and Lilliston and Cummins (1998) argued, the United States Department of Agriculture (USDA)’s involvement in setting US state organic standards may have led to watered down standards, which ultimately triggered scepticism within the organic movement.

From a market transformation perspective, regulators and the financial sector will likely face challenges with respect to positioning and defining the financial market segment that can be considered ‘green’, both within the overall context of the financial markets and within the specific context of ‘sustainable investment’. ‘Green finance’ has historically been aligned with a broad range of investment approaches (ESG integration, exclusions, etc.), a broad range of investment vehicles (*public* and *private* equity, corporate and sovereign bonds, etc.), and various acceptable risk and impact profiles. As currently viewed, ‘green finance’ runs the risk of being overly focused on overlay and processes, which might lead to inadequate focus on generating investments that are sufficiently ‘green’ or that combat environmental issues such as climate change (Inderst et al., 2012).

Mainstreaming sustainable finance products, particularly those currently considered ‘impact-first’ investments, may potentially lead to ‘impact dilution’ among those investments, as some organisations warn against the risk of ‘impact-washing’ or ‘SDG-washing’ if investors interpret the SDGs loosely or oversimplify their impact measurement practice (Novethic, 2017). In many instances, SDG reporting may simply exhibit ceremonial response on behalf of the asset manager, since an increase in reporting on fund alignment with the SDGs (performative measures) does not invariably lead to ostensive changes to the fund’s composition, as many investors, primarily institutional, may simply map what they are already doing against the SDGs (I12). “Standardized impact reporting might help align the various regions, but in the industry, there is a gap between those companies and organisations that are committed to impact reporting and those that are not” (I4).

### ***Increased Externalities***

The perceived complexity of the financial sector may serve to create ‘market segmentation’<sup>59</sup> between impact investments and more mainstream SRI investments, which may also be exacerbated by current policy structures within the EU. For instance, while ‘impact investing’ is a term that can apply to any asset class, in practice the investment strategy has traditionally favoured private market assets, particularly private debt, private equity and real assets (Novethic, 2017). This can make certain ‘impact investment’ funds ineligible for classification under UCITS, and they are instead classified as an AIF (Triodos, 2017). As a result, impact investments classified as ‘alternative’ funds may be labelled as ‘complex’ even when that is not

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<sup>59</sup> “The change in market structure due to the emergence of the quality sub-markets” (Bonroy & Constantatos, 2012)



the case compared to more mainstream UCITS investments, which can limit impact investment uptake<sup>60</sup> (Triodos, 2017).

Eco-labels may potentially contribute to this challenge and divert capital from projects or areas that might need it the most. For instance, labels that favour publicly traded and large-cap companies and mainstream investment vehicles may have transformative outcomes, such as giving those funds increased visibility at the expense of smaller actors and alternative investment schemes. There is also a potential challenge with respect to the capacity and ability of ‘small mid-cap companies’ to comply with disclosure demands that eco-label standards are likely to generate. The “smaller the company the less resources they have to implement policies and less reporting obligations they have” (I9).

Multi-criteria impact requirements or impact criteria that are overly stringent may result in improper differentiation due to asset managers’ lack of control over information quality and the proprietary nature of ESG ratings information, which may result in unforeseen burden-shifting in the marketplace. This is further complicated by a current shortage of feasible, competitive ‘pure play’ impact products in the marketplace. Alternatively, impact criteria that are insufficiently stringent may lead to ‘impact washing’ and overall impact dilution as mainstreaming impact investing (around the SDGs for example) will not necessarily cause investment re-allocation or positive impact investing.

## 6.2 Criteria Evaluation

### 6.2.1 Efficacy

As discussed in Chapter 3, examining the potential *efficacy* of a program in an *ex ante* context requires assessing the likelihood that intended policy effects will actually be attained (Crabbé & Leroy, 2012). Thus, examining the *efficacy* of an eco-label program, as an ‘*information as policy*’ intervention, requires consideration of its potential to impact market dynamics. The efficacy of alternative eco-label program mechanisms is therefore considered in light of their ability to reduce information asymmetry for investors with respect to **processes** that an asset manager uses in developing and managing sustainable investment funds (e.g. sustainable investment strategies, disclosure, transparency and reporting processes and asset selection and analysis methods). This section also explores the potential that alternative eco-label designs may have to steer the market towards outcomes that can result in positive environmental **impacts**.

#### **Process Improvements**

Product **differentiation** with respect to mainstream funds (*public* equity and debt) that apply more general ESG strategies will present challenges given both the complexity of measuring impact as well as the similarities between *best-in-class* funds and other funds on the market. Packaged products (such as mutual funds) reduce handling costs for asset managers and can therefore reduce transaction costs for retail investors, however they can also bias retail investors’ decisions as they provide limited variability and are traditionally complex (2DII, 2018).

Participating asset managers may be limited in their ability to obtain a **price premium** for labelled products. While labelled funds may reduce initial search costs for investors, those cost savings may be offset by increased administrative costs borne by asset managers related to label

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<sup>60</sup> For example, a 2015 report by FIR demonstrated that asset managers have both a negative perception of alternative products and assume that they are undesirable to customers (2Dii report).

compliance. Labelling schemes that do not place strong emphasis on process transparency and reporting requirements are likely to reduce administrative fees for asset managers and thus provide lower fund participation costs for investors.

In addition to the effects that greater transparency and disclosure may have on reducing information asymmetries, some suggest that it can also provide the industry with greater insight on the challenges, dilemmas and weaknesses faced by investors and companies, rather than on mere narratives regarding corporate environmental performance. It is possible that this cycle can produce new solutions to environmental challenges from sources that otherwise would not be made aware of the challenges faced (Forum Ethibel, 2017).

### Impact Criteria

Impact investing strategies must rely on clear goals and trusted indicators to be credible and to apply stringent impact measurement and reporting efforts to avoid risks of ‘impact washing’ (Novethic, 2017). Eco-label programs may potentially trigger *individual positioning* either through sector-thematic or impact criteria that can drive investments into illiquid or high-risk investments or sectors. The mechanisms to achieve these outcomes are outlined below in Figure 6-1.

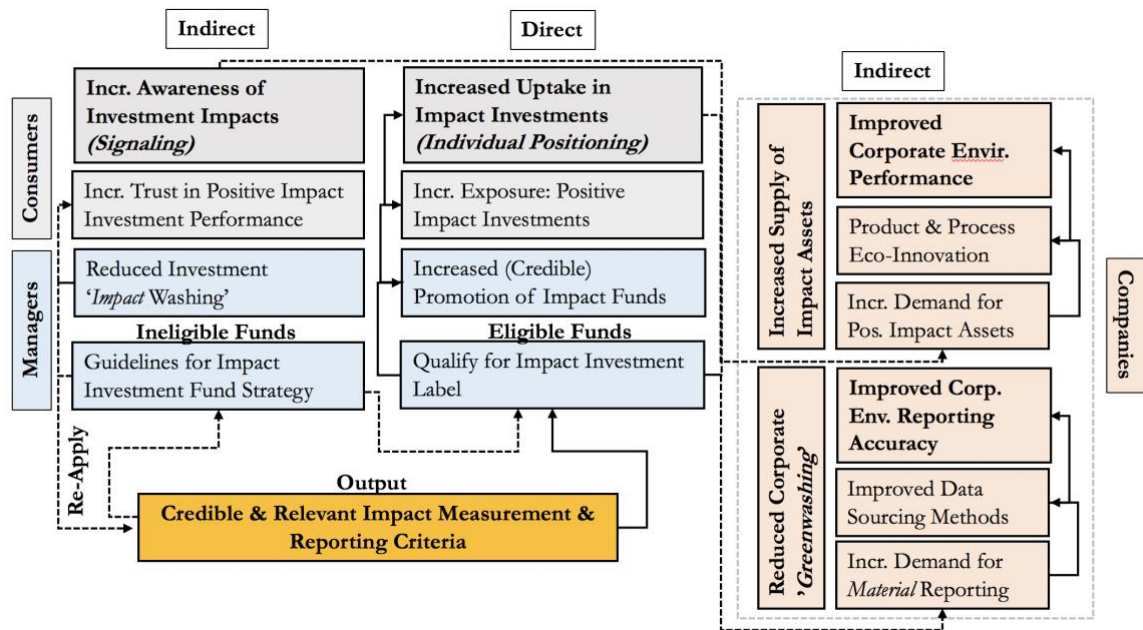


Figure 6-1 Potential Outcomes of Stringent Impact Criteria

Description of direct and indirect outcomes of credible and relevant impact criteria and the potential mechanisms through which they can influence positive environmental outcomes among asset managers, retail investors and companies. Dashed lines represent causal mechanisms that might occur outside the target area (i.e. to non-participating market actors and companies).

Source: Author's Own

Labels can be an effective tool for asset managers to signal their sustainability strategies, but in order to achieve *additionality*, labels must be able to set standards that actually push the market forward rather than serve to confirm or legitimize existing ESG practices. Stringent impact criteria can indirectly influence the market by increasing (and improving) transparency across

the investment chain through: i) improved data collection and analysis methodologies; ii) greater corporate disclosure. This could have a spill-over effect into the quality and materiality of investment impact measurement as well as the demand for positive impact products.

There is a strong demand for more fulsome, accurate and transparent impact reporting from market actors, although the demand is not evenly distributed among the retail investment sector. Heterogeneity with respect to the multiple strategies used in sustainable finance will make market segmentation a hard effect to avoid, particularly for certain direct investment strategies that have thus far not had the same participation rates as mainstream sustainable investments. As a result, overly stringent label criteria for impact investments may only provide relevant information to a small sub-component of the heterogeneous retail investment market. While current experiences related to stringent impact criteria suggest that they can decrease overall fund participation levels, there is also evidence that they may offer additionality by serving as a ‘best practices’ *signal* to the market. For instance, two thirds of the funds that have obtained the TEEC Label were created in direct response to the label’s inception (I6), and without the label it is likely that those funds would not have been created.

Although higher administrative fees may lead to limited initial uptake among consumers, increased *fund loyalty* among participating investors may produce a competitive advantage for asset managers, provided a label is able to signal to investors that its criteria identify funds most likely to produce long-term financial or environmental returns. To that end, environmental impact measurement and reporting might become a critical aspect of label design in securing more long-term investment horizons, as investors driven by altruistic motives may see less competitive returns or higher risk profiles as the cost of investing sustainably (Peifer, 2014). Eco-labels that incorporate impact measurement and reporting criteria may become a useful measure towards combatting the prevalence of *short-termism* in the industry (European Commission (EC), 2018).

## 6.2.2 Relevance & Legitimacy

Evaluating a program’s potential *legitimacy* involves a consideration of the likelihood that the program will be accepted, adopted and implemented by market actors (Gupta et al., 2007; Thidell et al., 2015), as well as the political constraints that may limit effective implementation of the policy (Dellas & Pattberg, 2013). Examining the *relevance* of a policy entails a consideration of the actions and decisions taken by the scheme in relation to its underlying rationale, goals and outputs (Thidell et al., 2015). With respect to environmental policy, that can entail an examination of whether the criteria set by the label address relevant environmental aspects and set sufficiently high standards, and whether they can trigger innovation within the industry (Thidell et al., 2015).

### **Structural Legitimacy**

Within the field of rational choice institutionalism, organisation may pursue legitimacy through modifying (or disassociating from) behaviour associated with prevailing institutional logics, which is seen as a precursor to re-establishing market dynamics that allow a firm or industry to carry out actions that conform to market logics. Organisations are therefore likely to modify behaviour when confronted with situations that may compromise their legitimacy (Sammeck, 2012). Procedural legitimacy becomes a crucial aspect of organisational legitimacy in the face of complex outcome attribution as procedures can provide easily-monitored proxies for less visible targets of evaluation, such as strategies, goals, and outcomes (DiMaggio & Powell, 1983; Suchman, 1995).

Eco-labels may serve as a signal to investors that the investment community is taking steps to comply with socially acceptable norms and could help re-establish trust among market participants and trigger increased participation. The capacity of a label to do so is likely to increase its legitimacy among market actors. For example, an eco-label program that provides process clarity and transparency for retail investors can present an opportunity to reduce participation barriers for both retail investors and asset managers.

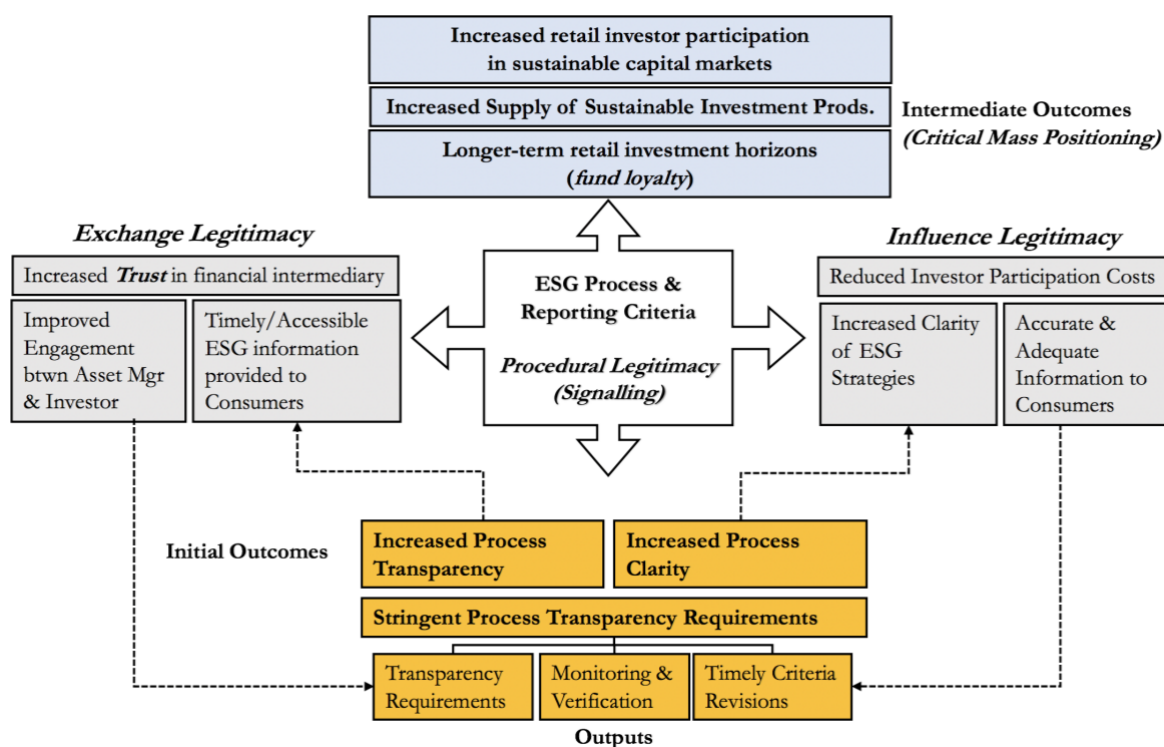


Figure 6-2 Potential Impact of Process Criteria on Structural Legitimacy

Source: Author's Own

Figure 6-1 outlines the theory behind this process as it relates to credible and acceptable **process criteria** within the context of a label targeting more mainstream ESG investments. Process and reporting standards (represented in the middle of the diagram) help to strengthen and build interactions between the program's outputs (both initial and recurring) and outcomes produced (initial and intermediate). These interactions can repeat through a recursive, mutually re-enforcing process which can produce positive direct (market) outcomes as well as potentially positive environmental impacts. Through this process, retail investors might observe greater alignment between asset manager practices and positive social outcomes (e.g. intention to make a positive environmental impact). As a result, the investment sector can (re)establish social acceptance even without demonstrable improvements to the outcomes of their practices. This can be particularly relevant in the investment sector, where system **complexity** can obfuscate the relationships between individual behaviour and ultimate outcomes.

One potentially encouraging example of such an effect can be found in the development of the 'Green Bonds' market. Green Bonds were first introduced in 2007 and experienced several years of minimal growth before the market doubled in size between 2016 and 2017. According to Bloomberg New Energy Finance, green bonds issuance reached \$123bn in 2017, and to many, green bonds represent an encouraging example of the 'virtuous cycle' potential of investment vehicle uptake (Eurosif, 2016). The increased volume of issuance has been driven by increased investor demand, which was facilitated by the Green Bond Principles (GBP):

voluntary standards and a taxonomy to ensure that funds sourced through green bonds are used for green investments (European Commission, 2018). The Green Bond experience can thus serve as an example of how increased *procedural*, *exchange* and *influence* legitimacy can provide mutually re-enforcing feedback loops that work simultaneously to improve product quality and consumer participation.

### **Criteria Relevance**

Scaling up ‘impact investment’ appears to present both demand and supply challenges. With respect to product **demand**, impact investment portfolio selection resulting from stringent impact criteria (i.e. a narrower investment universe) is likely to limit the desirability of those investment products among large segments of the market that favour more ‘financial returns’ perspectives. Higher risk or longer-term payback may have become more acceptable, or the breadth of what can be considered as an ‘impact’ investment is becoming wider. For instance, despite the significant increase in popularity of Green Bonds, underlying standards and performance indicators set by the Green Bond Principles (GBP) are “seen as being a bit soft” (I4). Increased uptake in impact investment strategies may also create **supply** side challenges, that could hinder market development for ‘direct impact investing’ as scaling up impact investing too quickly without a parallel increase in sustainable projects can result in an inadequate supply of suitable projects to meet demand (Triodos, 2017).

### **Program Legitimacy**

There is a concern that standards attached to a comprehensive taxonomy, including those that are considered voluntary, will be “too prescriptive”. In particular, EU asset managers have suggested that eco-label standards derived from a taxonomy of sustainable activities will lead to significant ‘box-ticking’ with little tangible benefit: “there is the perception among certain stakeholders that delegated acts often become detailed and descriptive [...] which could lead to a bureaucratic approach and burdensome tick the box compliance exercises” (EFAMA, 2018:7). Labelling schemes that do not incorporate stringent impact measurement criteria or taxonomy-based activities restrictions are more likely to attract funds invested in a wider investment universe, which is likely to maintain the perceived financial acceptability (higher expected return) of those funds for a larger portion of the industry.

Quick turnaround times associated with leading standards is likely to turn administrative oversight and criteria revision into burdensome processes. Asset managers electing to participate in a labelling scheme will require some level of stability in setting process and impact targets. Setting the revision period will thus be an important part of obtaining acceptance among market actors. Calls for transparency are also a two-way street: “Providers should disclose their methodology. Only a transparent methodology can be properly assessed. Otherwise providers would be able to apply subjective criteria thereby risking inconsistent outcomes. A transparent methodology also allows the fund industry to engage with the provider and discuss any potential flaws” (EFAMA, 2018:5).

Labels that apply broad ESG criteria may not be able to offer sufficient differentiation among labelled and non-labelled products or include products considered to be ‘black goods’<sup>61</sup>, which can impact label credibility. “For retail investors, the lack of differentiation among labelled and non-labelled funds might be particularly troubling due to the presence in many ‘green’ funds of large, often high emission companies” (I6).

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<sup>61</sup> ‘Black goods’ are those that belong to product categories that are considered to be environmentally harmful (Thidell, 2009).

## 7 Conclusions and Recommendations

Section 7.1 provides a summary of the conclusions drawn from the findings, analysis and evaluation in relation to the research questions posed in Chapter 1. Section 7.2 then provides a discussion related to research question 2.2 as to what implications these findings might have for effective eco-label program design at the EU level.

### 7.1 Conclusions

#### **What market-based and/or environmental challenges are addressed by eco-label programs for investment products? (RQ 1.1)**

The challenges faced by the financial sector in improving industry sustainability appear to rest on two foundational issues: (i) scaling-up ‘sustainable’ investments and (ii) enhancing the effectiveness of sustainable investment towards achieving impact in the real economy.

Greater market uptake in sustainable investing may lead to improved impact measurement and environmental performance across the industry (*critical mass positioning*). Increased transparency and reporting can lead to more accurate information, which may reduce participation costs associated with misaligned strategies and inaccurate performance reporting (*signalling*). More fulsome process disclosure may reduce search costs for consumers in identifying portfolios that cater to their needs and may promote greater asset manager knowledge and awareness of sustainability (*individual positioning*). In the context of the financial sector, trust was also found to be a significant source of relational tension between retail investors and asset managers, which can impact the perceived legitimacy of sustainability-related claims.

#### **How can existing market dynamics and industry norms in the EU investment sector influence eco-label performance? (RQ 1.2)**

**Asset Managers:** (i) There is a noticeable change in attitude towards sustainable investing, with many sustainable investment practices becoming mainstream. (ii) There is mainstream market hesitance towards certain ‘green’ and impact investment which represent a departure from many more established SRI and ESG investment practices. (iii) Challenges exist with respect to the additionality and measurability of sustainable investment activities on the real economy.

**Retail investors** are (i) a potentially large driver of the impact investment market due to the lack of regulatory constraints. (ii) Investors may be dissuaded to participate in the sustainable investment market due to increased participation costs. (iii) Investor needs and wants with respect to sustainable investments are **heterogeneous**, and challenges are further exacerbated by misaligned incentive structures that promote **short termism**.

**Other Market Actors:** (i) Non-financial corporate reporting is a crucial element of material non-financial disclosure. (ii) Complex relationships along the investment chain, including the exchange of information between companies, asset managers and financial analysts all pose the risk of exacerbating information asymmetries for retail investors.

#### **What alternative causal mechanisms have been or might be used in theory and in practice by eco-labels in the context of investment products? (RQ 2.1)**

Each of the labels examined offered unique design elements based on their intended target markets, outcomes, and mechanisms. The **Nordic Swan Label** aims to generate greater trust

in overall sustainable capital markets and thus focused criteria on strategies aimed at improving reporting and disclosure practices among both asset managers and companies. The **LuxFlag Environment Label**, which was one of several labels offered by LuxFlag aimed at different segments of the sustainable investment market, seeks to generate financial performance among environmental sectors primarily through a combination sector-specific investment targets and a broad approach to process criteria intended to stimulate capital re-allocation. Lastly, the **TEEC Label** was designed to set the bar with respect to ‘best practices’ in developing investment products intended to have a positive environmental impact through alignment with a taxonomy of eligible ‘green activities’ for investors and companies.

A common thread among all labels examined is their intention to provide consumers with greater visibility of sustainable investment activities through third-party certification from a reputable and recognizable label provider, which in turn is intended to provide a competitive advantage for asset managers. In return, these labels can provide consumers with greater transparency and clarity with respect to the sustainable investment strategies used in portfolio formation and thereby reduce information asymmetry in that respect. Similarly, under the assumption that increased transparency leads to greater market participation, process standards criteria were designed to improve sustainable investment strategies, which would facilitate (and incentivize) market participation as more producers enter the market, resulting in greater harmonization in sustainable strategies.

Eco-labels that facilitate industry process improvements, or at least signal to investors that the investment community is taking steps to comply with socially acceptable norms through increased procedural legitimacy could help re-establish trust among market participants and thus the capacity of a label to do so is likely to increase its legitimacy among market actors. There is a strong demand for more fulsome, accurate and transparent impact reporting across the investment chain from investors. Stringent impact criteria can indirectly influence the market by increasing (and improving) transparency across the investment chain through: i) improved data collection and analysis methodologies; and ii) greater corporate disclosure. This could have a spill over effect into the quality and materiality of investment impact measurement.

While all label designs examined aim to drive greater transparency among participating asset managers with respect to investment processes, there are trade-offs between the alternative mechanisms employed that may curtail effectiveness depending on intended outcomes. These considerations are discussed in the following section.

## **7.2 Policy Implications**

### **How might an eco-label program applied in the context of the entire EU retail investment market most effectively address current challenges faced? (RQ 2.2)**

Given calls for harmonization, it appears that an EU-wide eco-label for retail investment products would have a positive impact on addressing one or several of the challenges currently faced by the industry with respect to sustainable (and green) investing. There appears to be an industry consensus that greater transparency and accessibility within the field of sustainable investing are crucial due to the heterogeneity of strategies, products and investor needs among various sustainable investment types, and that a lack of harmonized standards regarding sustainable practices is one of the primary barriers to greater movement towards those objectives.

In the current landscape, competing national label standards with differing geographic reaches make the cost of obtaining a label for a fund that is intended for multiple markets quite restrictive and can limit asset manager participation (I4). Introducing a unified pan-European labelling framework is seen by many as a means to overcoming these cost barriers. Similarly, harmonized process standards may indirectly contribute to the acceptability of more stringent eco-label standards.

There appears to be a common belief that improving disclosure practices across the supply chain can trigger increased effectiveness of sustainable investment strategies. The key defining feature of new disclosure requirements relates to **impact** reporting, as many now see the field of responsible investing as a strategy where “merely stating that environmental and social criteria are considered is not enough. It must be combined with quantified targets that are measured over time” (Novethic, 2018). Doing so could result in a convergence between responsible investment on the one hand, adopted by investors who consider environmental, social and governance (ESG) risks in their investment process, and, on the other, the dynamic but narrower market of impact investing. Improved corporate disclosure practices may lead to the development of comparable quantitative environmental impact metrics and thus increased information flow throughout the investment chain.

There is a strong desire among certain stakeholders for alignment between EU policy measures and common international goals such as the SDGs (EFAMA, 2018). Aligning impact criteria with international commitments can provide a positive marketing advantage to asset managers and generate participation uptake. Aligning label standards with the SDGs may also present a unique opportunity to unite these two market segments (mainstream and impact) towards greater impact measurement, which could improve monitoring and measurement practices from a mainstream perspective and allow for the scaling up of impact investing. However, insufficiently stringent impact criteria as well as supply-side challenges in the availability of competitive impact investment products could lead to impact dilution and poor market participation, theoretically limiting an eco-label’s direct impact.

Similarly, there appear to be important trade-off implications for eco-label programs regarding the level of criteria stringency that can feasibly be set, and the impact on the relevance and legitimacy of the program in two related but distinct ways: (i) cumbersome process stringency may increase the fees that active asset managers are required to charge in order to offset additional reporting requirements; while (ii) increased impact stringency may limit the number of potential investments eligible for portfolio inclusion, which will impact the ROI or risk profile of labelled funds and thus likely to limit market uptake.

### **7.2.1 Harmonized Process Standards**

**Main Policy Implication:** Increased harmonization across the industry regarding disclosure and process transparency is likely to be seen as relevant for policymakers and likely to be accepted by target actors. The following is a summary of the main effects that a harmonized EU standard with respect to sustainable investment processes is expected to produce:

**Signalling:** A third-party certified label regarding sustainable processes could serve as a signal of legitimacy (procedural) to retail investors, reduce trust-related barriers to market participation (exchange legitimacy) and improve process clarity which could trigger greater communication between asset managers and investors, and drive greater alignment between investor needs and asset manager strategies (influence legitimacy).



**Long-termism:** Standardized transparency and reporting processes have the potential to trigger positive secondary outcomes such as greater harmonization in investor material impact reporting, greater portfolio alignment with investor needs, and increased awareness among asset managers regarding sustainability issues, which could all facilitate improvements in mainstream sustainable investment practices (*critical mass positioning*).

**Investment Chain Information Flow:** Setting eco-label standards that aim to drive quality improvements in corporate non-financial disclosure, such as through standards with respect to active fund management (such as the Nordic Swan) is likely to have the intermediate outcome of greater overall market use of non-financial information and greater harmonization among markets with respect to disclosure and reporting.

**Program Legitimacy:** Lastly, in light of the significant and growing popularity of prior non-state initiatives with respect to transparency and reporting, such as the UNPRI and the Eurosif Transparency Code, it is likely that stringent process criteria would be acceptable to a significant portion of asset managers, which could lead to widespread industry uptake (*critical mass positioning*).

### **Limits:**

Harmonized process standards are not likely to eliminate all information asymmetry barriers due to the proprietary nature of ratings and analysis methodologies. Further, without sufficient impact targets, a broad-application EU Label could increase participation at the expense of improper market segmentation and product differentiation.

## **7.2.2 Harmonized Environmental Impact/Activity Criteria**

**Main Policy Implication:** An eco-label that focuses on impact measurement standards aligned with a taxonomy of sustainable activities might have the desired effect of achieving additionality through ‘best practices’ signalling, and greater alignment across the investment supply chain.

**Moral Legitimacy:** An EU Label with positive impact measurement and reporting criteria is likely to contribute positively towards increasing consequential legitimacy regarding sustainable efforts among the industry. Further, positive impact reporting criteria might promote fund loyalty, which may offset challenges associated with increased administrative fees.

**Impact Washing:** The SDGs provide a material framework for ‘narrowing the gap’ between mainstream and traditional impact investing strategies. Stringent impact criteria could help minimize ‘impact washing’ among asset managers, which could be particularly relevant for asset managers seeking to market SDG related products, and at a time when investor interest in sustainable investment is growing significantly.

**Individual Positioning:** Stringent impact measurement and/or criteria based on a sustainable activity taxonomy could guide increased investment towards illiquid environmental markets that would otherwise not receive funding.

### **Limits**

An EU-wide label may be limited in its ability to set sufficiently stringent impact criteria, which could fail to address ‘impact dilution’ (or ‘SDG washing’) in the marketplace and lead to improper product differentiation. Standards attached to a comprehensive taxonomy, including those that are considered voluntary, may be seen as “too prescriptive”, and may limit program

acceptability among asset managers. Similarly, taxonomy or impact-based standards that apply to an EU-wide market will likely require trade-offs between criteria stringency and legitimacy among intended participants, which may lead to watered down impact standards.

## 8 Critical Reflections and Further Research

The purpose of this evaluation was not to examine the eco-label program as a whole but to examine the potential interactions between program effects and context dynamics within a single case (the EU investment sector). While this approach has allowed for an in-depth exploration of the subject and is well positioned as an *ex ante* evaluation to produce policy relevant information, these methodological choices also entail questions regarding the external validity and generalisability of the findings (Yin, 2003). Further, applying a critical realist perspective to policy evaluation entails the use of normative judgments for both context analysis and criteria evaluation, which can cloud the objectivity of the study if research methods are not sufficiently structured and rigorous. Attempts were made throughout the research to ensure that individual biases did not cloud the methods (through structured data collection methods) or findings (through structured coding and triangulation), however it is important to acknowledge the potential impact that these biases may have on the validity of the findings particularly in the context of a qualitative study.

Though efforts were made to address the complexity of the system under study: in forming the evaluation (RLA), grounding the data collection process through initial knowledge synthesis and structuring the eco-label program model, this research has left a number of questions relevant to the consideration of eco-label program design and implementation in the investment context both unasked and unanswered. For instance, one of the key general challenges in eco-label program evaluation relates to environmental impact measurement, and within the context of sustainable investments those challenges are both highly relevant and outside of the scope of this research.

### **Further Research**

One of the primary aims of an *ex ante* reverse logic analysis is to provide a sound interpretation of the intervention's strengths and alternatives for action, serving as a guide for further evaluation and research activities (Rey et al., 2012). The results of this evaluation suggest that research examining the real-world impacts of eco-labels for investment products, as well as sustainable investing activities themselves could serve a crucial role in further demystifying causal connections between them.

In order to draw stronger conclusions with respect to eco-label impacts on market dynamics, further research examining the impact that labels have on the *'fund loyalty'* of participating investors could help deepen our understanding of how labels can indirectly influence market behaviour. Further, given the research findings with respect to the desirability of process harmonization within the investment sector, and in the wake of new EU financial regulatory measures and reforms such as MiFID II<sup>62</sup>, the PRIIPs Regulation<sup>63</sup>, and amendments to the fiduciary duty seeking to codify ESG integration requirements into investor obligations, further studies examining how these various directives and regulations can complement one another in order to create policy coherence would likely prove extremely helpful.

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<sup>62</sup> Markets in Financial Instruments Directive 2014/65/EU in force as of January 3, 2018

<sup>63</sup> The Packaged Retail and Insurance-based Investment Products Regulation (EU) No 1286/2014 in force as of January 1, 2018

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## Appendix A: Interview Guide (Label Issuers)

*Before we start, I'd like to make sure you are alright with this conversation being recorded. The recording is only for research purposes and will not be made public. Everything we discuss, and all personal information will be handled to exclude personal and company-specific information.*

### Introductory

- 1) How long have you been with your company?
- 2) Can you describe your role with that organisation?
- 3) How long have you worked in Eco-labelling/The Financial Sector?
- 4) Have you worked with eco-labels other than the \_\_\_\_ eco-label?

### Eco-label Background

- 1) How long has the \_\_\_\_ label been operational?
- 2) Were you involved in the design process?
  - a. If so, can you describe that process (how responsibilities are divided)
- 3) What financial products does the eco-label apply to?

### Label Design

- 4) What are the main objectives of the label?
- 5) Do you think there are different objectives between an eco-label for financial services and other products/services?
- 6) In your view, does the \_\_\_\_ Eco-label improve access to or participation in sustainable investments? If so, how?
- 7) Have you noticed any challenges related to labelling schemes for investment funds?
- 8) Does the \_\_\_\_ Eco-label provide preference to specific sectors, or are performance criteria standard among all sectors?
- 9) How would you describe the general level of sustainability awareness among retail investors? How has that changed over time?

### Direct Effects

- 10) In your view, has the eco-label been successful in achieving its intended goals?
- 11) Are there any external forces that might impede the label's objectives?
- 12) Have you ever received feedback from stakeholders about why they chose to participate or not participate in your eco-label?
  - a. If so, how does your eco-label deal with those concerns?
- 13) Do you know how many funds have applied for the eco-label? What percentage has been accepted?
- 14) Has your eco-label conducted any consumer surveys in lead up or following criteria development or label rollout? Have eligibility criteria changed over time (if so, when)?

### Side Effects

- 15) Have you received any responses to the label that surprised you?
- 16) Is your organisation responsible for label oversight?
- 17) If so, has monitoring/oversight presented any challenges?
- 18) In your view, has the \_\_\_\_\_ Eco-label affected:
  - a. Participation in SRI among consumers?
  - b. Knowledge and/or acceptance of SRI among investment professionals?
  - c. Access to better corporate data?

### **Follow-up Questions**

- 19) Are there any documents or further information that you would be willing to share that might help in this research? Does your organisation track the number of participating funds and/or assets under management?
- 20) Is there anybody whom you believe would have further relevant information for this research project that might be willing to participate?

**Those are all the questions I have. Is there anything else you would like to add? Otherwise thank you very much for your time!**

## Appendix B: Interview Guide (Label Users)

*Before we start, I'd like to make sure you are alright with this conversation being recorded. The recording is only for research purposes and will not be made public. Everything we discuss, and all personal information will be handled to exclude personal and company-specific information.*

### Introductory

- 1) How long have you been with your company?
- 2) Can you describe your role with that organisation?
- 3) How long have you worked in the Financial Sector?

### Sustainable Investment Approaches

- 4) Does your company have any written policies on sustainable investment/finance?
  - a. If so are you involved in designing or implementing those processes?
- 5) What financial products/services does your organization offer?
- 6) Does your organisation prefer a particular sustainable investment strategy?
  - a. If yes, why? What advantages do you believe the strategy offers?
  - b. If no, how long has that been your firm's approach to sustainability strategy selection?
- 7) How does your organisation communicate your SI strategy with investors?

### Market Context

- 8) Are there any recent trends in sustainable investments that you have noticed?
  - a. If yes, are there any factors that you can identify as being particularly influential?
- 9) Do you believe that sustainable investment strategies can influence financial performance?
  - a. If so, in what ways?
  - b. Do you believe there is any friction between the two?
- 10) Does your firm have any strategies/products that target green or impact investments in particular?
  - a. If so, are there differences in the way those investments are designed compared to other sustainable investments?
  - b. If no, are there any particular reasons why not?
- 11) Do you think that barriers exist that limit investor participation in sustainable investment?
  - a. If so, what are the most pressing barriers?

### Label Participation

- 12) Does your organisation participate in any labelling programs currently? Anticipate doing so in the future?
  - a. If yes, what motivated your organisation to participate?
  - b. If no, are there particular reasons why?



13) Have you/do you anticipate any particular benefits from the label?

#### **Follow-up Questions**

14) Are there any documents or further information that you would be willing to share that might help in this research?

15) Is there anybody whom you believe would have further relevant information for this research project that might be willing to participate?

**Those are all the questions I have. Is there anything else you would like to add?  
Otherwise thank you very much for your time!**

## Appendix C: Overview of Interviews

Table A1 Overview of Interviews

Stage 1 - Unstructured Interviews						
Int.	Date	Position	Area of Expertise	Actor Class	Format	Duration
1	30-May	Policy Advisor	Environmental Policy	Policymaker	In person	65
2	05-Jun	Researcher	Eco-labels	Academic (Label)	In person	48
3	23-Jun	Researcher	Sustainable Finance	Academic (Finance)	Telephone	50
4	07-Aug	Journalist	Environmental Finance	Media	Telephone	52
Stage 2 - Structured Interviews						
Int.	Date	Position	Area of Expertise	Actor Class	Format	Duration
5	27-Jun	SF label specialist	Investment Label	Policymaker	Telephone	75
6	23-Jul	Executive Director	Investment Label	Policymaker	Written Response	N/A
7	24-Jul	Executive Director	Sustainable Investment	Asset Manager	Telephone	38
8	24-Jul	ESG Consultant	ESG Evaluation	Policymaker	Telephone	42
9	25-Jul	Research Chief	Investment Label	Policymaker	Telephone	48
10	26-Jul	Regulatory Policy Advisor	Asset Management	Asset Manager	Written Response	N/A
11	03-Aug	Criteria Developer	Sustainable Investment Standards	Policymaker	Telephone	40
12	29-Aug	Investment Manager	Sustainable Investment	Asset Manager	Telephone	48
13	30-Aug	Sustainability Officer	Sustainable Investment	Asset Manager	Telephone	37

## Appendix D: Coding Structure

Table A2 Coding Structure

Context			
Second Order	Third Order	Description	Example
<b>Problems/Needs</b>	<i>Environmental/Market</i>	<i>Challenges in sustainable/green investment context</i>	“The gap in funding is so large, that we need fundamentally new and different solutions and ways to channel investment capital towards the Agenda.” (SDG Investing Report)
<b>Structural Barrier</b>	<i>Complexity</i>	<i>Challenges with respect to identifying financial or environmental performance</i>	“There are issues with additionality, and whether they are actually diverting new capital or not. Does it actually increase investments in green projects?”
	<i>Incentive Misalignment</i>	<i>Heterogeneous needs/wants of the investment industry</i>	“[SDG-based practices] allow for asset managers to focus on a few of the SDGs, allowing them to fit ‘the identity of certain organisations into the product’” (I9)
<b>Normative Barrier</b>	<i>Institutional Norms</i>	<i>Interactions between institutional logics</i>	“Impact investing is seen to some as ‘the most noble way to lose money’” (I13)
Mechanisms			
Second Order	Third Order	Description	Example
<b>Efficacy</b>	<i>Main Effects</i>	<i>Impact on target market: participating investors /asset managers</i>	“Originally the goal of the CIEL label was to push transparency and robustness of the ESG investment process” (I6)

<b>Indirect Effects</b>	<i>Beneficial Effects</i>	<i>Impact on non-participating market actors</i>	“[asset managers] have both the mandate and the means to pursue information from companies and issuers” (I5)
<b>Negative Effects</b>	<i>Perverse Effects</i>	<i>Unforeseen side effects of label designs</i>	“Term impact investing is being misused all over the world. That will hurt long term credibility of the term” (I13)
<b>Evaluation</b>			
<b>Second Order</b>	<b>Third Order</b>	<b>Description</b>	<b>Example</b>
<b>Trustworthiness</b>	<i>Structural</i>	<i>Robust control and verification processes</i>	“the feeling is that [green finance] is such a fast-moving industry” (I4)
	<i>Influence</i>	<i>Legitimacy of Industry norms</i> <i>Acceptability of label administration</i>	“Transparency is considered a first requirement [of sustainability]” (Ethibel, 2018)
<b>Transparency</b>	<i>Procedural</i>	<i>Satisfactory licensing and verification processes.</i> <i>Relevant information consumers / outside actors.</i>	“There is the perception among certain stakeholders that delegated acts often become detailed and descriptive, which could lead to a bureaucratic and ‘box-ticking’ approach in the case of sustainable finance” (I4)
<b>Participation</b>	<i>Exchange</i>	<i>Acceptance of criteria among market actors / Credibility among producers</i>	“When you are restricting an investment universe, there is always a balance between ‘sustainability’ and investibility. A narrow investible universe is less attractive.”
	<i>Consequential</i>	<i>Material/measurable impact standards / disclosure</i>	“The label aims to set a ‘top-of-class’ approach which serves to set an increasingly high bar with respect to a fund’s performance on environmental aspects” (I6)

## Appendix E: Overview of Selected Labels

Table A3 Overview of Selected Labels (Expanded)

	Nordic Swan	French TEEC	LuxFlag Environment
<b>Date of Launch</b>	15-06-2017	01-12-2015	01-06-2011
<b>Label Type</b>	ESG	Energy/Climate	Environment/Sectoral
<b>Labelled Funds</b>	13 listed (20 according to interview)	15 (as of September 2017)	11
<b>Audit Period Length</b>	6-9 wks (30 hrs)	4-6 wks	4 wks
<b>Legal Basis</b>	None	Article 2 of Energy Transition for Green Growth Law (2015)	None
<b>Eligibility Criteria</b>	UCITS (with specifications)	UCITS / AIFM Funds / Bond funds	Any EU Fund
<b>Who Sets Criteria</b>	The Nordic Eco-labelling Board, an independent external organisation.	A dedicated multi-stakeholder Committee chaired by the Ministry of Environment	LuxFlag in conjunction with ALFI led multi-stakeholder industry working group
<b>Who grants labels</b>	Nordic Swan	Accredited auditors	LuxFlag
<b>Label costs</b>	Application fee of 3,000 EUR and annual license fee of 0.0015% of AUM in the fund.	None	None
<b>Audit Costs</b>	Costs borne by non-compliant fund managers	None	None
<b>Criteria Revision</b>	3-5 years	1 year (renewable)	1 year (renewable)
<b>Intermediate Verification</b>	Annual	Variable	6 months (compliance letter)
<b>'Green' Taxonomy - (Meta Standard)</b>	GBP (modified) – applies to 'green bonds' only	CBI (modified)	None

Sources: Data obtained from interviews, European Commission (2018)

## Appendix F: Integrated Program Models

Focus: Problems / Needs / Outputs / Initial Outcomes / Intermediate Outcomes

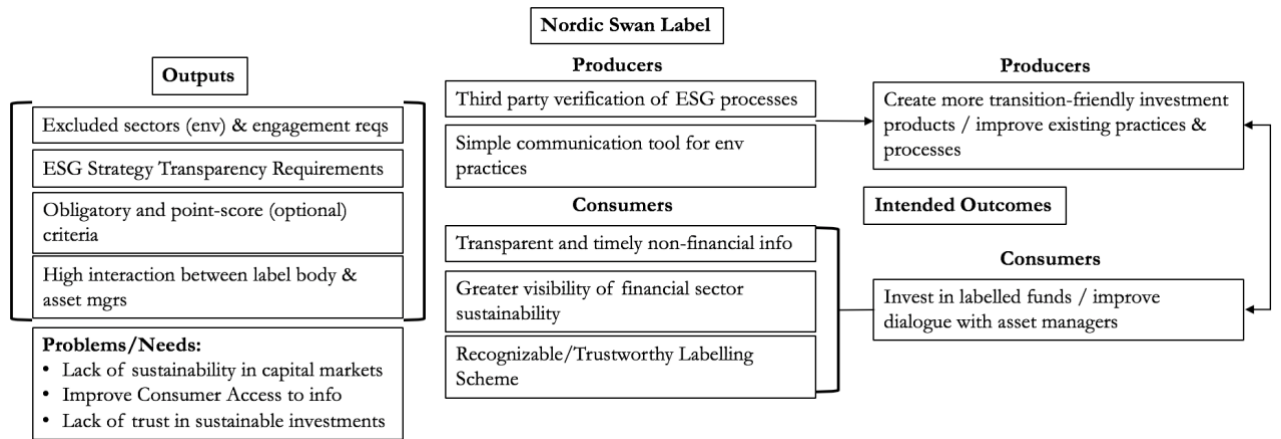


Figure A3 Integrated Program Model (Nordic Swan Label)

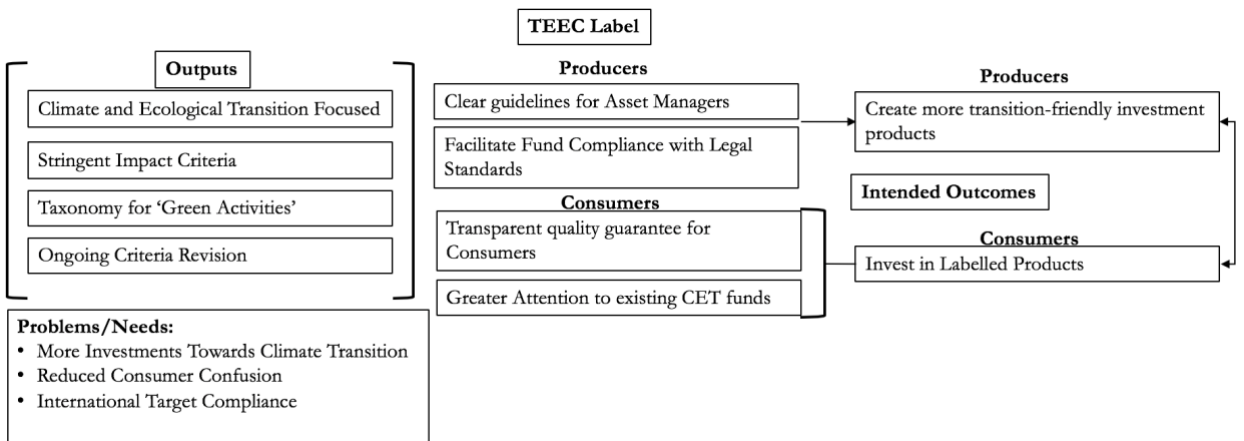


Figure A4 Integrated Program Model (TEEC Label)

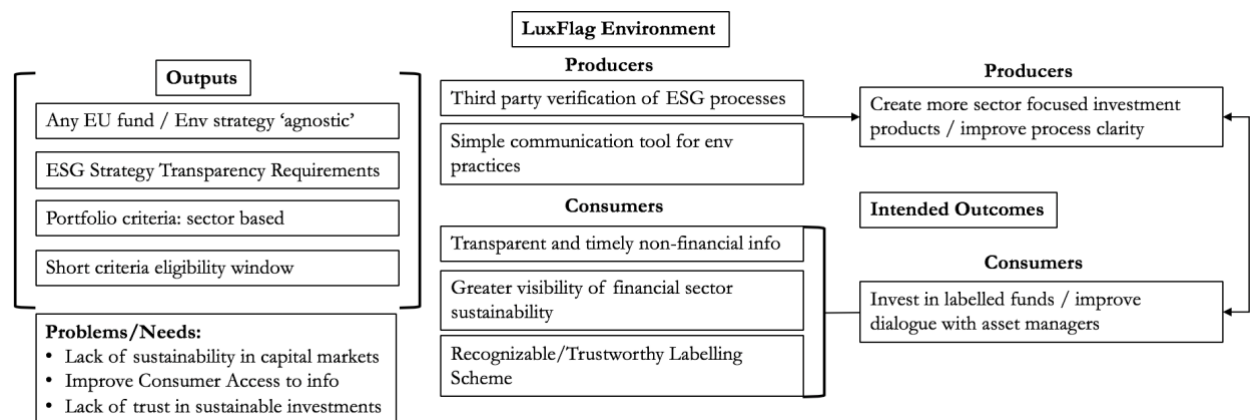


Figure A5 Integrated Program Model (LuxFlag Environment Label)

## Appendix G: Glossary of Terms

Term	Definition
<b><i>Additionality</i></b>	Additionality is when an individual financing decision (strategy or investment) changes what would have occurred compared to business as usual.
<b><i>Blended Strategies</i></b>	Some investors are willing to take lower financial returns, or higher risks for an expected return, in order to have impact. They consider the “blended” social and financial return. Another way to put it is that delivering good financial returns along with impact may mean more risk, or at least more patience or more hands-on involvement and support, which may or may not be compensated.
<b><i>Brown Growth</i></b>	Economic development that relies heavily on fossil fuels and does not consider the negative side effects that economic production and consumption have on the environment
<b><i>Corporate Governance</i></b>	The system through which companies are directed and controlled, aimed at ensuring that duties are exercised according to laws, regulation and codes of conduct.
<b><i>ESG Ratings</i></b>	A scoring framework through which a publicly listed or privately held company, sector, or country’s performance on ESG factors are evaluated and measured in a systematic way to yield a combined score for that company, sector, or country.
<b><i>Equity Investment</i></b>	An equity investment process refers to the buying, holding and selling of shares on a stock market in anticipation of income in the form of dividends and gains on subsequent sale, as the value of the stock rises.
<b><i>European Supervisory Authorities (ESAs)</i></b>	The ESAs are the European Banking Authority (“EBA”), the European Insurance and Occupational Pensions Authority (“EIOPA”) and the European Securities and Markets Authority (“ESMA”). They contribute to developing a unified set of rules for EU financial markets (the “Single Rulebook”). They also help to foster supervisory convergence among competent authorities and to enhance consumer and investor protection. The ESAs play a key role in ensuring that the financial markets across the entire EU are well regulated, strong and stable.
<b><i>Fiduciary Duty</i></b>	The fiduciary duty sets out the responsibilities that financial institutions owe to their beneficiaries and clients. The expectation is to be loyal to beneficiary interests, prudent in handling money with care and transparent in dealing with conflicts (Schoenmaker, 2017).
<b><i>Fixed-Income Investment</i></b>	A fixed-income investment process (which include investment vehicles such as corporate or government bonds or bond mutual funds) usually consists of lending money to a borrower for a certain period of time in exchange for interest (Arjaliès, 2014).

<b><i>Fund Loyalty</i></b>	The continued investment in a mutual fund despite the belief that one is earning a lower return on investment.
<b><i>Green Bonds</i></b>	Green bonds differ from traditional bonds in the sense that proceeds must be used exclusively to finance or refinance key areas of environmental concern such as climate change, natural resources depletion, loss of biodiversity, and air, water or soil pollution. Green bonds are issued by development banks, states and government agencies, municipalities, commercial banks and companies. Two key aspects of green bonds are that they (i) specifically target environmental and climate-related projects, and (ii) can facilitate traceability between the flow of capital and projects with an environmental profile.
<b><i>Green Overlays</i></b>	Green ‘investments’ refer to assets that are in some way defined as ‘green’, e.g. a renewable energy company, or a thematic green fund managing assets, or a carbon credit. However, green ‘investing’ can also be undertaken in the form of an investment overlay, e.g. the integration of climate change or ESG elements in the general investment approach or legal SRI compliance.
<b><i>Greenwashing</i></b>	Tactics that mislead consumers regarding the environmental practices of a company or the environmental benefits of a product or service.
<b><i>High Net Worth Individuals (HNWIs)</i></b>	Individuals with more than US\$1 million in freely investable assets.
<b><i>Impact Investing</i></b>	Impact investing refers to the development of investment products that actively seek to ‘make a difference’ in the real economy.
<b><i>Impact Washing</i></b>	Refers to companies marketing a positive social or environmental impact that does not exist or is overstated.
<b><i>Index</i></b>	The term ‘index’ has many applications and may be used to describe a list, a rating or a ranking (Sinclair, 2011). The terms ‘ranking’ and ‘index’ are used interchangeably.
<b><i>Index Fund</i></b>	An index fund (also index tracker) is a mutual fund or exchange-traded fund (ETF) designed to follow certain pre-set rules so that the fund can track specified basket of underlying investments. Those rules may include tracking prominent indexes like the S&P 500 or the Dow Jones Industrial Average or implementation rules, such as tax-management, tracking error minimization, large block trading or patient/flexible trading strategies that allows for greater tracking error but lower market impact costs. Index funds may also have rules that screen for social and sustainable criteria.
<b><i>Indirect Investments</i></b>	Indirect investments are investments made in other funds (fund-in-fund), equity index futures, etc., as opposed to direct holdings, which are those for which the fund owns the particular assets itself.
<b><i>Investment Fund</i></b>	A ‘pool of assets’ with specified risk levels and asset allocations, into which one can buy and redeem shares’ (EFAMA 2017).



<b>Investment Value Chain</b>	Individual retail investment is no longer considered a matter of individual savers directly choosing which shares or bonds to buy, but rather the flow of capital from individuals through a sequence of intermediaries (the ‘investment chain’) involving a number of different investment vehicles, processes and strategies (Arjaliès et al., 2017).
<b>Life-Cycle Consideration (ISO 14024)</b>	For ISO 14024 Type-I eco-labels the principle of ‘life cycle consideration’ is a differentiator from many other kinds of labels. It establishes that: The objective of reducing environmental impacts is best served by considering the whole life cycle when setting product environmental criteria. Life cycle stages to be considered when developing the product environmental criteria should include: extraction of resources, manufacturing, distribution, use and disposal relating to relevant cross-media environmental indicators.
<b>Long-Termism</b>	Long-termism describes the practice of making decisions that have long-term objectives or consequences. Investments into environmental and social objectives require a long-term orientation. However, current market practices often focus on producing high returns over a short timeframe.
<b>Mainstream Impact Investing</b>	An impact investment strategy with a primary focus on a company’s inputs (e.g. ESG practices and policies, CSR initiatives and risk mitigation tools).
<b>Prospectus</b>	A disclosure document that describes a financial security for potential buyers.
<b>Risk-Adjusted Returns</b>	Refined measurement of an investment’s return which measures how much risk is involved in producing a return, expressed as a number or rating. Risk-adjusted returns can be applied to individual securities, investment funds and portfolios.
<b>Sector-Focused Investments</b>	Early investments in a targeted sector (e.g. renewable energy, water, etc.) this strategy may yield dramatic innovations that provide benefits to the sector as a whole, rather than the return accruing to one specific company. They are making the early investments in the sector innovators that may yield market rate opportunities.
<b>Short-Termism</b>	Short-termism arises from a practice of finance that is focused on near-term profits rather than strategic fundamentals. It is reflected in analysis, allocation and trading that seeks to extract value over a time horizon where the underlying economic returns do not have the time to materialise. Many companies and investors seeking to deliver sustainable outcomes feel undermined by this persistent short-term focus in financial markets and from some financial investors.
<b>Sustainable Finance</b>	Sustainable finance refers to any form of financial service integrating environmental, social or governance (ESG) criteria in business or investment decisions, for the lasting benefit of both clients and society at large. It should be oriented towards long-term societal objectives and proactively foster a more sustainable economic, social and environmental development (i.e. one that does not lead to economic and financial melt-downs; that addresses rising social inequalities and respects planetary boundaries). This also includes increasing awareness of and transparency regarding ‘sustainability’ risks that may have an impact on the stability of the financial system.

***Sustainable and Responsible Investment*** A long-term-oriented investment approach, which integrates ESG factors in the research, analysis and selection process of securities within an investment portfolio. It combines fundamental analysis and engagement with an evaluation of ESG factors in order to better capture long term returns for investors, and to benefit society by influencing the behaviour of companies.

***UN Global Compact (UNGC)*** The UN Global Compact was introduced by the UN in 1999 and is both a political platform and framework for companies that seek to commit to sustainable and responsible practices. The UNGC includes ten principles of corporate social responsibility that businesses can report upon. To do so, companies will include as part of their annual public reports how the UNGC principles are implemented within the business. The principles are divided into four main groups based on the UN Human Rights Declaration, ILO Convention, Rio Declaration on Environment and Development and the UN Convention Against corruption.