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Investor disclosure as policy response to climate change: Exploring the French case of mandatory climate disclosure for institutional investors

Torunn Brånå MSc International Environmental Studies The Department of International Environment and Development Studies, Noragric, is the international gateway for the Norwegian University of Life Sciences (NMBU). Established in 1986, Noragric's contribution to international development lies in the interface between research, education (Bachelor, Master and PhD programmes) and assignments.

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I, Torunn Brånå, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature. Tomm Bana

Date.....03.07.2017.....

I. Aknowledgements

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II. Abstract

The purpose of this thesis is to contribute to the academic and political debate on climate-related disclosures as a policy response to climate changes. Specifically, the study provides empirical evidence from a qualitative case study exploring the French climate-related transparency regime for institutional investors (FCTR) anchored in Article 173-VI of the French Energy Transition Law. This case is of particular interest because it represents the first attempt at mandating climate-related disclosures for institutional investors. While this case has received a great deal of attention in political and financial circles globally, it remains largely undiscovered in academic terms.

The purpose of the thesis is operationalised through four research questions. Firstly, the study seeks to investigate what the FCTR is, and how it can be understood as political phenomenon. Next, it asks what kind of institutional structures the transparency regime represent, and how these impact investors. Drawing on this insight, the third question sets out to identify impacts and limitations with the current configuration of the FCTR. Finally, the fourth question aims to propose a set of recommendations for the future development of climaterelated disclosures for institutional investors. The study applies a stakeholder approach to the selection of informants, aiming to illuminate the case from several relevant angles. In total, 14 semi-structured interviews were conducted with representatives from six stakeholder groups: asset owners, asset managers, financial intermediaries, NGOs/interest organisations, public authority, and researchers. The study finds that the FCTR, and the institutional foundation it builds on, has strengthened the development of 'climate conscious' norms amongst institutional investors. The role of 'norm entrepreneurs' from interest organisations, and to some degree the Government and the finance industry, has been identified as an important factor in the norm building; so has the momentum created by the French presidency of COP21. However, the climate conscious norms seem to be at a pre-internalised stage as of now, and their implications for investor choices appear to be limited. Another key finding is that the FCTR has sped up the research and development efforts into metrics and indicators usable to measure climate-related risks, opportunities, and impact. The final institutional aspect of the FCTR, formal rules, appears rather weak as the FCTR is constructed on a comply or explain fundament and does not currently have any formal monitoring body or sanction structures. Nonetheless, it appears from the findings that investors feel obliged to comply with the law for reputational reasons. In sum, the FCTR is a greenfield policy project that deserves some patience while the mechanisms are tested. Still, it is worth exploring its preliminary impacts and shortcomings, as other states have signalled that they will not be far behind France in mandating investor climate disclosure.

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Abbreviations and acronyms

2dii*	2 degrees investing initiative, French interest organisation			
AuM	Assets under management			
BNP IP*	BNP Paribas Asset Management			
CIB*	Credit Agricole Corporate and Investment Bank			
CDP	Carbon Disclosure Project			
CEO	Chief Executive Officer			
CFO	Chief Financial Officer			
СОР	Conference of the Parties; refers to UN climate negotiations			
COP21	The 21 st Conference of the Parties to the UNFCCC			
CRED*	Paris Center for Law and Economics at Paris II University			
CSR	Corporate social responsibility			
ETL	The Energy Transition Law			
EU	European Union			
EUR	Euro			
ERAFP*	Établissement de retraite additionnelle de la fonction publique, French pension fund			
ESG	Environmental, social and governance factors used in investment processes (see section 2.4.1)			
FIR*	French Social Investment Forum			
FSB	Financial Stability Board			
FCTR	French climate-related transparency regime for institutional investors			
FRR*	Fonds de reserve pour les retraites, French pension fund			
GDP	Gross domestic product			
GHG	Greenhouse gas			
HLEG	High-level expert group; in this context, the EU High-level expert group on Sustainable Finance			
IEA	International Energy Agency			
INDC	Intended nationally determined contribution (to the Paris Agreement)			
MP, MPs	Member(s) of Parliament			
NDC	Nationally determined contribution (to the Paris Agreement)			

* Indicates that the actor is included in the empirical analysis of the thesis.

NGO	Non-governmental organisation			
OECD	Organisation for Economic Co-operation and Development			
PDC	Portfolio Decarbonization Coalition			
PRI	Principles for responsible investment			
SDGs	UN Sustainable Development Goals			
SRI	Socially responsible investments/investing			
TEEC	Energy and Ecological Transition for Climate Label; certification for 'green' funds (see section 5.2.3)			
TCFD*	Taskforce on climate-related financial disclosures, under the G20 Financial Stability Board			
ТРР	The Transparency Policy Project (see section 3.4			
UK	United Kingdom			
UN	United Nations			
UNEP	United Nations Environmental Programme			
UNEP FI	United Nations Environmental Programme Finance Initiative			
UNFCCC	United Nations Framework Convention on Climate Change			
USD	United States dollar			
WWF*	World Wide Fund for Nature			

1 Introduction

"The more we invest with foresight; the less we regret in hindsight", uttered Bank of Englandgovernor Mark Carney in his bespoken 2015 speech "The Tragedy of the Horizon". In order to achieve the energy transition we desperately need to avoid the most adverse impacts from climate changes¹, a shift in investment flows is required (OECD / the International Energy Agency & the International Renewable Energy Agency, 2017; Randers, 2016). As Carney nodded at in the quote above, investments are about making things happen. Right now, we need to make clean technology and energy solutions happen, and that at the expense of carbon-intensive projects that are profitable in the short run.

On a less idealistic note, such a shift should be in the self-interest of investors. Climate scientists warn that limiting global warming to two degrees above pre-industrial level means leaving 80 percent of known fossil fuel reserves in the ground unless we promptly improve carbon capture and storage technology, which unfortunately seems unlikely at this moment (Carbon Tracker Initiative, 2011). Regardless of their investments and related possibility of 'stranded assets' in carbon-intensive industries, investors should care about climate changes because they pose a threat to all physical assets and value chains. A study by the Cambridge Institute for Sustainability Leadership (2015) suggests a typical pension fund portfolio could see a 25 percent permanent loss due to climate change *in the near future* if no further mitigation actions are taken. On the other side, the energy transition we need will be capital-intensive and large scale, thus representing significant investment opportunities for institutional investors (Commission on the Economy and Climate, 2016; Institute for Energy Economics and Financial Analysis, 2017). In other words, directing finance flows away from hydrocarbons and into clean technologies has little to do with tree-hugging and everything to do with risk and opportunity management.

Yet, investor surveys reveal that most investors stick to their business-as-usual investment strategies. The 2016 edition of the Global Climate Index finds that half of the world's 500 largest asset owners do not consider climate risks when making financial decisions (Asset Owners Disclosure Project, 2016). Similarly, an IMF report suggests that climate-related risks such as extreme weather events, rising sea levels, carbon taxation or major demand shifts towards 'clean' solutions are still perceived to be far away, unlikely, or too long-term to cover by the traditional

¹ This paper does not dwell upon the scientific discussion on the extent of human-induced climate change, but merely rests on the findings of the Intergovernmental Panel on Climate Change's Fifth Assessment Report.

investment and risk management frameworks of institutional investors (Farid et al, 2016). This rhymes with the main point of Carney's 'tragedy of the horizon': CEOs and investors are aware of the climate problem, but they fail to take it into account due to its long-term nature because their incentive structures are focused on the short term (Carney, 2015). With the exception of coal, most conventional carbon-intensive investments are perfectly profitable in the short term. As long as company managements and asset managers have their remunerations calculated based on short-term profits, there are few reasons for either of them to depart from such investments. Fossil-based investments also steer clear of the search costs related to finding investment objects that are attractive both from an environmental and a profitability perspective, and challenges related to for instance market capitalisation thresholds and comparability with benchmark indices (University of Cambridge Institute for Sustainability Leadership, 2016). In general, 'conventional' investments remain the comfortable option that does not pose burdensome challenges to established ways of doing things.

A crucial question for lawmakers and regulators, then, is how to challenge this wicked status quo. How can public policy mend the misalignment between two major public objectives - mitigating climate change and maintaining financial stability - and the behaviour of large institutional investors such as pension funds, insurance companies, mutual funds and hedge funds? The most obvious answer would probably be to introduce a sufficiently high, global price of carbon. As this is not considered politically feasible in the short term (Bertram et al., 2015), other avenues of policy response is explored. Increasing attention is directed towards the concept of disclosures in this context. Enhancing transparency related to investors' alignment with public climate objectives and their exposure to climate risks can, in theory, release a "chain reaction of new incentives" (Fung, Graham, & Weil, 2007 p. 2) when stakeholders act upon the published information. This is indeed the rationale behind the French climate-related transparency regime for institutional investors (referred to as FCTR in this paper) that has been established through the implementation of Article 173 of the French Energy Transition Law (ETL). Adopted in the preface to the 21st Conference of the Parties (COP21) in Paris in 2015, the provision has received a lot of attention internationally. As there are discussions of adopting similar legislation going on in other jurisdictions², this thesis seeks to explore the case for mandatory climate-related disclosure for institutional investors as a policy tool to advance international climate objectives

² A High-Level Expert Group on Sustainable Finance (HLEG) has recently been set up by the European Commission to evaluate options for integration of climate-related disclosures into the EU financial policy framework. Other, less formal processes have been launched in Sweden, the Netherlands, and the UK, according to the 2 degrees investing initiative. In California, state legislators are expected to pass a similar law by in 2017.

based on insight from France and the FCTR. The underlying question is as simple as it is complicated: does transparency in this case make any change?

1.1 Institutional investors and institutional structures

While climate-related disclosures is a relevant topic for many sectors of an economy, this thesis limits its scope to disclosure for institutional investors. These investors are key players by virtue of the immense influence these investors exert in our economy. As an example, pension funds represent more than 30 trillion US dollars in assets globally. Insurance companies follow closely with 25 trillion US dollars' worth of assets (Speck and Zoboli, 2016, p. 151). Because of the size of these funds, many major companies are now owned in large by institutional investors. This dominance in ownership comes with power; over the last decades, institutional investors have developed a tradition for using their shareholder positions to intervene directly with the companies to advance their own interests (Harmes, 2011). However, as Harmes points to, these interests have so far mainly worked against and not towards a greater degree of sustainable investments. Because of the short-sightedness institutionalised in the investment industry, investors pressure companies to "boost the price of our company's stock and 'provide immediate value to shareholders", as a representative from the business community conveyed in US Senate testimony already in 1989 (Harmes, 2011 p. 104). This problem will be described in more detail in section 3.3. For now, we may simply observe that one key reason for these short time horizons is the structure of the investment industry³. A recent PwC survey finds that on average 56 percent of pension funds' assets are managed externally, that is, by third party asset management companies (PwC Market Research Centre, 2016). As these asset managers compete to manage the assets of the institutional investors, short-term performance is the most common indicator of performance (Harmes, 2011).

From an institutionalist perspective, the short-sightedness and the strictly profit-oriented rationality of the investment industry are social constructions which could under the right circumstances be changed. A change in institutional investment practices in a sustainable direction could be very good news for our planet, not to mention for us who live on it. Then the high amounts of assets and shareholder power controlled by relatively few actors could effectively contribute to "making finance flows consistent with a pathway towards low

³ Please note that in this thesis, the term 'investor' may refer to both asset owner such as a pension fund, and external asset managers to which the actual investments are often outsourced. This is because Article 173-VI applies to both, and distinguishing between the two is often not necessary in this context. When distinguishing is appropriate, the terms 'asset owner' and 'asset manager' will be used.

greenhouse gas emissions and climate resilient development", which is an explicit goal in the Paris Agreement (United Nations / Framework Convention on Climate Change, 2015 Art. 2.1c). This thesis sets out to explore whether the changes in institutional structures represented by the establishment of the French climate-related transparency regime for institutional investors (FCTR) can have any impact in this respect.

1.2 Introducing climate-related disclosure

A climate-related disclosure framework for investors is meant to reveal the climate-related risks and impacts of the companies an investor invests in and, subsequently, of the investor itself. At this point, it can be useful to draw the distinction between climate disclosures and greenhouse gas accounting. While the latter is a narrow, precise accounting of a company's emissions of greenhouse gases, climate disclosure covers a wider range of activities such as climate governance, management and mitigation of climate-related risks, organisational readiness for changes, in addition to a quantification of emissions (Kolk, Levy, & Pinkse, 2008) + check citation.

The French climate-related transparency regime for institutional investors (FCTR) represents a major innovation in this field because it is the first attempt at mandating climate-related disclosure for investors by public policy (and because of its open-ended framework design, which is presented in section 2.5). Private, climate-related disclosure schemes have existed for some years, with various scopes and degrees of success. According to the Task Force on Climate-related Disclosures (2016), there are around 400 environmental or sustainability themed disclosure regimes on different levels of governance globally. Those are in essence voluntary, industry-based reporting initiatives such as the Carbon Disclosure Project (CDP) and the forthcoming framework by the Financial Stability Board's Task Force on Climate-related Disclosure framework that delivers decision-relevant information for asset managers and asset owners (TCFD, 2016). While the TCFD and the FCTR have different points of departure – industry-based versus state-led governance – their objectives are largely overlapping, as we will return to.

Climate disclosures belong to the family transparency policies, which has been growing steadily in the last 20 years (Fung et al., 2007). Two main reasons for the increase in disclosure policies will be presented in section 3.4: the significant increase in information availability thanks

to Internet-based information channels, and the political feasibility of transparency policies compared to other types of policy instruments such as prohibitions or taxes (Fung et al., 2007).

1.3 Objective & research questions

As various forms of climate-related disclosures are brought up as possible policy tools to advance the transition to a low-carbon economy, this thesis seeks to join the debate. The overall objective of this study is to explore the concept of mandatory climate-related disclosures for institutional investors through investigating the case of the French climate-related transparency regime for institutional investors (FCTR). Based on insights into the strengths and limitations of this policy construction, the thesis aims to propose a set of recommendations for the future development of climate-related disclosures for institutional investors.

In order to operationalise this objective, the following research questions have been developed, each building on the previous:

RQ1. What is the French climate-related transparency regime for institutional investors, and how can it be understood as a political phenomenon?

This question seeks to establish and understanding of what the components of the FCTR are, and how it has emerged in this shape in the French political context.

RQ2. What kind of institutional structures does the FCTR represent, and how do these impact investors?

Relating the case of FCTR to institutional theory, this question dives into the institutional structures that can be identified in relation to the FCTR. Drawing on the insight from research questions 1 and 2, the third question seeks to understand what the impact of such an institution might be:

RQ3. What kind of positive impacts can we anticipate from the current configuration of the FCTR, and what are the shortcomings of the regime that may be identified at this stage?

A transparency instrument may – intentionally and unintentionally – foster many types of impact in the disclosing organisations as well as in information users. This question explores which positive impacts as well as shortcomings that may be identified in the FCTR.

RQ4. What kind of recommendations for climate-related transparency instruments may be drawn from exploring the case of the FCTR?

In response to the final research question, the strengths and limitations identified in the current FCTR will be combined with relevant literature and theory with the aim to develop a set of recommendations for future updates of the components of the FCTR, as well as the formation of new climate-related transparency instruments elsewhere. This research question will be addressed in the discussion chapter.

1.X Structure of the paper

TBC

2 Background

The French climate-related transparency regime for institutional investors (FCTR) stands on the shoulders of several strands of institutional development. This chapter seeks to establish a backdrop for the emergence of this specific policy regime.

2.1 Tracking the concept of corporate sustainability

The idea that business⁴ can or should be environmentally sustainable rests on at least two premises: First, that economic activity contributes to the degradation of a physical environment that consists of limited resources , and second, that businesses have some kind of moral obligation to reduce or avoid such impact. Neither of them are new; both premises have been debated quite some time.

Prior to the 1960s, there was not much attention towards humans' degradation of the physical environment for other reasons than the risk of hollowing out our own resource base. Nature and its resources were mainly regarded factors of economic input⁵ (Winn & Kirchgeorg, 2005). In the 1960s and 70s, this view was challenged by a movement of thinkers, scholars, and citizens who saw the natural environment as valuable in its own right. The concept of environmentalism was sparked by works such as Carson's Silent Spring (1962) that illuminated environmental problems related to food production, Club of Rome's report Limits to Growth (Meadows, Meadows, Randers, & Behrens, 1972), and the deep ecology philosophy fronted by Næss (1973). In the environmentalist discourse, environmental degradation is a problem not by virtue of threatening the resource base of the human enterprise, but in itself. This discourse materialised in the founding of civil society organisations such as Greenpeace and Friends of the Earth, both formed in 1971 (Horrell, 2015), but it also reached the highest levels of international conference diplomacy. In 1972, the United Nations Conference on the Human Environment (although with an anthropocentric title) placed environmental issues on the intergovernmental agenda, resulting amongst other things in the founding of the United Nations Environmental Program (UNEP). The academic community contributed to the movement by providing an ever more conclusive scientific foundation, a work that was systemised trough the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988. Throughout the 1970s and 80s,

⁴ The term 'business' in this context also covers finance, as finance can hardly be (environmentally) sustainable in its own right if not the activities it ultimately funds are sustainable.

⁵ As Linnenluecke, Smith, and McKnight (2016) importantly point out, indigenous knowledge and practice has considered the limitations to the natural resource base, and the intrinsic value of nature, long before it became a topic in Western academia and public debate.

national environmental regulations and international treaties (such as the Vienna Convention for the Protection of the Ozone Layer in 1985) were adopted to limit human degradation of the natural environment. In 1992, at the Earth Conference in Rio, the United Nations Framework Convention on Climate Change (UNFCCC) was agreed upon as a structure for future climaterelated negotiations at the intergovernmental level.

The dawning determination to constrain human activities in order to protect the environment naturally also touched upon various business activities. As noted by Winn and Kirchgeorg (2005 p. 234), the prevalence of high-profile disasters such as the Santa Barbara oil spill in 1969 and chemical explosions in Italy in 1976 highlighted the role of the industry in the observed environmental problems. Starting in the 1970s, businesses experienced a growing call for 'corporate social responsibility', paralleled by appeals to report on their 'responsibility' performance (Williams, 2015). This call was reinforced by the 1980s' discourse of sustainable development, a concept coined by the Our Common Future report by the World Commission on Environment and Development (World Commission on Environment and Development, 1987). The emphasis on environmental issues and their links to business has lead to certain changes in the way corporations were run. "Studies of the relationship between the natural environment and business organizations now assert an increasingly legitimate place in mainstream management literature", Winn and Kirchgeorg (2005 p. 233) observe. Perhaps, though, the pressure from environmentalist movements has lead to an even greater change in the way corporations communicate. By 2016, around 400 environmental or sustainability themed disclosure regimes exists, according to the Task Force on Climate-related Financial Disclosures (2016).

Despite the growing pervasiveness of concepts such as corporate sustainability and general responsibility over the past 40 years, Williams (2015) notes that the state of environmental problems has changed primarily for the worse in this period of time (although with some honourable exemptions, such as the efforts to mend the ozone layer). Does this mean that the development of the human enterprise is not compatible with ecological sustainability? Or have the 'responsible' corporate initiatives over the past decades been, as liberal economist Friedman (1970) put it, "hypocritical window-dressing"? Williams (2015) dubs the idea of sustainable development a "popular oxymoron" invented to provide assurance for the optimism institutionalised by modern capitalism. "That we might not be able to have our cake and it too", he argues, "is a prospect that our deeply embedded economic and political values prevent us from giving any serious consideration".

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2.2 An international momentum

As the sections above explained, environmental issues have been on the global political agenda for a few decades now. It can be argued, however, that efforts to constrain human impact on the natural environment have been stepped up significantly in the last years both by the intergovernmental structures and in the international community of businesses and investors. This section presents some of the features of what I choose to (somewhat optimistically) label an international momentum for climate change mitigation.

2.2.1 The science base and observed climate changes

As mentioned in the previous section, the UN IPCC was established in 1988 to strengthen the knowledge base of climate-related discussions (Linnenluecke et al., 2016). The Panel published its first assessment report in 1990; since then, it has assembled five such reports with increasingly vocal warnings about human impact on the climate and the impacts we may expect in return. The fifth and, for the time being, last assessment report leaves little room for interpretation: "Anthropogenic greenhouse gas emissions [...] are extremely likely to have been the dominant cause of the observed warming since the mid-20th century" (IPCC, 2013 p. 4). The report warns that a business-as-usual scenario leads us toward a global mean temperature rise of 2.6 to 4.8°C by the end of the century, compared to the 1986 to 2005 average⁶. The conclusions of the Fifth Assessment Report reinforces key points from previous assessments by the Panel; however, this time the information seems to have resonated more. Extreme weather events such as the Hurricane Sandy that hit coastal regions of the Atlantic in 2012, or the heat waves striking both hemispheres in 2012 and 2013, may have contributed to underline the importance and the urgency of the matters. World leaders were increasingly pressured to deal with climate-related challenges; Barrack Obama for instance promised to "respond to the threat of climate change" in his inaugural address after his re-election in 2013 (Obama, 2013). One year later, Obama and Chinese President Xi Jinping made the unlikely announcement that the the world's two major emitters of greenhouse gases commit to bilateral emission targets (Climate Institute, 2015).

⁶ The RCP8.5 scenario, which is referred to as the 'business as usual' scenario of the IPCC's Fifth Assessment Report, has received some criticism for the assumptions it makes, such as simply projecting the last decades' emission trajectory and population growth into the feature without compensating for technological development and prosperity growth. For an overview of the assumptions of the RCP8.5 scenario, see Riahi et al. (2011)

2.2.2 The SDGs and COP21

Finally, in 2015, international environmental diplomacy saw two milestones. The Sustainable Development Goals (SDGs) were adopted by the UN General Assembly in September as a successor to the Millennium Development Goals, and the Paris Agreement was signed by the 195 UN member states at the 21st Conference of the Parties (COP) to the UNFCCC in December⁷. Besides representing major progress in committing states to act on the increasing threat of climate change, these two events also mark greater acknowledgement on the role of non-state actors in general and business and finance in particular. Both the SDGs and the COP21 setup recognised that the private sector is equipped to provide capital, knowledge and technological solutions beyond what most states can do (Mathres, 2015; Sachs, 2012). At the same time, private sector actors are behind a large part of global greenhouse gas emissions and use of natural resources, which means their efforts to reduce their impact is crucial to the fulfilment of climate goals.

2.2.3 Initiatives for corporate environmentalism

A range of industry, civil society and intergovernmental initiatives have derived from the recognition of private sector's key role in mitigating climate changes. Key initiatives targeting the financial sector will be presented in section 2.4. For the non-finance sectors, four important initiatives will be presented briefly with the purpose of drawing a background for the finance-related initiatives: The UN Global Compact; ISO standards on environmental management; the Science Based Targets Initiative, and the Carbon Disclosure Project (CDP). This is not an exhaustive list; the initiatives are selected because they are available for most sectors and regions. Other initiatives may be important for certain sectors and/or regions, such as the LEED/BREEAM labels for the construction industry, the Forest Stewardship Council for forestry, and different eco-labels for manufacturing and agricultural industries.

The **UN Global Compact** is a petition through which CEOs can pledge to implement the United Nations' sustainability objectives (notably the SDGs) in the management of their companies (UN Global Compact, n.d.). The 21 different **ISO standards** for environmental management are classifications for products, services and systems developed by the International Organization for Standardization, allowing businesses to commit to certain norms and

⁷ During the final stage of this research project, US President Trump announced that he will work towards a withdrawal from the Paris Agreement. At the time of writing, it is still too early to judge if the decision will eventually be effectuated and if so, which consequences a US withdrawal might have.

procedures for sustainable business management (International Organization for Standardization, 2009). **The Science Based Targets Initiative**, a joint initiative by the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature (WWF), encourages businesses to develop GHG emission reduction targets and strategies that are in line with the level and speed of decarbonisation that is required for the world to stay within the 2degree target. Finally, the **Carbon Disclosure Project** (CDP) is currently the most comprehensive structure for corporate carbon- and other environment-related reporting in the world, with more than 5600 companies in 90 countries submitting information about their carbon footprint, according to CDP's own web pages. The CDP will be discussed further in chapter 4.X, as a key objective of their work is to provide decision-relevant information for investors to "make better decisions, manage risk and capitalize on opportunities" (Carbon Disclosure Project, n.d.)

2.3 The climate – finance nexus

Regardless of what one may think about 'ethical' capital, the climate and the financial universe are closely intertwined. Climate changes and the finance universe have several connections, which are being increasingly recognised both by the industry itself and other segments of society. Climate changes themselves, and political and technological responses to them, may pose a risk to financial assets. But the challenge of climate changes may also be seen as an opportunity: substantial investments in clean energy solutions and other types of infrastructure are for instance needed in order to reach public climate targets (Commission on the Economy and Climate, 2014). This section expands on the risk and the opportunity perspectives of the relationship between climate and finance.

2.3.1 The climate risk perspective

The private sector's impact on the environment and the climate has been on the agenda of NGOs and, to a certain degree, policy makers, for a while. It has inspired countless corporate sustainability strategies aimed at becoming 'a part of the solution rather than the problem', with various scope and motivation. What is relatively new, however, is the realisation that climate changes and environmental problems are also very likely to impact private sector activities, directly or indirectly. Extreme weather events and rising sea levels are examples of threats to

physical assets that may reduce profits and/or increase insurance costs to certain businesses (S. Dietz, Bowen, Dixon, & Gradwell, 2016; Task Force on Climate-related Financial Disclosures, 2016). Data collected by the Intergovernmental Panel on Climate Change (IPCC) suggest that financial losses from extreme weather events have been multiplied by 10 since the middle of the 1900s (IPCC, 2014). According to an assessment by Trucost for UNEP, environmental externalities such as greenhouse gas emissions, particle pollution, and water abstraction had a value of minimum 10.97% of the global GDP in 2008. In 2050, this share may have increased to 17.78% or more, as the applied model is on the conservative side (Mattison et al, 2011 p. 18). From a financial perspective, the picture drawn above involves several, multi-faceted risks that can broadly be categorised as physical risks and transition risks (Carney, 2015; Task Force on Climate-related Financial Disclosures, 2016).

Physical risks

The first figure referred to above, on losses related to weather events, reflects a physical risk to assets such as real estate, factories, energy plants, and so on. In addition to posing a direct threat to physical assets, climate changes may also affect prices or availability of water or commodities necessary for production, complicate transportation, or jeopardize employees' safety. The Task Force on Climate-related Disclosures (TCFD) further distinguishes between acute, physical risk related to events such as floods or cyclones, and chronical risks such as rising sea levels or even unliveable regions (Task Force on Climate-related Financial Disclosures, 2016). "There are no jobs on a dead planet" stated General Secretary of the International Trade Union Confederation, Sharan Burrow, in 2015, emphasizing the economy's ultimate dependency on our physical environment (Romano, 2015).

Researchers have tried to estimate the magnitude of potential economic losses due to physical climate risks. The Cambridge Institute for Sustainability Leadership (2015) employs a model with three different development scenarios: 1) a No Mitigation scenario in which the states are pursuing their own self-interests and emission trajectories and temperatures continue upward; 2) a 2-degrees scenario in which a substantial carbon tax is used to maintain a strict carbon budget and investments in renewable energy increases by 80 percent; compared to 3) a Baseline scenario where most of today's policies are continued with no major step-ups, but temperature rises turn out to be moderate;. They find 2.2 percent of global GDP to be at risk in the short term (2015-2020) in the 2-degrees scenario, compared to 4.7 percent in the No Mitigation-scenario. Translated into impact on investment portfolios, the report estimates that

the performance of a conservative portfolio⁸ will have had a 9 percent increase after five years in the 2-degrees scenario, whereas the No Mitigation scenario shows a fall of 26 percent in performance (Cambridge Institute for Sustainability Leadership, 2015 p. 31).

Transition risks

In addition to the mere physical threats, policy responses and societal and technological transformations driven by climate change my pose a threat to many segments of the economy. For instance, an internalisation of the vast climate-related externalities calculated by Mattison et al (2011) through carbon pricing or other forms of market-based instruments will necessarily affect profitability of a range of investments. Rapid transitions to low-carbon technologies can also have a destabilising effect on markets. As a third risk factor, corporations operating under certain jurisdictions such as the US may face litigation for failing to address climate changes (Task Force on Climate-related Financial Disclosures, 2016).

The 'carbon bubble' debate relates to transition risks. A 2011 watershed report by the NGO Carbon Tracker Initiative warned that only 20 percent of proven fossil fuel reserves globally could be burnt if we are to stay within the two degree target. In other words, the majority of the world's oil and gas reserves are valueless if the two degree target is applied (and absent any rapid development in carbon capture and storage technology). Considering the fact that 20 to 30 percent of the market capitalisation of major stock exchanges such as London, Moscow and Australia are connected to fossil fuels, the term 'carbon bubble' may not be so far-fetched after all (Carbon Tracker Initiative, 2011). "Financial crises occur when markets realize that what was previously regarded as a solid asset has dissolved", states Robins (2012 p. 262), and draws a parallel to the dotcom crash in the late 1990s and the more recent financial "credit crunch" of the 2000s: they were caused by the sudden correction of overvalued technology shares and subprime mortgages.

2.3.2 The opportunity perspective

We have now established that there are considerable financial risks related to climate changes and the shift to a low-emission society. Nevertheless, from a financial perspective, this period of transition also offers plentiful opportunities. Many of the low-emission solutions such as wind farms, solar plants and electric transportation systems, require higher upfront investments per

⁸ Modelled at 59 percent fixed-income instruments, 40 percent equity and 1 percent commodity investment; a composition typically found in the management of pension funds (Cambridge Institute for Sustainability Leadership, 2015 p. 20)

project than their conventional, fossil-driven equivalents (Commission on the Economy and Climate, 2016). But not only is the capital expenditure for each low-emission project high; we also need a lot of them in order to reach international climate targets. The 2016 New Climate Economy report finds that around 90 trillion US dollars in infrastructure investments is needed before 2030 to align global development with climate objectives. That is, in comparison, more than the current stock of infrastructure investments (Commission on the Economy and Climate, 2016).

Besides the moral and/or reputational upsides of contributing to finance these projects, there is increasingly strong evidence for their attractiveness in terms of revenue. A recent report by the Institute for Energy Economics and Financial Analysis claims that investments in renewable energy infrastructure are capable of generating returns of 12 to 15 percent today⁹ (2017, p. 32). Relative to conventional energy investments, the competitiveness of renewable energy projects is strengthened year by year, and new examples of break-even cases are reported on a regular basis. Many Indian onshore wind and solar PV projects have for instance lower tariffs than new coal plants, but also, more surprisingly than the cash costs (fuel plus operating costs) of existing coal capacity, according to 2017 data (Gray, 2017).

2.4 Climate-related initiatives targeting investors

Recognising the important two-way connection between investments and the climate, several actors have directed their attention towards the issue of sustainable or climate-conscious investments in recent years. This includes researchers, NGOs, industry organisations, vocal individuals and, finally, public policymakers. Table X summarises major climate-related initiatives that calls for some kind of response or action (such as network participation/membership, pledges, or disclosure) from investors¹⁰. It is worth noting that the majority of these initiatives take the shape of disclosure regimes. However, as the initiatives listed are based on voluntary contribution with low or no entry costs, and low or no costs related to non-compliance apart from possible reputational cost, they are *per se* different from mandatory regimes. The rationale

⁹ The report was prepared prior to the Norwegian Ministry of Finance's March 2017 decision about whether to allow the Government Pension Fund Global to invest in unlisted infrastructure projects. The Ministry ended up rejecting such investments, contrary to the recommendation from the Fund's managers, citing that the Fund is "not well suited to carry the particular risks posed by such investments" (Fixsen, 2017).

¹⁰ Information is collected from the official web pages of the initiatives, unless otherwise is stated. The list does not include informational measures such as CICERO's Shades of Risk approach, or commercial approaches by credit rating firms (such as Moody's and S&Ps climate risk assessment), assurance or audit providers (e.g. EY Climate Change and Sustainability Services), or climate performance assessment providers (such as Trucost). Neither does it include initiatives targeting exchanges or indices.

behind private disclosure initiatives, Gupta points out, could range from "improving state-led mandatory regulation to avoiding state-led mandatory regulation" (2008 p. 2).

Initiative	Format	Description/objective
Asset Owners Disclosure Project (AODP)	Review	Produces the annual Global Climate 500 Index.
Carbon Disclosure Project (CDP)	Disclosure framework (for companies)	Organised as a joint call from investors for companies to publish carbon disclosures. 800 investors managing a total of USD 100 trillion have signed; 5,800 companies representing around 60% of global market capitalisation disclosed data in 2016.
Climate Disclosure Standards Board (CDSB)	Standards board	Informed investments
Equator Principles	Protocol to be signed	Integration of ESG/ climate risks
Global Impact Investing Network (GIIN)	Forum	International forum
Global Sustainable Investment Alliance (GSIA)	Umbrella of national/regional networks	International network of national/regional organsations
Institutional Investors Group on Climate Change (IIGCC)	Forum	Forum for 137 institutional investors in 9 European countries, with a total AuM of €18 trillion. Facilitates collaborative investor engagement with companies.
Investor Network on Climate Risk (INCR)	Network	Investors considering climate-related risks
Portfolio Decarbonisation Coalition	Pledge	Co-funded by CDP,. UNEP FI, Amundi Asset Management, and Swedish pension fund AP4.
Principles for Responsible Investment (PRI)	Investment principles	Integration of socially and environmentally responsible factors in investments
Task Force on Climate-related Financial Disclosures (TCFD)	Disclosure framework (for companies)	Established by the Financial Stability Board (G20) to develop a framework for "voluntary, consistent climate-related financial risk disclosures" for companies that investors and other stakeholders may take into consideration
The Montréal Pledge	Disclosure framework	Pledge to measure and publish carbon footprint of investment portfolio on an annual basis. The initiative is overseen by PRI.
UNEP Finance Initiative	Umbrella initiative	Different approaches

Table 1: Global voluntary sustainability initiatives for investors

2.4.1 SRI and ESG: General principles of 'ethical' investing

The initiatives listed above typically ask investors to implement a specific procedure such as publishing a disclosure, and have some kind of organisation or a secretariat to follow up. There are also, however, some more general principles or concepts that influence investors' behaviour. Socially responsible investments (SRI) (and RI, a less used abbreviation for responsible investments) and factoring in environmental, social and governance (ESG) issues are the most common concepts. In the vocabulary of the Global Sustainable Investment Alliance, ESG refers to factors or criteria that can be considered in an investment process. The integration of ESG criteria is one of several investment approaches that legitimise the use of an SRI label.

A popular ESG approach in Europe is the 'best in class' strategy, through which asset managers select the 'best' (or, as is often the case in practice, exclude the 'worst') companies in the universe of eligible investments based on their score on ESG criteria (Global Sustainable Investment Alliance, 2014). Note that this universe is in the first place decided by factors such as risk (a factor that more often than not ignores climate-related issues, see section 2.3.1), and expected return. In other words, the ESG criteria usually work as a filter to single out the least desirable investments in this approach (RAFP, n.d.) Other approaches include exclusion of entire sectors or industries such as coal companies from the universe of eligible investments, or a 'thematic approach' favouring certain sectors such as renewable energy. Some also include shareholder engagement (explained in section 2.3.1) in their definition of ESG/SRI approaches. In practice, the terms SRI and ESG are often used interchangeably as labels of 'ethical' investments, portfolios, or funds. The use of the labels is self-proclaimed with no regulatory framework or standard defining them (RAFP, n.d.). Hence, there is a low degree of comparability between funds that apply them. Nonetheless, or perhaps just because of that, the ESG/SRI labels have become increasingly popular amongst mainstream investors in recent years. The Global Sustainable Investment Alliance claims 30 percent of assets under management globally are now SRI labelled (Global Sustainable Investment Alliance, 2014 p. 7). In this thesis, the term ESG is used to describe an investment approach where environmental, social and governance issues to some degree are taken into consideration.

2.4.2 Acting upon risks: stay or go?

Many of the initiatives listed in table X are structured around the 'what gets measured gets managed' rationale: if investors are only made aware of climate-related risks, they will react to

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them. There are two main approaches that investor response to climate risks (or other risks) may take on: to sell out of the risky business, or to try to push it in a less risky direction. The *Divestment* movement advocates for institutional investors to divest (sell out) from the most carbon-intensive industries such as coal and tar-sand. One of the vocal supporters of divestment, UN special adviser Jeffrey Sachs, argues that reducing exposure to fossil fuel investments is the fiduciary responsibility of institutional investors because of the substantial risk of losses such investments entail (Pearce, 2015). The NGO *350.org* keeps a list of institutional investors that have pledged to sell all or parts of their shares in the most carbon-intensive sectors. The other broad type of investor response to risks is 'shareholder engagement', which means using the shareholder power to lobby, vote, or post proposals for more risk resilient strategies, rather than to leave the company behind¹¹ (Strott et al 2017, Harmes, 2011).

2.3.2 Existing legislation relevant to climate-related disclosure

Table X lists a range of voluntary climate-related disclosure schemes with which investors may choose to comply. However, some investors are also required by existing legislation to disclose on their exposure to climate risks. Two main groups of legislation should be mentioned in this context:

- National financial codes. Most financial codes include provisions on risk disclosure, and defines thresholds of risk materiality above which any risks should be publicly disclosed (TCFD, 2016). In other words, companies including financial institutions have to outline and publicly disclose which risks are substantial and relevant to their value chains, and how they seek to mitigate them. It is the interpretation of the Financial Stability Board's Task Force on Climate-related Disclosures (TCFD) that climate-related risks to many companies are reaching the materiality thresholds of most jurisdictions, thus these risks should be approached within the ordinary legal framework for risk management.
- The EU Non-Financial Reporting Directive. The *Directive 2014/95/EU on the disclosure of non-financial and diversity information* that was adopted in 2014 and should be implemented within 2017. It requires certain large companies (defined somewhat woolly as large corporations of 'public interest' and with at least 500 employees) to report on issues related to the environment, social matters, human rights, anti-corruption, and employee

¹¹ One recent example of successful shareholder engagement is the shareholder proposal filed by institutional investors at the 2017 annual meeting of ExxonMobil, the world's largest oil company. With a 62 percent majority, the investors succeeded in requiring the company to assess and disclose how it is preparing for the transition to a low-carbon economy (Ceres, 2017).

diversity (CDP, 2015).

2.5 The case of France

Returning to the specific case of the FCTR, this section gives an overview of features of the French society and economy that has contributed to setting the stage for this policy regime.

2.5.1 Distribution of political power

While the other two major EU states, Germany and (for now, at least) the UK, distribute political power onto the countries and federal states of which they are composed, France is a thoroughly centralised state. The importance of the local government level is marginal, according to Szarka (2002). Moreover, the executive branch of the governance system holds a large proportion of the power, relative to the situation in Germany and the UK. The term 'volontarisme' is used to describe the autonomous political capacity of the French state, exemplified for instance by the rather impromptu and little debated decision to build up a nuclear-based energy system as a response to the 70's energy crisis (Szarka, 2002). While the state level has a high formal capacity of political power, Szarka (2002) points out that the influence of private interest groups is institutionalised in French policy-making.

2.5.2 Environmental philosophy

More than half of France's 551,500 square kilometres (in Europe) is agricultural land, and almost 30 percent is covered by forests (OECD, 2015; CIA n.d.). Even if the share of the population employed in the primary sector has decreased since the Second World War, agriculture is still high up on the political agenda and the farmer lobby is powerful (Szarka, 2002). The high position of agriculture is naturally associated with the profitable outputs (France is the major agricultural producer in the EU), but also with notions of traditional French values and the romantic French country life. Hunting, for instance, remains a dear hobby as well as a perceived constitutional right to many. According to Szarka, the historical French view of nature is anthropocentric; taking care of the physical environment is primarily considered maintenance of the resource base needed to sustain human prosperity. This contradicts, amongst others, the traditional North American outlook in which nature is seen as valuable in its own right and should be protected from human exploitation (Szarka, 2002). That being said, France has had a strong, visible, and politically influential environmental movement since the 1970s, and this has

challenged anthropocentric traditions. It can still be traced, though, as in former President Hollande's speech to the World Economic Forum in Davos in 2015: "The time is past when humankind thought it could selfishly draw on exhaustible resources. We know now the world is not a commodity, is not a source of revenue; it's a common good, it's our heritage (...). We have a single mission: to protect and hand on the planet to the next generation" (Hollande, 2015).

2.5.3 A brief history of environmental policy

Even though France as an EU member is committed to comply with union-wide regulations on climate and environmental issues, the republic has a substantial body of national environmental legislation. France has had national climate action plans since year 2000 and got its first Energy Policy Framework law in 2005. The bill laid out the primary targets of the republic's efforts against climate change, including pledges to reduce energy intensity and greenhouse gas emissions, and to reduce dependency of nuclear power (Grantham Institute, 2015). In 2007, the French government launched an initiative that was dubbed Grenelle (which simply means summit). In this process, six working groups consisting of representatives from the State, environmental NGOs, the educational system, employers and employees were assembled to propose a set of recommendations for France's environmental policy. After a round of public consultation, the principles of the Grenelle were adopted in the 'Grenelle I' law, effective from 2009. The principles were further elaborated by Grenelle II in 2010, a more detailed framework for the implementation of the recommendations in Grenelle I (Grantham Research Institute, 2015). The Grenelle laws have been criticised for being so extensive that the term "legal monster" even have been used (OECD, 2016). The output that the Grenelle initiative produced was essentially in line with, or slightly ahead of, France's EU commitments and policies adopted by comparable states. For instance, the renewable energy target that was set to 23%, three points beyond the EU target of 20% (Grantham Research Institute, 2015). Despite legal complexity and a moderate level of ambition, the Grenelle initiative is noteworthy because of the multistakeholder, participatory governance system it institutionalised.

2.5.4 The Energy Transition Law (ETL)

A similar roundtable model was employed during the eight-month National Environment Conference in 2012-2013, which was the first step of the process leading to the adoption of the Act of 17 August 2015 on energy transition for green growth, commonly referred to as the Energy Transition Law (ETL). Like its predecessors, this is a comprehensive law; there are in total 215 articles targeting activities across the French society and economy. Following the French Government's web pages, the overall objective of the law is to reduce the emission of greenhouse gases and the dependency on nuclear power by decreasing the consumption of fossil fuels; increase the production of renewables; improve energy efficiency, and cut the amount of waste sent to landfills. To support this development, the Government has set binding targets for carbon taxation applying to energy production. They have also committed to scale up state-controlled financing of low-emission initiatives (French Government, 2016). The adoption of the ETL was clearly a component in France's preparations to host the 21st Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC) in December 2015. The Law was intended to provide "a leadership by example in Europe and beyond, through the definition of an ambitious climate and energy transition roadmap" (Rüdinger, 2015). The Law also serves as a framework for the fulfilment of France's nationally determined contributions (NDCs) under the Paris Agreement.

2.5.5 Current concerns of environmental policy

In recent years, the issue of environmental sustainability has become increasingly intertwined with the issue of social justice and inclusive growth. As an example, the 2016 legislation banning food waste is considered a two-sided sword battling both poverty and resource over-exploitation (Mourad 2015). Likewise the full French name of the ETL, 'Loi relative à la transition énergétique pour la croissance verte', translates to 'the energy transition for green growth act'. This philosophy is expressed even more clearly in the new formal name of the Ministry of the Environment: the Ministry for the Ecological and Inclusive Transition (French Government, 2017). Furthermore, the 'transition écologique' (*the ecological transition*) is often mentioned in the same breath as 'la transition énergétique' (*the energy transition*). Replacing some of the 75 percent of the electricity in the French grid that is produced by nuclear energy is an (although contested) objective of French energy policy (Grantham Institute, 2015).

2.5.6 The financial landscape

As France is a major economy in the European context, the French landscape of institutional investors is large and important. French institutional investors represent assets at a value of around two trillion Euros (Reibaud, 2015;). Although the market consists of around 840 asset owners and a great number of asset managers (the French asset management industry is the

second largest of its kind in Europe), a dozen large, mostly state-linked actors dominate the picture. Many of them are administered by the *Caisse des Dépôts et Consignations*, described as the 'investment arm' of the French Government; a construction unique to France. The Caisse des Dépôts manages, amongst other things, the main pesion schemes (Dalmaz, 2016). With a basic pay-as-you-go pension system, the number of major actors in the pension market is limited. The basic pension system is then supplemented by various compulsory and voluntary pension schemes for the different occupations (Reibaud, 2015). Insurance companies, including life and health insurance, is the other main group of institutional investors. Paris is one of the main financial centres of Europe alongside cities like Frankfurt, Zurich and London. After the British EU referendum in 2016 concluded with Great Britain pulling out from the European Union, Paris' position as a major financial centre may be strengthened further. In connection to the COP21 in Paris, finance market actors in Paris launched the "The Paris Green and Sustainable Finance Initiative", a call for making Paris an international capital of 'green' finance (Paris Europeace, 2016).

2.6 Introducing the French climate-related transparency regime for institutional investors (FCTR)

The French climate-related transparency regime for institutional investors (FCTR) is a definition drawn by the author with the aim to package the different investor climate disclosure-related policy tools launched by the French Government since 2015. This includes Article 173-VI of the French Energy Transition Law, the Energy and Ecological Transition for Climate Label (TEEC), and the International Award on Investor Climate-related Disclosures. The content of Article 173 and the implications of the two other components will be presented in the analysis and the discussion of this thesis. The following sections outline the legal contexts and some basic details about these policy instruments.

2.6.1 Economy-wide disclosures

The extensive scope of the legislation ETL provides is meant to prepare a wide range of actors and sectors for an energy transition. This also includes enhanced transparency regarding climaterelated risks and performance. Article 173 includes climate-related disclosure requirements for listed companies (paragraph III and IV), banks and credit institutions (paragraph V), and finally, institutional investors (paragraph VI)¹². The provision for listed companies is a reinforcement of Article 225 of Grenelle II, which requires companies with more than 500 employees to report on "how they take into account the social and environmental consequences of [their] activity and [their] social commitments in favour of sustainable development" (France Diplomatie, 2013). This provision in fact dates back to the New Economic Regulations Act from 2001, although it has been expanded along the way (ibid.). The Grenelle II also includes a reporting requirement for asset managers: Article 224 obliges fund managers to describe how they consider ESG criteria in their investment policies (Giamporcaro, 2016). Article 173-VI expands this provision by requiring more information components, but more importantly, by also subjecting asset *owners* to the provision (2 Degrees Investing Initiative, 2015).

2.6.2 Coverage of Article 173-VI

The full provisions of Article 173-VI apply to institutional investors such as insurance companies, pension and social security funds and mutual funds with a balance sheet exceeding €500 million. Around 60 institutional investors fall within this category in France (Husson-Traore, 2016). In addition, a simplified disclosure requirement applies to investors with a balance sheet below this threshold (Principles for Responsible Investment, 2016). Because many institutional investors assign external asset managers to conduct the placement of their funds, the Article also applies to asset managers with French asset owners on within the client base. These asset managers may be located anywhere in the world (2 Degrees Investing Initiative, 2015). The provisions entered into force on January 1, 2016, and the first cycle of disclosures should be published no later than 30 June 2017 (Principles for Responsible Investment, 2016).

2.6.3 Supplementary instruments: fund label and disclosure award

In addition to the disclosure requirements laid out in Article 173-VI of the Energy Transition Law, the FCTR as defined by this thesis includes the Energy and Ecological Transition for Climate Label (TEEC) and the International Award on Investor Climate-related Disclosures. The award "guarantees that the 'labelled' funds meet certain criteria, particularly in relation to their direct or indirect contribution to the financing of the energy and ecological transition and the quality and transparency of their environmental characteristics", according to section I of the

 $^{^{12}}$ A more detailed list of provisions applying to listed companies and banks and credit institutions, in English language, may be found in Principles for Responsible Investment's Global Investor Briefing (2016), page 7.

decree that implements the label into the French Environmental Code¹³. The decree defines the governance of the label, while the certification scheme is set out by criteria guidelines external to the decree. These criteria include a list of sector which funds may be invested into, included waste management and energy efficiency. Activities related to fossil fuels or nuclear energy is required to be excluded (Husson-Traore, 2016).

The International Award on Investor Climate-related Disclosures is an award organised in 2016 by the French Ministry of Environment and the 2 degrees investing initiative (2dii), a French interest organisation promoting climate-related disclosures. The competition was open to investors worldwide, but sought to "highlight best practices in investor climate change reporting, in line with article 173-VI" (2dii, n.d.).

¹³ The full translated text of the decree, as provided in the Official Journal of the French Republic, can be found in Appendix E

3 Theoretical context

This chapter introduces the theoretical tool box that is utilised in this thesis. It presents the classical common pool resource problem 'the tragedy of the commons' as a point of departure to identify different views on institutions, after which an individualist and an institutionalist perspective are outlined. The third section presents an overview of structural obstacles against a sustainable investment practice. Section four reviews theory on transparency as a policy tool, including the principles for effective transparency policies proposed by the Transparency Policy Project (TPP). The final section of the chapter indicates the academic contribution of this work.

3.1 Climate change as a tragedy of the commons

The 'tragedy of the commons' problem predicting overexploitation of common-pool resources was introduced by Hardin in his seminal 1968 article in *Science*. In the reasoning of Hardin, the ''inherent logic of the commons remorselessly generates tragedy'' when all herdsmen in a common as ''rational beings'' seek to maximise their individual gain by adding another animal to their herd, ignoring the signs of overgrazing (Hardin, 1968 p. 1244). In more general terms, Hardin describes the problem in the following way:

"Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons." (Hardin, 1968 p. 1244)

From a rational choice perspective, the logic of a commons tragedy can be applied to just about any situation with a common-pool resource which many actors seek to exploit. Transnational air pollution, deforestation, and overfishing are all examples of possible 'tragedies' within the field of environmental governance (T. Dietz, Ostrom, & Stern, 2003). After all, the planet we all share is the ultimate common good (Vatn, 2005). In the context of this thesis, the tragedy of the commons problem can be used to describe investor action (or, more precisely, inaction) to mitigate climate changes. Finding alternatives to the institutionalised, largely carbon-intensive investment strategies may be costly to the individual investor in the short term. However, in the long term, the collective failure to do so is very likely to produce climate changes that threatens the individual assets of investors and even financial stability as a whole (Carney, 2015; Task Force on Climate-related Financial Disclosures, 2016).

3.2 Perceptions of institutions

3.2.1 Institutions as constraints

The tragedy of the commons is a typical social dilemma. Such dilemmas "occur whenever individuals in interdependent situations face choices in which the maximization of short-term self-interest yields outcomes leaving all participants worse off than feasible alternatives", as defined by Ostrom (1998 p. 1). Predicting a 'tragedy' to be the outcome of such a dilemma, though, entails certain assumptions. First, it assumes that actors are "rational beings", or, more precisely, "individuals with given preferences, whose choices are driven only by the concern for maximising individual utility" (Vatn, 2005 p. 2). This may be considered the corner piece assumption of neoclassical economic theory¹⁴, alongside stable preferences and the absence of information costs and transaction costs (Vatn, 2005 p. 40-43). Second, the 'tragedy' outcome assumes that actors' preferences are not influenced by institutional structures. In the commons, institutions could be norms of responsible grazing, or even formal rules such as a periodical grazing ban that could be enforced through fines. In the narrative of Hardin's tragedy, no such institutions are in place, or their impact is not strong enough to influence the actors' choices. This perspective may be described as *individualist* (Vatn, 2005 p. 25).

From an individualist perspective, institutions are constraints to the individual's free choice. As Vatn notes, "the self-contained individual [...] does not need any institutional support to understand or to act" (2005, p. 44). This also applies to disclosure policies. Indeed, transparency policies are redundant in a world of unbounded rationality and perfect information. Firms that benefit from disclosing information will do it voluntarily, while firms that will lose from disclosing details about their behaviour will either refrain from disclosing (which the market may then respond negatively to) or adjust their behaviour and then disclose (Fung et al., 2007; Grossman, 1981). Becker (1968) reasons that the probability of penalty decides whether an actor chooses to comply with a rule or not.

When extended to commercial actors such as firms, the neoclassical model assumes what Campbell describes as a *contractarian* imperative: maximising profit and shareholder value is the core motivation of any firm, and thus of any activities the firm undertakes (Campbell, 2007 p. 952). Proponents of this view will disregard notions of socially or environmentally responsible behaviour by firms, unless this type of behaviour generates a premium for the actor in question (ibid.). In a market solely motivated by profit maximising, actors will go to any length to pursue

¹⁴ Also known as standard or mainstream economic theory.

this, as long as they will not be penalised for it (Campbell, 2007). Both Hardin's tragedy of the commons and the neoclassical economic model are widely criticised, for instance for taking an essentialist view (Ansari, Wijen, & Gray, 2013) or simply being irrelevant in describing a messy real world (Boettke, 1996). Nevertheless, the individualist, utility maximising rationality described by these theories is a central assumption in modern business thinking and practice (ibid.).

3.2.2 Institutions as enablers of collective action

An institutionalist would argue that even the most cynical capitalist firm is influenced by the social structures we call institutions (Vatn, 2005). Vatn defines three broad types of function an institution may have: norms, conventions, and formally sanctioned rules (2005 p. 6f). In the case of an asset management company, such institutions could be the regulations of the markets in which it operates; norms for appropriate investing, such as the exclusion of cluster munitions producers; and conventions such as dress codes. Through these institutionalist camp, however, there are different perspectives of the relationship between individuals and institutional economists like North, Vatn notes, depart from the same individualist perspective as neoclassical economists: they see society as a collection of utility-maximising individuals, and then there are institutions "establishing the stage at which these given individuals (inter)act" (Vatn, 2005 p. 11). Through this lens, institutions are 'rules of the game' external to the actors' influence, imposed on them as necessary constraints in order to reduce transaction costs, incentivise behaviour in accordance with the public good, and monitor opportunistic behaviour (Vatn, 2005).

This thesis, in contrast, adopts the social constructivist position of Vatn. From this perspective, humans "both influence and are influenced by the institutions" (2005, p. 25). Following this, the preferences of individuals are not pre-defined; they are determined by the institutional context a choice is made within. This rationale opens up for what Vatn describes as *plural rationalities*: different institutional settings have different notions of rationality, there is not one universal type of rationality (like maximising individual utility) that applies to all settings (Vatn, 2005). As an example, a portfolio manager goes to work in the morning with the objective of maximising clients' returns (and, in turn, her remunerations) which can be said to be a 'rational' action from an individualist perspective. On her way home, the same portfolio manager might donate her coins to some kids from the local school band selling burnt cookies outside the mall. That action would make no sense when observed from an individualist standpoint. From a social constructivist perspective, this may be explained by the *social rationality* of the portfolio

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manager. Following Vatn (2005 p. 122f), we may distinguish between two types of social rationality: *reciprocal rationality* (the portfolio manager donates her coins to the school band, trustful that the band members' parents will support her son's football team when its their turn to sell cookies) and *normative rationality* (supporting band kids is the right thing to do; they need those coins more than she does). An important point here is that *both* the utility-maximising rationality of the portfolio manager during her work hours, and the social rationality influencing her donation choice on the way home, are defined by institutional contexts. If the portfolio manager allocates capital to environmentally degrading coal production during her workday, it is because that is defined as a rational choice within the social structure her workplace represents.

A key question in our context, then, is to which degree an institutional structure such as the FCTR may influence the rationality and thus the choices of the actors it includes. One possible outcome is that nothing changes – the short-sighted, profit-maximising rationality is so strongly institutionalised that the FCTR has no effect. It is also possible that the FCTR maintains the profit-maximising rationality, but widens the actors' scopes of factors than generate profit and constitute risks. For instance, one could imagine that civil society actors increase the pressure for 'green' investments so much that the investors consider it a substantial reputational risk not to change investment practice. Or, that new knowledge of climate-related risks emerging from the disclosures convinces investors to make a shift in investments. Both these outcomes are compatible with a strictly return-focused rationality, but are more aligned with public climate objectives than the 'old' investment logic. Finally, we shall consider the possibility that the FCTR constructs a social rationality amongst investors. In this situation, investors institutionalise norms of 'responsibility for the common good' and make investment decisions that reflect this, even if this lowers returns in the short term. The impact of FCTR on the actors' rationalities will be returned to in the Discussion chapter.

3.3 Another tragedy: The short-sightedness of the investment industry

It could be argued that any institution aimed at changing the profit-maximising rationality of investors is fighting against gravity. Of all capitalist business models, financial investment is perhaps the most purely capitalist, as its sole *raison d'être* is to maximise return on capital. This strictly profit-maximising rationality, some scholars suggest, has been a driving force behind some of our economy's gravest breakdowns, such as the financial crisis in the late 2000s (Barton, 2011). It has also repeatedly been identified as a root cause of the misalignment between

investment flows and climate objectives indicated in the introduction to this thesis. In both these lines of argumentation, the intrinsic short-sightedness of profitability as measured by Western capitalist systems is identified as a core problem.

With a clear reference to Hardin's tragedy, Bank of England Governor Mark Carney has dubbed this problem the "tragedy of the horizon" (Carney, 2015). Like each of the herdsmen in Hardin's tragedy considered only their own desire to increase utility by adding one more animal to their herd (resulting in a degradation of their common grazing resource), the investors in Carney's tragedy keep on investing in industries that contribute to the degradation of our planet. Analogous to adding one more animal to the herd, these investments are profitable in the short term, but are very likely to make all actors worse off in the long term¹⁵. Carney relates this problem to the issue of time horizons because he believes most investors and asset managers are aware of the risks related to climate change, but see them as outside the short time frame they operate within¹⁶. While institutional investors are 'long-term investors' in the sense that they manage capital for long periods of time (e.g. someone's pension savings), Harmes notes that the time horizons of the individual fund managers are considerably shorter. The intense competition between asset managers lead to a pressure to perform strongly in the short term. Furthermore, Harmes observes that within the asset management companies "these competitive pressures have become formalized in institutional structures that reinforce short-termism" (2011, p. 104). From an institutionalist perspective, the institutional context of an asset management company imprints short-sightedness onto the individuals employed by the company.

3.3.1 Identifying challenges of modern institutional investment

This short-sightedness is closely linked to other structural problems of the investment industry, and together these problems constitute a major obstacle to sustainable capital allocations. The following section presents key challenges of the current mainstream investment practices defined by the University of Cambridge Institute for Sustainability Leadership (2016), in order to provide background for the later discussion of the FCTR's capacity to influence institutionalised practices.

¹⁵ In economic terms, climate change represents an allocative inefficiency, i.e. the costs of preventing climate changes are lower than the current and potential costs such changes entail. This is the main message of the Stern Review (Stern, 2007). However, while there is solid scientific evidence for this assertion on the aggregate, research shows that the negative impacts of climate change are unevenly distributed. The countries with the highest emissions are found to be the ones least vulnerable to climate change (Althor, Watson &Fuller 2016).

¹⁶ It is hard to indicate with any degree of preciseness the length of these time frames. Investment horizons may span from a few seconds, in the extreme cases, to a couple of years in mainstream investment management practice. The short-sightedness defined by Barton (2011) is a relative size compared to the time it takes to build up a profitable business, which he estimates to be at least five to seven years.

1) Time horizons and investment beliefs. Modern portfolio management with short-term placements relates more to 'trading' than 'investment'. This can be illustrated by an example from Barton (2011): Around 70 percent of equities trading in the US is done by 'hyper speed' traders, who may keep stocks only for seconds. Clearly, in such cases, the long-term value of the stock is not of interest. For investors to have real stakes in the environmental, social and governance performance of an investee, the holding period of a stock should be five to ten years or more.

2) Benchmarks and tracking errors. The traditional way to measure the performance of an investment portfolio is to compare it to market capitalisation-weighted indices ('cap-weighted indices') such as the Standard and Poor's (S&P) 500 Index and the Nasdaq Composite Indices. These indices indicate the average return of a given economy at a given time. Advocates of long-term investment argue that such indexes do not fully reflect risks and opportunities that accrue in the long term, as the values of the firms comprising the index is decided by their attractiveness in the short term. Moreover, the composition of the benchmark indices often guides the composition of investment portfolios in order to ensure comparability between the two. Constructing a portfolio with a different composition of markets and industries, then, comes with the risk of a higher tracking error¹⁷ which asset managers will usually avoid.

3) Dispersed funds and passive ownership. Following the index benchmarking tradition, asset managers distribute the funds of a mandate to a large number of companies, in line with the composition of the relevant index. Diversification of investments is a core principle of risk management. At the same time, however, it prevents stock holdings in each investee company to reach the level of a 'critical mass' required to take an active owner position.

4) Performance monitoring and reporting of portfolio performance. The frequency and the indicators of asset managers' performance reporting decides what she will prioritise in her work. Again, the problem of short time frames prevents sustainable investing, the Institute for Sustainability Leadership report argues; if asset managers' performance is mesured and rewarded on a short-term basis, they will make placements that are profitable in the short term. The authors underline that they do not want to get rid of the regular monitoring of performance, but

¹⁷ The tracking error is the standard deviation of the difference between the return of the benchmark index and the actual return of an investment (Norges Bank Investment Management, 2000).

see this as a tool for early problem detection. Evaluation should be done on the basis of a period of at least three to five years, they suggest, and bonuses should be weighted in favour of longterm performance. Futhermore, the metrics and indicators that are commonly used to determine an asset manager's performance today do not reflect her success in promoting sustainability in investee companies.

These points may be summarised in the words of Harmes: "fund managers operate in a structural context which severely limits their ability to take into account any non-market investment criteria. If a fund manager did so and their fund underperformed against their peers, even if only in the short-term, the fund manager would be out of a job" (2011, p. 104)

3.4 Climate-related transparency policies as policy response

So far, the chapter has presented some fundamental theories about the rationalities on which humans base our decisions. It has also identified some key challenges to sustainability related to the practices of mainstream investors. As this thesis seeks to assess the effectiveness of a transparency regime in circumventing these challenges, the next section will consider the concept of disclosure as policy tool from a theoretical perspective.

3.4.1 Transparency policy as concept

Policies aimed at increasing transparency around a given issue with objective to reduce public risks can be traced back to Franklin D. Roosevelt's presidency. Roosevelt took office four years after the 1929 stock market crash and was naturally concerned with how to avoid similar events in the future. One of his solutions was the "letting in the light of the day" on companies selling securities to the public, which was operationalised through Securities Act of 1933 and the Securities Exchange Act of 1934 (Graham, 2002 p. 2). The idea of "light of the day" as a policy tool had Roosevelt lent from Louis D. Brandeis, an attorney who had advocated transparency policies as a measure to reduce the risk appetite of investment banks already 20 years earlier: "Publicity is justly commended as a remedy for social and diseases. Sunlight is said to the best of disinfectants; electric light the most efficient policeman", he wrote in an article in Harper's Weekly in 1913 (Brandeis, 1913). The 1930s disclosure regulations of the US was the beginning of corporate financial disclosures as we know them today (Graham, 2002).

Later, the notion of transparency was expanded to several policy areas. From the 1960s onwards, a generation of general "right to know-laws" was adopted in order to ensure the

public's general right to insight into societal matters. Following Fung, Graham, and Weil (2007) we now witness a second generation of transparency policies that subjects more specific issueareas such as air pollution or corruption. Such disclosures may be labelled targeted transparency policies. "At the core of these laws", they write, "is an elegantly simple idea: government intervention to require the disclosure of information can create economic and political incentives that advance important policy objectives" (Fung, Graham, Weil & Fagotto, 2005 p. 1). In the last few decades, the use of transparency instruments has been fuelled by the endless possibilities of the Internet and modern information technology. Transparency can be seen as a "key concept of our times" (Gupta, 2008 p. 1): As citizens and consumers, we now expect information that concerns us to be readily available. We are also able to share and distribute information easily amongst us, and to get in touch with corporations, organisations and public entities more easily. In this way, the Internet has empowered civil society to hold corporations and other organisations accountable for their actions (Fung et al 2007, Gupta 2008). As Fung, Graham, and Weil (2007) point to, the increasing popularity of disclosure policies may also be explained by their political viability compared to introducing standards or market-based instruments such taxes.

Gupta (2008) observes that the concept of targeted transparency is entering the field of environmental governance at full speed. She sees this as a part of a 'procedural turn' in global environmental governance: a turn of attention towards processes and procedures (hereunder disclosures) rather than outcome. While she welcomes enhanced transparency in environment-and climate related matters, she underlines that calls for transparency may be based on different rationales. For example, she notes that the motivation for accepting disclosure schemes may range from "*improving* state-led mandatory regulation, to *avoiding* state-led mandatory regulation (Gupta, 2008 p. 2; emphasis in original). Hence, it is important to ask which actors define the information to be disclosed, and why. If we apply the logic of neoclassic economic theory, actors would welcome a transparency policy if they consider this to be the lesser of possible institutional constraint on their free choices.

3.4.2 Principles for effective transparency policies

If investors accept or even encourage a given disclosure policy because they deem it to be the less demanding regulation they could hope for, can we then expect the policy to have any effect? With the increasing prevalence of transparency policies, there has also been some academic attention towards the concept. A cornerstone work of the (non-economic) analyses of transparency policies is the Transparency Policy Project (TPP) directed by Fung, Graham and Weil at the Taubman Center for State and Local Government at Harvard University. The objective of this project was to understand how transparency policies work (or do not work) and why. Following detailed evaluation of 18 existing disclosure instruments across policy areas, the TPP has developed a set of principles for effective transparency policies that may be translated into a framework for effectiveness analysis for our purpose. These principles are presented in brief in the following; please refer to Fung, Graham and Weil (2007) pages 176 to 179 and (the other F G W) for the full text.

I. Availability

The disclosed information should be easy to find and use for the intended audience. The effectiveness of disclosure policies, according to the TPP researchers, depends on the audience's ability to embed the disclosed information into their decisions routines. Hence, policies should be designed with this in mind. This may sound obvious, but considering the vast amount of information that is published for instance on the Internet in formats not digestible by the ordinary citizen, or even hidden from plain sight, the importance of information availability should be emphasised.

II. Stakeholder engagement

Stakeholders should be activated in maintaining the disclosure scheme. The policy should be designed to embrace the participation of NGOs and other civil society actors, through granting them a role. This could be a formal or informal 'watchdog' role, feedback mechanisms, discussion fora, et cetera. This could enhance the policy's legitimacy and provide vital input for improvements.

III. Management attention

Disclosure policies should be designed to lead the attention of the entire organisation of disclosing companies towards the disclosed information and its impact. One way of doing this is requiring chief executives to formally confirm the data.

IV. Sustainability

Disclosure systems are more likely to be sustainable over time if (at least some) disclosers experience benefits from complying. One example of this is designing disclosure schemes that rest on existing initiatives within the industry or the environment of disclosers. Another example is disclosure schemes that reduce companies' reputational risk or give them a relative advantage compared to, for instance, foreign rivals.

V. Metrics

It matters which metrics disclosers are asked to employ. Metrics should be chosen to enhance the accuracy and comparability of disclosures; at the same time, over-simplification should be avoided as it may disincentivise innovation, or concentrate an organisation's improvement efforts around too few (or even the wrong) issues. The chosen methodology should provide standardised, comparable, and disaggregated information.

VI. Format

The format of the disclosure should be customised for the purpose of the disclosure, in order to reduce the users' search costs. If possible, the main points of information could be distilled into simple grading systems, bars, charts, et cetera, designed to be available to users in the settings where the information is relevant. As an example, hygiene score cards for restaurants can be translated into a smiley face icon available on restaurant doors.

VII. Review & update

A disclosure system should be dynamic and adaptive towards changing conditions; this requires continuous updating. A mechanism that integrates periodical feedback collection and review of the disclosure system's achievement of its objective may prevent outdating. The frequency of updates as well as the responsibility for carrying it out should be clear.

VIII. Sanctions

Because producing disclosure almost always comes at a cost, and revealing data about a company may come at an additional reputational cost, there is always a chance that some organisations will misinform or not disclose the required data at all. For a disclosure scheme to be effective, it should include substantial penalties for non-compliance.

IX. Other means of enforcement

Economic sanctions should be accompanied by enforcement structures such as audit requirements, and 'watchdog' functions as mentioned under Stakeholder engagement. This will impose a reputational cost related to noncompliance alongside the economic cost.

X. Interaction with other policy instruments

Fung, Graham and Weil note that disclosure policies should be "considered a complement and not a replacement for other forms of public intervention" (2007 p. 179). This is especially valid in cases where the objective of a disclosure policy is to unveil the degree of compliance with other regulations, such as restaurant hygiene obligations.

While these features of effective disclosure frameworks may seem technical and mainly relevant to the establishment of formal rules and to some degree conventions, the discussion chapter will illuminate how these features also contribute to norm making.

3.5 Contribution of this work

Even though there has been a remarkable increase in disclosure initiatives in the realm of environmental and climate-related governance, the topic has not been subject to much academic scrutiny. "It is striking how under-analyzed the notion of transparency remains, particularly in writings within global environmental politics", Gupta reported in 2008 (p. 1). She upholds here is a "compelling need to investigate the growing pervasiveness of the call for transparency in global environmental governance, one which extends beyond state-led international environmental regimes to private and market-based governance as well" (ibid). In more recent years, a body of research on certain high-profile initiatives such as the Carbon Disclosure Project (CDP) and other carbon reporting schemes has emerged. Hahn, Reimsbach, and Schiemann reviewed this literature in 2015 and found that the overwhelming majority of the 66 studies surveyed were quantitative analyses of published disclosure reports. Qualitative approaches were the rare exceptions in the material they reviewed. This thesis contributes to strengthen the research field by providing a qualitative approach through an in-depth case study of a climate-related transparency regime. This approach diverges from the body of quantitative analyses in that it evaluates the disclosure scheme based on insight from relevant stakeholder groups, rather than numerical evidence. This kind of assessment is appropriate to identify features of the institutional structures associated with the policy regime, as experienced by involved actors.

Moreover, previous research naturally only covers voluntary climate-related disclosure schemes, as the FCTR represents the first climate-related disclosure obligation to be found in national law. As far as the author is aware, no research has been directed towards this legislation by independent researchers yet. It should be noted that some reports on the FCTR have been launched (or are in the pipeline) by French and international think tanks and interest organisations that have been active in the process of developing and adopting this policy. These reports are similar in the way that they assume increased transparency is an important contribution to the 'energy transition'. This thesis takes one step back and asks whether the FCTR really has the capacity to influence investment flows and if so, how it works.

An objection to investigating the case of FCTR at this specific point in time is that the legislation was adopted very recently and that an analysis thus may be premature. That is a valid argument; this should not be the last critical assessment of the policy in question. However, Matisoff argues that the early evaluation of policy experiments is useful because it may lead to "an improved understanding of institutional design and how to solve collective action problems" (2013 p. 580). As other jurisdictions are already entering the process of adopting identical or resembling legislation, I am hopeful that this research could be useful in informing the policy discussions that may occur in Norway and elsewhere.

4 Research design and methods

4.1 Choice of research design

This research project explores the case of the FCTR and its potential to shift investment flows in direction of an energy transition. As there has only been a year since the adaptation of the Article 173-VI and no 'results' in any quantifiable terms are available yet, a case study as defined by Yin (2014) is a relevant approach because it allows the researcher to assemble information and insight from different sources of evidence and different perspectives.

4.1.1 The case study approach

In the words of Yin (2014), a case study is an "empirical inquiry" that "investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (Yin, 2014 p. 16). This is indeed true for the FCTR. A case study may have different purposes: it can be *descriptive* of a phenomenon in its real-world context; it can be *explanatory* in terms of explaining

"how or why some condition came to be" (Yin, 2014 p. 238), or it can be *exploratory* with the aim to identify research questions for following studies. Although this study includes descriptive and explanatory elements, especially in answering research questions 1 and 2, the approach is mainly of exploratory nature.

4.1.2 Unit of analysis

One of the major challenges related to the case study as research approach is defining the scope of the case, which is the unit of analysis (Yin, 2014). As the case study approach integrates the context of the case in the analysis, drawing a clear inside/outside line can be complex. In this study, the scope of the case is limited to what we refer to as the French climate-related transparency regime for institutional investors (FCTR). As defined in section 2.5.3, this includes the implementation of Article 173-VI of the French Energy Transition Law, the Energy and Ecological Transition for Climate Label (TEEC) and the International Award on Investor Climate-related Disclosures.

4.1.3 Sources of data

A case study builds an understanding of a case by converging evidences from different sources of information. Yin (2014) considers six possible sources of evidence, of which three are utilised in this study.

Interviews

The main source of data for this study is interviews with representatives from different groups of stakeholders to the FCTR. The primary objective of the interviews was to establish an understanding of how the FCTR can be received by organisations who relate to it. Another key purpose of the interviews was to expand the knowledge base on the practical details of FCTR and the process through which it came about, as the information available on the Internet (and in English language) leaves some gaps. A total of 12 interviews with 14 individuals from five stakeholder groups were conducted; the sample is presented in section 3.2.1. The interviews were what Yin terms 'shorter case study interviews'; one, focused interview session per organisation, with a duration of about one hour (2014 p. 111). The conversations were guided by an interview guide to ensure comparability of answers, but the order of topics and questions was not fixed. Interviews were recorded and notes were taken during the sessions; additional notes were also made right after each session. In addition to these pre-organised interviews, three

shorter conversations have been included in the empirical analysis in order to fill gaps in the empirical material. These conversations took place during lunch and a reception session at a conference (details are presented in section x). The conversations were guided by selected questions from the interview guide and were recorded only through written notes.

Documentation

Empirical data collected through the interviews has been supplemented by, and assessed on the background of different types of written documentation (described simply as 'documentation' by Yin). This broad category of evidence includes everything from personal letters to reports, formal studies, and newspaper articles (Yin, 2014). For the purpose of this study, six types of written documentation have been identified as particularly useful: empirical and theoretical studies published by independent researchers and research institutes; reports and guides issued by interest organisations and international bodies; climate-related disclosures published organisations subject to the FCTR; legal texts related to the FCTR and international commitments; speech manuscripts, and newspaper and blog articles. Most of the written sources of documentation have been accessed through the Internet. The exception is documentation and disclosures from interviewees, which were in some cases provided as paper copies. Yin (2014) advises caution to be executed when handling written documents in general, and web-based documents in particular, as it is a common mistake to assume 'automatic' validity when a piece of information comes in written form. This problem has been circumvented by cross-checking essential data using multiple sources.

Participant-observation

The final source of information for this study in participating in conferences and seminars related to climate-related disclosures, sustainability in finance, and climate risks. A total of seven relevant conferences and seminars have been attended in person in the last year; details of the events are listed in Appendix C. In the matrix of information sources by Yin (2014 p. 106), attending conferences can best be classified as participant-observation. Attending these conferences has little to do with the comprehensive field work often conducted by social anthropologists, for instance. Still, it allows for minor 'manipulation' of situations with the purpose to collect targeted data, as is often done in participant-observation fieldwork (Yin, 2014). As an example of 'manipulation', a question about the need for governments mandating climate-related disclosures was asked to a panel discussing the 'TCFD's preliminary recommendations for voluntary disclosure.

4.1.4 Analytical strategy

As with many qualitative studies, this study applies a mostly *inductive* relationship between research and theory. Following Bryman (2012), an inductive approach uses empirical findings to develop or expand theory. In contrast, a deductive approach usually generates hypotheses based on theory and then utilises collected data to confirm or reject the hypothesis. An inductive approach allows the researcher to refine the research questions over the course of the research project, which is beneficial for an exploratory study that seeks exactly to identify key issues for further research. Naturally, inductive research in most cases also stands on the shoulders of previous research and the concepts and theories derived from it. As an example, this study has been guided throughout by the findings and the framework developed by the Transparency Policy Project (TPP; see Fung et al., 2007; Weil, Fung, Graham, & Fagotto, 2006).

4.2 Selection of interviewees

Yin (2014) advises researchers not to use the term 'sample' because many people associate this with quantitative studies aiming to generate a statistical generalisation. Instead, this section will look at the process of selecting actors to participate in the study.

Selection approach					
Financial actors			Non-financial actors		
Asset owners	Asset managers	Intermediaries	Academia/ research	NGOs, interest organisations	Public authorities

Table 2: Selection approach

As the thesis sets out to explore the FCTR as it is perceived by different stakeholders, the selection process started by identifying relevant stakeholder groups. 'Stakeholder' in this context refers to disclosers, information users, authorities, and the wider public. As illustrated by Table 2, the first step was to draw a distinction between financial and non-financial actors. Within the financial actor category, asset owners and asset managers are apparent participants in this study

(note that these two types of actors are sometimes jointly referred to as 'investors' where the distinction between them is not important). In addition, financial intermediaries were identified as a possible information source, as they are in between asset owners and asset managers. In the category of non-financial actors, a 'triple helix' approach including academia, interest organisations and public authorities was used to filter possible interviewees. After identifying these six relevant stakeholder groups, the next step was to list possible organisations within each group. Reports and news articles relating to the FCTR, climate-related investor initiatives, and institutional investing in France were combed in order to map relevant actors. This resulted in a list of 24 financial actors and 8 non-financial actors operating in France and directly relevant to the FCTR. To broaden the perspective of the empirical data, the list was later expanded to also include non-French, non-financial actors who could illuminate the research questions from an 'informed outsider' point of view. The interviews with the asset managers and the 2dii were organised through contacts I have through my position as a sustainability adviser at the Norwegian agency for local government funding, Kommunalbanken. These interviews were conducted face to face in Paris. Interviews with the remaining participants were organised directly by me; some face to face, some per phone. While my inquiries generally were welcomed by non-finance actors, it proved challenging to book meetings with incredibly busy Parisian 'finance people' on my own. I made a number of inquiries that were never returned, and I experienced that interview appointments were postponed several times. When I, out of time considerations, had to conclude the data collection phase, I did not have any empirical data from NGO or public authority actors, which I considered a major weakness of my research. Fortunately, I went to one final conference in London where both WWF France and the French Environmental Ministry were on the speaker list, and I was able to ask each of them a shorter list of questions.

Based on this selection approach, this project ended up with 14 interview sessions (including three shorter conversations) with 16 individuals representing 14 organisations. The table below presents the sample for interviews, sorted by the stakeholder groups to which they belong. Details of the representatives from each organisation can be found in Appendix A.

Stakeholder group	Organisation	Type of organisation
Asset owner	ERAFP (Établissement de retraite additionnelle de la fonction publique)	Pension scheme

Table 3:	Overview	of actors	represented	in the	study
			1		

	Fonds de reserve pour les retraites (FRR)	Pension reserve fund
	Allianz GI	Asset manager
Asset manager	BNP Paribas Asset Management	Asset manager
	Mirova Responsible Investing	Asset manager
Intermediary	Crédit Agregole Corporate and Investment Bank	Investment bank
	2 degrees investing initiative	Interest organisation
	Finance Norway	Industry organisation
Interest organisation/NGO	FIR (French Social Investment Forum)	Multi-stakeholder think tank
	TCFD (The Financial Stability Board's Task Force on Climate-related Financial Disclosures)	Industry-led task force
	WWF (World Wide Fund for Wildlife) France	Environmental NGO
	CICERO Center for International Climate and Environmental Research	Research centre
Academia/ research	Paris Center for Law and Economics at Paris II University	Research centre
	Grantham Research Institute on Climate Change and the Environment	Research centre
Public authority	Ministry for the Ecological and Inclusive Transition, Republic of France Ministry	

4.3 Analysis

After completing the interviews, recordings (not applicable for the shorter conversations) were transcribed and matched with the interview notes. The notes could in some cases provide extra information such as immediate thoughts and ideas. In order to keep the amount of data manageable, the interview data were first roughly analysed and sorted into a 'substantial' and a 'less substantial' document. Then, the 'substantial' data were analysed again, guided by the

inductive approach suggested by Bryman (2012). In this approach, codes "serve as shorthand devices to label, separate, compile, and organize data' (Charmaz 1983, p. 186 in Bryman, 2012). First, numerical codes were assigned to the different pieces of interview data, to keep clear track of who said what. Then, an initial colour coding was used to separate the interview data into four main labels. The data were then reviewed and moved around, and the four labels refined, until they stood out as four reasonably defined topics. Finally, the pieces of data within each coloured topic were moved around in order to build explanations about the case (Yin, 2014 p. 147). In line with the iterative nature of such an approach, research questions were also revised several times throughout the analysis process.

4.4 Ethical considerations

None of the persons contributing to this study asked for general confidentiality. Hence, all of them are listed and cited by their full names, positions and the name of the organisations they represent. It happened on two occasions that investors gave details on specific investment-related decisions to illustrate a point, but asked me not to render that information directly. This was of course accepted. All interviewees were asked for consent to audio-record the interviews; none had any problem with this.

4.5 Limitations of the study

Several limitations of the study and its research design should be mentioned. To begin with, one of the returning challenges of case studies relates to deciding when a case is 'complete' (Yin, 2014). A complete case should firstly have a clear boundary between then phenomenon in question and the context to which it belongs. Secondly, relevant evidence should be exhausted, following Yin (2014). This study does not reach "completeness" in any of these terms. Article 173-VI builds, as section 2.4 explains, on both some pre-existing legislation and on already established practices of ESG 'filters'. Hence, it is hard to isolate the 'effect' from the policy instruments described here by the term FCTR. Rather than seeking to identify any isolated effect from the FCTR, then, the study considers this policy regime to be a stage of an ongoing institutional process.

The main limitation of this study, as I see it, is the small size of the "sample". In a situation where the extent of data collection is constrained by time and resource considerations, the stakeholder group approach to sampling implies that each stakeholder group is only represented by a very small number of actors. Specifically, the study would have gained from

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including more asset managers and asset owners, and a wider variety of within each category. It is clear limitation of the study that it rests on the views of the 'usual suspects' of sustainable investing. Including some smaller investors with less previous experience in dealing with climate-related issues could enrichen the empirical data. On the other hand, it could be argued that smaller investors are of less interest from a financial stability perspective. Furthermore, the collected data would have been strengthened from more interviews with civil society actors and political actors. As numerous attempts at organising interviewees with representatives from these two stakeholder groups failed, a 'last resort' solution of shorter, casual conversations at a conference was employed. Luckily, I was able to get hold of two important actors – the WWF and the Ministry of Environment – at this conference. The data from these conversations do not have the same quality as data from the interviews, however; both because they were more ad hoq, and because they were not recorded.

This case study of the French climate-related disclosure regime was conducted by a researcher who does not read or speak French. For the interviews and the conversations, this did not represent a major obstacle. All interviewees had adequate English skills and there is no reason to believe any substantial misunderstandings took place during the discussions. There were, however, some written inquiries for interviews that were never responded to. It is possible that the language barrier was the reason, or one of the reasons, that some actors chose not to respond. The major limitation concerning my lack of French skills is that I am not able to read the legal documents defining the FCTR, notably Article 173 and its implementation guideline, in the original language. English translations of the texts are provided by the 2 degrees investing initiative; those are also the English language versions of the documents used by the French Government and various other actors. Although I have all reasons to believe this translation has been conducted with the best intention, I cannot rule out that the choice of wording reflects the view of the 2 degrees investing initiative and that others would translate the same text in a different way.

A final limitation relates to the fact that the FCTR and climate-related disclosures in general is a moving target. New information has been released constantly throughout the project period, and will continue to be released after this thesis is printed (the blessing and the curse of studying such a topical issue, I assume). To illustrate this, the Task Force on Climate-related Financial Disclosures (TCFD) published their proposed reporting standard three days before the deadline of this work. Hence, the validity of some of the findings may be questionable after a relatively short period of time (while other findings reflect more general mechanisms of institutions and the human mind).

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5 Empirical analysis

As climate-related transparency instruments aimed at institutional investors is still a rather unmapped field, the collection of empirical data from different stakeholder groups has been an important part of this research project. This chapter presents the findings from the empirical analysis, structured by research questions 1, 2, and 3. The findings will then be discussed in relation to theory and other relevant empirical studies in chapter 6, which concludes by proposing a list of recommendations for climate-related investor disclosures.

Structure of the analysis

The analysis follows research questions 1, 2 and 3 presented in section 1.5; the fourth question is addressed in chapter 6. Findings are broadly categorised into the following topics:

Section 5.1: RQ1 The FCTR – what & why?	Section 5.2: RQ2 Institutional structures	Section 5.3: RQ3 Impacts & shortcomings
Backdrop	Strengthening norms	Impact
Characteristics of the FCTR	Developing conventions	Limitations
Reactions by actors	Defining rules	

Table 4: Overview of empirical analysis

Citing interview data in the analysis

This chapter seeks to give an overview of the general findings supported by several actors represented in the study, while at the same time clarifying the specific positions and views of the individual actors. The general findings will be rendered in the author's words, followed by a bracket that indicates which actors have explicitly expressed support for the position.¹⁸ In the bracket, actors are referred to by a number; which number represents which actor can be found in tables 5 and 6. Where Roman numerals are bracketed, this refers to a speaker at a conference attended. The speaker references are listed in Appendix C. It should be highlighted that an actor *not* being listed after a position does not necessarily oppose the position, but has not explicitly supported it. In addition to the general findings, the analysis includes individual statements from the actors represented in the study. These statements are cited with the name of the

¹⁸ This approach is inspired by Pedersen and Slette (2016).

representative and the organisation (by abbreviation); for information about the position she holds and the features of the organisation, please refer to tables X and X.

Ref #	Name of interviewee and organisation	Type of organisation	Key features and figures
2	Anne-Claire Abadie, Allianz GI	Asset manager	Asset management branch of German-owned insurance company Allianz, one of the largest financial service providers globally. 500 bn. Euros AuM globally. Signatory of: CPD, FIR, IIGCC, PRI. Not formally regulated by Article 173 because of legal status.
3	Jacky Prudhomme, BNP Paribas Asset Management (BNP IP)	Asset manager	650 billion euros AuM globally. 250 billion invested with ESG filter, 25 billion under 'pure SRI management'. Signatory of CDP, Montreal Pledge, PDC, PRI
5	Erwan Crehalet, Crédit Agrecole Corporate and Investment Bank (CIB)	Intermediary (Investment bank)	
6	Pauline Lejay, ERAFP (Établissement de retraite additionnelle de la fonction publique)	Asset owner (pension fund)	Signatory of: PDC, Montreal Pledge,
8	Mickaël Hellier, Fonds de reserve pour les retraites (FRR)	Asset owner (pension fund)	Temporary pension reserve fund established in 2011. Manages 37 billion euros in assets transferred from the state, to be handed back to Caisse des De□ pôts et Consignations in 2024. FRR's mandate obliges it to manage funds in accordance with international commitments of the French state, such as the UN Global Compact and the Paris Agreement. Signatory of: PDC, Montreal Pledge, Not formally regulated by Article 173 because of legal status.
9	Ladislas Smia, Mirova Responsible Investing (Mirova)	Asset manager	Established 2014 as a SRI-only subsidiary to Natixis AM (300 bn. mainstream asset manager). 7 billion AuM, mostly equity and infrastructure. In addition, Mirova advises and assists Natixis in SRI and shareholder engagement. Consider themselves conviction-based, 'benchmark-aware but not benchmark-driven'. Signatory of: Montreal Pledge, PDC

Table 5. Key features and figures of financial actors represented in the study

Ref #	Organisation	Type of organisation	Key features
1	2 degrees investing initiative (2dii)	Interest organisation	Think tank/lobby organisation established in Paris in 2012 to advocate investments aligned with climate objectives. Offices in UK, New York and Paris, activities around the globe. Represented in the ISO14097 working group on climate and the finance sector, and the EU Commission's High Level Expert Group on Sustainable Finance.
4	CICERO Center for International Climate and Environmental Research	Academia/research	Institute for multidisciplinary climate research, specialising amongst other things in climate finance. One of the leading providers of 'second opinions' for green bonds. Based in Oslo.
7	FIR (French Social Investment Forum)	Interest organisation	Forum for responsible investments; French branch of the Global Sustainable Investment Alliance (GSIA). Multi-stakeholder think tank with 70 members including asset managers, asset owners, researchers, consultants, NGOs and individuals.
10	Paris Center for Law and Economics at Paris II University (CRED)	Academia/research	Research centre at University Paris II Panthéon-Assas, the traditional law university of France.
11	TCFD (The Financial Stability Board's Task Force on Climate-related Financial Disclosures)	Interest organisation	Task force established by the G20 Financial Stability Board (FSB) in the context of COP21. Aims to develop a consistent standard for voluntary climate- related disclosures for companies, investors, and other organisations ('economy-wide').
12	Ministry for the Ecological and Inclusive Transition. Republic of France (the Environmental Ministry)	Public authority	The French Environmental Ministry shares the ownership of Article 173-VI with the Ministry of Finance.
13	Grantham Research Institute on Climate Change and the Environment ('Grantham')	Academia/research	Multi-disciplinary research centre established under the London School of Economics and Political Science.
14	World Wide Fund for Nature – France (WWF)	NGO	The French department of world wide environmental NGO WWF. Has been an vocal advocate of Article 173 and has pledged to review published disclosures.
15	Finance Norway	Industry organisation	The industry organisation for the financial industry in Norway.

Table 6. Key features of non-financial actors represented in the study

5.1 What is the FCTR, and how can it be understood as a political phenomenon?

5.1.1 Backdrop

The French climate-related transparency regime that was initiated in 2015 did not, as Grégoire Cousté from the FIR observes, "*come from nowhere*". It is built upon existing legislation and norms that applied to the French community of institutional investors prior to the adoption of Article 173 and the following procedures. It is also, however, also a product of the specific political environment in the years prior to the adoption; notably a wide range of actors in the French society preparing for the French presidency of the 21st Conference of the Parties (COP). This section presents findings from the empirical data that relate to the backdrop to which the FCTR was effected.

Political context

Although a variety of political factors may have played into the adoption of Article 173, there is one specific factor that is mentioned by most of the interviewees based in France: The French presidency of COP21, the UN climate summit that produced the Paris Agreement. There is unanimous agreement amongst interviewees that the upcoming summit created favourable political conditions for climate-related legislation, hereunder Article 173-VI (1, 2, 3, 5, 7, 9, 10, 14). The idea was that "we should do something that remains in history. We have to prove we are the leaders!", recalls CRED researcher Liudmila Strakodonskaya: "Ségolène Royal [Minister of the Environment at that time] was one thousand percent for this". This aspiration to demonstrate leadership by example is in line with then-President Hollande's stated ambition of leading 'the nation of environmental excellence'. A similar ambition is expressed by Alexandra Bonnet from the Ministry for the Ecological and Inclusive Transition: "With this law, France has paved the way". In the prelude to COP21, the importance of the finance sector in the mitigating climate changes and realising an energy transition was highlighted, and "Article 173 became the flag for the mobilisation of the finance sector" (Stan Dupré, 2dii). In fact, Dupré argues, "there was a lot of lobbying against the law from the finance sector, but the pressure from the government was too strong because of the COP". Dupré further explains that the 2dii was involved in drafting a similar article a couple of years earlier, but that this was rejected by the government. "But then climate and finance became more of a topic as the COP was approaching, and we brought it up again. We drafted a new article, but with more people involved this time. It was adopted just in time for the COP", he states. A similar view is expressed by Anne-Claire Abadie, Allianz GI: "... then we were going to host the COP21, and suddenly we had sustainability all over the political agenda". Jochen Krimphoff from the WWF agrees: "The COP was an important momentum. I can only speculate, but maybe the legislation would not have happened if the COP were in another country".

The strong position of law is a feature of the French society that was brought up as another explanation of why France was the first state to mandate climate-related disclosures (7, 10). *"We do love regulation in France"*, says Grégoire Cousté from FIR; *"in France, the law [as institution] is important. It always has been"*. CRED researcher Liudmila Strakodonskaya points at the fact that the French legal system is based on civil law. In other words, rules are codified to a larger extent, and earlier in the rule-making process, than in the common law system used in most English speaking states. Hence, it makes sense to enshrine the disclosure rule in law at an earlier stage in France than would be the case in for instance the UK.

Finally, the close relationship between the Government and non-state actors pushing for disclosure is a third explanation mentioned by most French interviewees (1, 2, 3, 6, 7, 9, 10). Liudmila Strakodonskaya from CRED describes the disclosure requirement as an *"industry-politics initiative"*. The think tank *2 degrees investing initiative* (2dii) is in particular mentioned by several interviewees (2, 5, 7, 10). Founder and CEO of the 2dii, Stan Dupré, confirms that the think was indeed founded with the very aim to advocate for mandatory disclosure:

I guess everyone has their own story on how this law came about... Mine is that I wrote a book about the role of financial institutions in the energy transition, in 2010. One of the measures I proposed was to make climate disclosure mandatory for investors. I continued to work for this in various ways, and in 2012, I founded the 2 degrees investing initiative. We partnered with the government from the beginning, I had already been involved in their 2012 roundtable on this topic. (Stan Dupré, 2dii)

The central role of Dupré and the 2dii in drafting both the Article 173 and the following implementation decree is described by both Dupré himself and other interviewees (2, 7, 10).

The article itself is vague, so implementation guidelines are important. There has been a huge debate on the drafting of those. We were involved in many ways, advising different departments of the government on their version of the text. We basically advised the Treasury, the Ministry of Environment, the MPs ...

We wrote different drafts depending on what the different departments wanted, but always related to our research.

(Stan Dupré, 2dii)

The French branch of the WWF is also mentioned as an actor that has promoted climate-related disclosures (1, 6, 7). Pascal Canfin, the current CEO of WWF France, was Minister for Development in the two first years of Hollande's presidency and has vowed to follow the implementation of Article 173 closely. Deputy director for green finance in WWF-France, Jochen Krimphoff, confirms that they "*have been pushing for this kind of disclosure for years*". Throughout the data collection for this project, it becomes clear that several of the organisations represented in the study have been involved in the law-making process. Jacky Prudhomme from BNP IP was involved directly as a member of the drafting committee, while others were more indirectly involved:

We have a person who works specifically with advocacy, and who has pushed for this kind of reform from our side. Especially the labels. (Ladislas Smia, Mirova)

One of the most active persons in France in advocating the law is in our board. He is closely linked to the MP that promoted the Article. (Grégoire Cousté, FIR)

To sum up, the interview data identifies three main factors of the political context that are useful in explaining why climate disclosure legislation and the FCTR emerged in France: The momentum created by the French COP21 presidency; the high position of legal provisions *per se*, and the close ties between the Government and non-state actors that favours this kind of legislation.

Preparedness of the finance sector

The finance sector does not appear to have been surprised by the introduction of the FCTR, although the degree to which the actors were prepared seems to vary. *'It is built upon laws that already existed''*, explains Grégoire Cousté of FIR; *'we were in a process''*. This 'process' consists of both formal legislation and norms in the investor community, the interview data shows. *'We see this as a continuation of the existing legislation, but of course it is an improvement, too''*, says Pauline Lejay of the

pension scheme ERAFP. The existing legislation referred to is the 'Grenelle II' law adopted in 2010, see section 2.5.1 of this paper for an outline of the actual provisions. As important as the legislation, perhaps, is the "*culture of sustainability*" as described by Anne-Claire Abadie from Allianz GI. Several French interviewees agree that the concepts of SRI and ESG are already well developed in France and not least within their own organisations (1, 2, 3, 5, 6, 7, 8, 9, 10).

SRI was already important in France. All the pension schemes had started to think about ESG and climate change because of existing regulation, especially a tax incentive to relocate employee savings to clean investments. Because the pension schemes are big, the big asset managers had already started looking into this, too.

(Anne-Claire Abadie, Allianz GI)

Although some warn that the preparedness of the French finance industry may be rather superficial and limited to a decision-irrelevant ESG screening (9, 10), the actors represented in this study appear to be largely welcoming the disclosure regime. "We chose to see this as an opportunity to show that we are responsible investors", says Jacky Prudhomme from BNP IP. "Clearly, for us, it brings us new business", agrees Ladislas Smia from Mirova. Generally, the financial actors contributing to this study seems to see the FCTR as an advantage to their organisations (2, 3, 6, 7).

Government ambitions

It has already been mentioned that France clearly wanted to represent an example for other states to follow in the context of her COP21 presidency. The interviewees of this study was asked what they thought the Government's ambitions for the FCTR were, apart from setting an example. "*Right now, it is more of a political marketing tool than a real law. [...] Everyone agrees to do window-dressing, and the Government is happy about that*", conveys Stan Dupré of the 2dii. The investors in this study generally refrain from using that expressive language to describe the objective of the law. Some (3, 6, 8) expressed views in line with that of Allianz GI:

"The purpose of the law was really to change the minds of investors; to incentivise them to look for new solutions, new ways of reporting and maybe new processes also, new investment processes. It is an invitation to be transparent. It gives an impetus to the industry. "Be creative, launch anything you want!". The regulation is not prescriptive; it just sets a minimum." (Anne-Claire Abadie, Allianz GI)

This impression is also shared by CRED researcher Liudmila Strakodonskaya:

"The article doesn't want results, it wants ambitions. More or less like the PRI [UN Principles for Responsible Investment], but in law. The intention was to prepare the soil for new methodologies and approaches."

The aims expressed by Alexandra Bonnet from the Ministry for the Ecological and Inclusive Transition (hereafter: Ministry of Environment or just Ministry) are however slightly more ambitious: "Asking institutional investors for \Box climate-related disclosures for the first time may trigger behavioural changes in companies and investors". While this study was underway France elected a new President, Emmanuel Macron, and got with him a new government. This has sparked debates about what will happen to the entire Energy Transition Law and, in our context, the FCTR. Interviewees seem a bit confused with Macron's position in environmental and climate-related issues; indeed, the Green Party describes his approach as 'environmental indifference' (with clear reference to Hollande's expressed ideal of 'environmental excellence'). It is furthermore controversial in environmentally concerned circles that the new Prime Minister is a former public affairs director (or 'chief lobbyist', in the words of one interviewee) for Areva, a major French nuclear power company. Stan Dupré of the 2dii offers some insight on how the FCTR might evolve with President Macron at the wheel:

"We are close to many of the members of the [new] government so we more or less understand what is going on... Macron himself does not care about this [the environment], but he wants to get rid of inefficient regulations and tax breaks. We think this law can be used in that regard. One of the guys behind his economic program was the head of the Prime Minister's think tank at the time we co-authored a proposal on tax breaks with them. Also, the fact that the new Minister of Environment has a high profile is a good sign. There are a lot of people who have pushed for this legislation that have links to him." (Stan Dupré, 2dii)

As will be discussed in chapter 6, one of the strengths of a disclosure scheme enshrined in law is that it – at least to some degree – ensures continuity across political fluctuations.

5.1.2 Characteristics of the FCTR

Having established a backdrop for the FCTR, then, it is time to look at the actual formulations of the legislation and how these are interpreted by the actors represented in this study.

Disclosure requirements

Both Liudmila Strakodonskaya from CRED and Stan Dupré from the 2dii point to the extensive Parliament discussions and lobby activities that surrounded the adoption of Article 173-VI; the final documents were indeed products of political compromises.

The final text is far from what we drafted, there was a lot of discussion on the content of it. Our initial idea, to report on the alignment of portfolios and investments strategies with climate policies such as the Paris Agreement, is still there but much weaker. (Stan Dupré, 2dii)

Two important features of the Article are deemed likely to stem from the compromise: the 'comply or explain' approach (a continuation of the related provision from Grenelle II), and the openendedness in terms of methodology. The implications of these features will be discussed in section 5.2. For investors choosing to disclose, there is not one unified way to 'comply'. The reporting framework is remarkably open-ended and allows for a wide range of methodologies and components to be included. Table X summarises the main requirements laid out in Article 173-VI and its implementing decree as highlighted by the actors in this study, as well as the level of familiarity with the tasks expressed by the actors. How these components form part of a governance structure will be discussed in more detail in section 5.2.

Type of information to be disclosed	Approach suggested in the Article and implementation decree ¹⁹	Degree of familiarity to investors
ESG (environmental, social and governance) criteria	"information on how their investment decision- making process takes social, environmental and governance criteria into consideration" – i.e. descriptive text	High. Pension funds are required to consider ESG criteria in their investments by existing legislation ²⁰ . All investors take part in international initiatives that to various degrees ask for ESG disclosure.

Table X. Disclosure	requirements	of Article	173-VI	and its	implementing d	lecree
1 4010 11. 10100100410	requiremento	01 11111010	110 11	and no	imprementing e	100100

¹⁹ Text exerts from the English translations of related documents provided by the 2dii (2015, 2016) – full texts are enclosed in Appendix F.

²⁰ It should be noted that this analysis finds the penetration of these factors into actual decision making to be rather shallow; see section \mathbf{X} . But for the purpose of reporting on ESG issues in line with current common practice, investors seem well equipped.

Exposure to climate- related risks	"a general description of the internal procedures of the entity to identify the risks associated with ESG issues, a general description of risks identified, and the exposure of its activities to these risks" – i.e. descriptive text ²¹ .	Varying. Asset owners represented in this study are among the top 15 in the Asset Owners Disclosure Project's 2017 climate risk index. Asset managers appear to be aware of the issue, but respond to it mainly through the use of ESG criteria as mentioned above. Scenario analysis does not seem to be widely implemented.
Current climate impact of funds	"measures of past, current or future emissions of greenhouse gases, directly or indirectly associated with emitters included in the investment portfolio" – commonly interpreted as the scope 1 and 2 ²² carbon footprint of a portfolio	High. All investors in the study publish carbon footprints. Some have been doing that since 2007.
Alignment with climate objectives	"indicative targets it sets itself to assess its contribution [], a description of the consistency of these targets with the objectives adopted by the EU and with [] the national low-carbon strategy; actions to achieve these targets, including changes made in investment policy, divestment, engagement with issuers, increases in investments made in thematic funds, securities or assets of infrastructure contributing to energy and ecological transition; funds having a specific label, adhering to a charter or being part of an initiative in this respect; if applicable, its performance vs. these indicative targets"	Moderate to low. With the notable exemption of Mirova, alignment with objectives appears to be measured through GHG emissions and emission reduction targets, the share of assets managed with ESG screening, and the exposure to certain instruments such as green bonds.

Developed from 2dii (2015 p. 8) to include the findings of this study.

As the table shows, the legal documents related to the FCTR provide a very low degree of specificity in terms of how to approach the disclosure requirements. "*At the moment it is very unstructured: what to report, when, in which format*", acknowledges CRED researcher Liudmila Strakodonskaya. The 2dii believes the Government will increase the level of detail when the provision is set to be reviewed at the end of 2018:

We included [in the article] an obligation by the government to set indicative targets for the investors. They are obliged to form a view on the metrics that investors should use, and to set the benchmark themselves. This has been postponed to 2019, after the innovation period. (Stan Dupré, 2dii)

²¹ The TCFD is currently in the process of developing a framework for climate risk disclosure, due to be published in July 2017. This work might provide clarity regarding appropriate indicators for climate risk disclosure.

²² Scope 1 and 2 refers to operational boundaries for greenhouse gas accounting, as defined in the widely accepted Greenhouse Gas Protocol standard (The World Business Council for Sustainable Development and the World Resources Institute, 2001). Scope 1 refers to direct emissions from a company site, such as stationary combustion, while scope 2 covers indirect emissions from the production of electricity, heat, or steam directly purchased by the company.

Other actors explicitly expressed doubt that it will be politically or technically feasible to increase the requirements in less than two years (6, 8, 10).

Complimentary tools: Award and labels

In addition to the reporting requirements defined by Article 173-VI and its implementing decree, the FCTR includes two complimentary initiatives by the Government; the International Award on Investor Climate-related Disclosures, and a green label obtainable for funds: The Energy and Ecological Transition for Climate Label (TEEC). The International Award on Investor Climate-related Disclosures (2° Invest Award) was launched by the Environmental Ministry and the 2dii in June 2016. It appears that the 2dii again was the driving force behind this mechanism:

We came up with the idea to create a global climate disclosure award to motivate a bottom-up process for the emergence of best practice. In collaboration with the government, both the Ministry of Finance and the Ministry of Environment, we recruited an international expert panel made of all the [climate-themed] investor coalitions, policy makers, NGOs and representatives from the French government. We defined a set of criteria based on our interpretation of the law, but validated by the Treasury and the Ministry of Environment. (Stan Dupré, 2dii)

Dupré explains that the award was organised as a call for investors anywhere in the world to submit their draft disclosures and have them reviewed by an international expert panel assembled by the Ministry. The award received 30 applications; 11 of them were from French investors. The final award was handed out at a high-level OECD event in October 2016.

5.1.3 Reactions by actors

The success of a disclosure framework that is as open-ended as the FCTR relies on the degree to which the affected actors embrace it. Indeed, the open approach of Article 173-VI appears to evoke mixed feelings; "*This is so complex, and we are left alone. We are all struggling with how to do this*", Jacky Prudhomme of BNP IP says. The Article was followed by an implementation decree meant to specify the disclosure requirement in greater detail, but this document too appears vague to the interviewees (1, 2, 3, 5, 6, 8, 9, 10). It is apparent, however, that the vagueness of the texts is somehow appreciated by the actors. "*It's a clever law because it doesn't tell you how to disclose, it just tells*

you to do it", upholds Grégoire Cousté of the responsible investment forum FIR. A similar position is expressed by Pauline Lejay of ERAFP: "I think the law is pretty good because it is not too prescriptive". Liudmila Strakodonskaya from CRED considers the open-endedness both a limitation and an opportunity: "The article is very loose, it's more guiding than demanding. That is the problem and the solution at the same time". There seems to be a consensus that the methodology available for climate-related disclosures at the moment is inadequate, and that it is a good idea to keep all doors open for developments in this field. Some also trust that the standard to be proposed by the TCFD in July 2017 will constitute a leap in the development (7, 13).

Even though the current level of requirements in Article 173-VI is low, a few interviewees report having experienced negative responses to the provision – notably from other organisations than their own. "The insurance sector was pissed off by this document. They say they already integrate climate change properly in their models. With all this attention toward the topic, their methods were exposed as fragile", conveys Jacky Prudhomme of BNP IP. A similar stance has been observed in smaller investor organisations by Grégoire Cousté from the FIR: "The smaller investors who do not have expertise in this field see this as just another bothersome regulation, they think they have too many constraints already". These negative responses reported (second-hand) seem to revolve around concerns of investor autonomy and burdensome regulatory constraints. The range of reactions by financial actors may be summarised in the words of Ladislas Smia from Mirova: "Some people see this as a new regulatory pain in the ass that is not going to change anything. Others are more open. There are very different reactions".

5.2 What kind of institutional structures does the FCTR represent?

The second research question of this study is concerned with the institutional structures that may be identified in relation to the FCTR. The next section responds to this question by analysing different aspects of the FCTR that may be considered institutions, or institutions in the making. The section is divided in three, guided by the appearances of institutions defined by Vatn (2005 p. 6): norms, conventions, and formal rules.

5.2.1 Strengthening norms

"The effect this law has, is mobilisation", states CRED researcher Liudmila Strakodonskaya. This view appears to be shared amongst many of the interviewees (2, 3, 5, 6, 7, 8, 9, 10). If mobilisation is the most tangible outcome of a policy, does it then have any governing capacity? This analysis finds the 'mobilisation' aspect to be an important feature of the FCTR. As Strakodonskaya points out, "*reporting should be a result of the things you do before reporting*". In other words, setting climaterelated issues on the agenda of the investors is a necessary first step for the produced disclosures to have any substance at all.

A 'mainstreaming' effect is mentioned by several participants (2, 3, 7, 9). By this, they refer to a process of more and more 'mainstream' (i.e. not ESG specialist) funds considering issues related to climate changes. Although most large financial actors in France already had had ESG and 'footprinting' on their agenda for a while, the FCTR forces *all* financial actors to consider these issues even if they decide to 'explain' instead of disclose.

"Some actors have to report even if they were not sensitive to this issue. They can report 'we do nothing', but then they would have to ask their boss 'do you agree that we do nothing?' and that can maybe start some processes?"

(Pauline Lejay, ERAFP)

In a similar vein, Anne-Claire Abadie of Allianz GI remarks that "*it forces people to ask themselves why does this matter to us?*". Jacky Prudhomme of BNP IP believes that "*with this, ESG and transparency on voting becomes mainstream*". There is a general view amongst participants that the legislation raises the bar for what is the 'mainstream' level of consciousness towards environmental and climate-related issues. "In a while, I believe ESG integration will be the standard for everybody. Conviction-based SRI will be the new SRI", states Ladislas Smia of Mirova. Because the disclosure requirements of investors necessarily 'trickles down' into more information asked for from the investee companies, the FCTR also contributes to increased awareness of climate-related issues in the issuer companies.

"When you talk to issuers about climate change now, you will see that the topic has spread to the top management. Before, you had the sustainability people who were able to talk about this, and nobody else. Now you can have a CEO or even a CFO talk about climate. Even the CEO of Tota²³l!" (Anne-Claire Abadie, Allianz GI)

An important aspect of the norm building effect is that the top management of organisations are now involved in the organisation's work on climate-related issues. Anne-Claire Abadie, who is an SRI portfolio manager at the French branch of the asset management division of Allianz,

²³ French oil company; one of the largest ones in the world.

illustrates how Article 173-VI created awareness of climate issues all the way to the top management in Germany:

We realised internally that we had no common approach to the issues that were raised in the law, even if the law does not apply to us directly. The department in France was quite prepared, but everyone else were far from that. We started discussions that involved portfolio managers, risk analysts, compliance, and the top management.

(Anne-Claire Abadie, Allianz GI)

For Allianz GI, these discussions in fact resulted in an internal reshuffle and the appointment of a Head of ESG position "to take care of our public positions and coordinate the way we think about ESG. We also have a Head of ESG research and a dedicated ESG department now." Similar stories are told by other participants: "Because of these requirements, we are making new connections between the branches internally. We have a more and more developed climate change strategy, backed by the CFO", says Jacky Prudhomme of BNP IP. "Climate is moving upwards on the agenda, and in the hierarchies", Abadie from Allianz GI observes. For some organisations, however, it appears that because the legislation did not require them to do anything they did not already do, Article 173 has had little norm-building impact within the organisation (8, 9).

For us, I would not say this has impacted the organisation at all. All the research and all the information was already in place. The top management is already engaged in these issues. We participate in a number of work groups [on climate-related issues]. (Mickaël Hellier, FRR)

The findings show that activating asset owners as disclosers, not only users of asset managers' disclosures (as was the case with the Grenelle II provisions), is a clever development. Extending the disclosure requirements to the entire investment chain, from asset owner to investee company, increases the demand for disclosures and the call for higher-quality data. Several interviewees mention that this increases the competition between asset managers and forces them to take these issues seriously (2, 3, 9). These dynamics between asset owners and asset managers, as well as civil society, makes this case of disclosure particularly interesting,

"This is quite different from other transparency policies such as pollution disclosure. This kind of disclosure has a very specific target group that has a vested interest in using the information."

(Richard Perkins, Grantham)

Accelerating norm development

There appears to be a general impression of the investors represented that the internal dynamics between asset owners and asset managers, and the competition between asset managers, is driving the norm generation. However, mechanisms such as the disclosure award and external reviews by third parties provide leverage that may speed up this process. Some civil society actors have indeed pledged that they will contribute to the development of good practices by providing a review of published disclosures. This is only to a certain degree known amongst the investors participating in this study; some of them mention 'rumours' that the WWF will be conducting a review of published materials (2, 3, 6). Jochen Krimphoff of WWF-France confirms that they will be undertaking a survey of disclosures, but it seems like they want to keep a low profile of the survey until it has been carried out. One possible reason for this is to avoid 'tailored' disclosures. Krimphoff also mentions that Novethic, a research centre subsidiary to the Caisse des Dépôts will be doing a separate survey but this information was not known to the investors in this study. Furthermore, Alexandra Bonnet of the Environmental Ministry informs that the Ministry has also set up a committee that will follow up the published disclosures, but this did not appear to be common knowledge amongst the interviewees in this study.

The International Award on Investor Climate-related Disclosures (2° Invest Award) provides another mechanism to speed up the development of norms. "*I have heard people talk about 'did you see who won it?*'. *It has released some friendly competition*", says Liudmila Strakodonskaya of CRED. The 2dii and the Environmental Ministry has released an overview of what they consider the best practice of the submitted disclosures for the award. Such a guide appears to be welcomed by the investors in this study, although Stand Dupré of the 2dii upholds that not all investors were pleased with the initiative:

We received a lot of lobbying against the award because it was intended to create a best practice frameworks that would put pressure on investors. We actually ended up in a meeting with one of the large investor coalitions on climate, who was very actively lobbying against it. But then they realised it was probably not a good idea to see their name in the press, related to lobbying against this award, so they finally stepped back.

(Stan Dupré, 2dii)

Finally, the two fund labels launched by the Government, the public SRI label and in particular the more demanding Energy and Ecological Transition for Climate Label (TEEC) could serve as a 'carrot' for considering climate-related issues and producing high-quality disclosures to document this. Only the latter is mentioned by the interviewees. The requirements for the certification appears to be judged as rather high by the participants. Of the asset managers in this study, only Mirova says it has received the label for some of their funds. "*The label creates robustness. It is a proof that what we do is really green*", says Ladislas Smia from Mirova, who also admits their "*lobby person*" has pushed for this kind of instrument to be launched. "*I hope we go more in that direction of assessing performance, this trend of more and more reporting has to stop somewhere*", he adds.

Given the absence of binding requirements in the current configuration of the FCTR, the development of strong norms is a prerequisite for the FCTR to have any effect. The findings reveal that norms of greater ESG awareness and compliance with the law are emerging, and that the dynamics between asset owners and asset managers is a driving force behind this. External leverage such as reviews by researchers or civil society actors can accelerate the process, but the effect of this is too early to judge.

5.2.2 Developing conventions

There appears to be universal agreement amongst the different stakeholder groups interviewed for this thesis that the lack of commonly accepted methodology is a major obstacle to a constructive development in disclosure. The interaction between investors, political actors and civil society actors is constrained because no common metrics or indicators exists.

"This kind of disclosures would be a great tool for us to compare asset managers' performance, but there is of course a problem with the methods, they are very different at the moment." (Pauline Lejay, ERAFP)

The value of consistent, thus comparable, metrics and indicators to investors is also highlighted by others. "Investors need to compare. If they cannot compare to a benchmark or a competitor, they don't know where they are", Liudmila Strakodonskaya from CRED says. Her view is shared by Martin Skancke in the TCFD: "Investing is about choosing between options. For climate-related information to be relevant to an asset manager or an asset owner, it has to allow for comparing between actors". An important aspect of the FCTR, then, is that it deploys an extensive methodology development process. This is also appreciated by Martin Skancke of the TCFD: "When disclosure requirements are introduced, a development in methods will follow". Several interviewees mention that they are involved in research or development projects on ESG analysis, climate risk assessment, and methodology for documenting this (1, 2, 3, 9) and some of them are even cooperating, at least informally, with peers from rivalling organisations.

"We all advantage from having standards because then you can compare. I look at what peers are doing, but it is more collaboration than competition at this stage because there is so much to do [...]. We have made our research open source, freely available to everyone wo might be interested. At some point we'll have to make it paid, but for now we keep it that way." (Anne-Claire Abadie, Allianz GI)

Similar approaches can also be found in organisations outside this study, the FIR confirms:

"We know some actors like Sycomore [asset manager] have put their methods in open code and regularly meet with peers from other companies to see how they can develop. The dynamic this has fostered is very positive!" (Grégoire Cousté, FIR)

The methodology problem and the need for an open-code approach has also been addressed at several conferences that has been attended as a part of the data collection for this thesis. Specifically, a "*Wikipedia for impact indicators*" was called for at the 7th annual Green Bonds Europe conference (XXII). Mirova, that is widely considered one of the leading actors in climate-conscious investments, have embarked on their own methodology development process, with the help of an external consulting firm:

"We have launched a cooperation with Carbone4 to create new methodology based on life-cycle assessment. But even that is not a sufficient measure; a wind turbine will end up at about net zero emissions, which is basically the same as a good shampoo... We also look at indicators for avoided emissions, and the use of energy transition scenarios. This requires a lot of assumptions. Even if we use the best available, it is not robust enough."

(Ladislas Smia, Mirova)

It appears from the interview data that although most of the financial actors in this study are involved in methodology development, many are waiting for a solution to be provided externally. 2dii and the TCFD are each mentioned multiple times in this context. Both of them are indeed working on more detailed reporting frameworks: the TCFD will release their proposed reporting guidelines in July, 2017. Those will be "voluntary guidelines, but we hope that they will be adopted by the member states of the G20", the TCFD states (XIX). 2dii, on their side, are continuing their work towards their own set of guidelines:

"Based on the submissions for the award, we have created a best practice guide. Now, the idea is to spread that. Hopefully we will be able to turn it into mandatory guidance. The first, intermediary step is to work with the Paris Green & Sustainable Finance Initiative, we have set up a working group to make voluntary guidelines that can be endorsed by the Government at a later stage." (Stan Dupré, 2dii)

Both 2dii and TCFD ensure that their work is compatible with the other's, and this also seems to be the general impression amongst the interviewees. Instead, there appears to be a possible conflict between 2dii and the TCFD on one side, calling for comprehensive measurements of climate impact and climate risk, and institutional investors and service providers who are comfortable with their current methods on the other side.

"I think there will be a "fight" between institutional investors already having their own ways of doing this, and the 2 degrees investing initiative which was a key player to push for this article and tries to link their recommendations to the TCFD. Their [2dii] approach is much more asset-based. They are not looking at all at CO₂ data, they are looking at what is the asset mix and where is the capex spent. They look at the mix of investments needed in a two degrees' scenario, and then they see is a portfolio is aligned. The current asset mix is not so clean, so they look at where the companies go, not where they are today or where they used to be" (Erwan Crehalet, CIB)

As Crehalet points to, the core of this misalignment is the use of CO₂ emission data and intensity (often referred to as footprinting by the interviewees) as a proxy for performance in various climate-related issues. The shortcoming of the footprinting approach was brought up by several participants (1, 2, 3, 4, 5, 7, 9, 10, 11). Still, it should be noted, all investors represented use this type of indicator to measure their performance. "*There was a strong push by the asset managers, data providers and index providers to use the carbon footprint as an indicator. Our research shows this is not a relevant indicator to measure climate risk or alignment with policy*", explains Stan Dupré of 2dii. This can be illustrated by stories from the asset managers: "The specialised climate fund I manage has a higher footprint than the benchmark because I have selected some utility companies where I can really see a change in the business model and in the capex allocation, towards cleaner solutions. But these companies will still be utility companies, they will still have higher emissions than a media company or a finance company that looks 'clean' [in terms of carbon footprint] even if they do nothing for the transition."

(Anne-Claire Abadie, Allianz GI)

This point is also clear to CIB, an intermediary in the financial landscape. "It [carbon footprint] has very limited use. A specialist fund investing only in solutions [to the climate problem] will find that their footprint is higher than the benchmark. It can backfire if it is used in large scale", warns Erwan Crehalet, climate risk analyst at CIB.

The interviewees' scepticism towards carbon footprints and carbon intensity (amount of CO_2 equivalents emitted per monetary unit invested) can be summed up in five points. First, as Abadie touched upon in her previous statement, the GHGs emitted by a company does not necessarily reflect whether this company represents the 'problem' or the 'solution'. For example, an oil company can have moderate direct emissions (the majority of emissions associated with fossil fuels comes from combustion, which in most cases happens within the reporting scope of the companies consuming the fuels), while a company that produces district heating from waste incineration would have high emissions. And many companies, for instance office-based service providers, will have very low emissions regardless of how well their business model fits into a low-carbon future. This relates to the second point; that carbon footprints or intensity measures are not useful proxies for climate-related risks. Some aspects of climate risk, notably the risk of increased carbon pricing, of course relate to the emissions from a company. But other types of climate risk such as the risk of flooding, or supply chain disruptions, or transition risks like lower demand for a company's services, are not reflected in this measure. The 2dii has published a discussion paper targeting this misconception specifically.²⁴ The third point is that of reporting boundaries: an attempt to produce a truthful GHG footprint of a portfolio will necessarily include the so-called scope 3 emissions, which are indirect emissions from goods and services consumed by investees. However, including scope 3 will in many cases make the footprint considerably larger than that of a portfolio which only measures scope 1 and 2 emissions; this incentivises companies and investors to keep the suboptimal scope 1 and 2 reporting. Fourth, a

²⁴ See 2 degrees investing initiative and Grizzly RI (2015). Carbon Intensity \neq Carbon Risk Exposure.

reduction in carbon intensity is the commonly used indicator for progress in carbon footprint performance. This can quite easily be achieved through what Anne-Claire Abadie of Allianz GI describes as "*tweaking the fund a little bit*": for instance, replacing a utility company with a media company. And fifth, carbon footprinting is, as CRED researcher Liudmila Strakodonskaya puts it, "*an attempt at a unified approach, although with a 100 different methodologies*". Even though the different actors have relatively well aligned ideas about what a carbon footprint is, there is still a wide spectrum of methodologies available and comparability is limited.

Some of the interviewees appear to perceive carbon footprints and –intensity as adequate 'starting point' indicators while they are waiting for something better (3, 6, 8). However, others advise that 'locking in' these types of indicators can in fact also lock funds into unsustainable assets. "Some large institutional investors like [large pension fund, name omitted] have set portfolio decarbonisation targets that more or less locks them, and then their asset managers too, to this approach. They have to continue to report on this", Erwan Crehalet from CIB warns. This is further supported by CICERO researcher Christa Clapp: "Everyone wants a figure for CO₂ reduction, but this focus on emission reductions doesn't give us the transition we need. It does not get us the investments we need in the long run, the solutions".

To summarise this section, Article 173-VI asks investors to disclose their performance in four main categories of climate-related issues: the integration of ESG criteria, exposure to climate-related risks, current impact of funds, and alignment with climate objectives. The findings show that for the time being, 'carbon footprinting' is the only universal approach to measuring this, although with a wide range of methodologies. A further development of indicators and metrics are welcomed by the actors represented in this study, who also to a varying degree contribute to advancing this field.

5.2.3 Defining rules

We may now establish that certain norms of 'climate consciousness' are emerging in the investor organisations represented in this study and in their circles, and that the FCTR has accelerated the development of conventions in form of commonly accepted metrics and indicators to measure and disclose such consciousness (although there is a long way to go). These are both prerequisites for climate-related disclosures to have any substance. This final section responding to the research question about governance structures is concerned with the rules of information exchange the FCTR defines.

The cornerstone of the FCTR is Article 173-VI, the legal provision that instructs investors to "mention in their annual report, and make available to their beneficiaries, information on how their investment decision-making process takes social, environmental and governance criteria into consideration, and the means implemented to contribute to the energy and ecological transition". However, the implementation decree also includes the option that "if an entity does not include ESG criteria or if it does so only partially, it should justify why", according to 2dii's translation of the decree (2dii, 2016). In practice, this requires investors to 'comply or explain'. This approach is meant to recognise that not all investors have started to consider issues such as ESG and climate risks, or have sufficient information to publish meaningful reporting. Following this, it is "*not really mandatory to disclose*", in the words of Alexandra Bonnet from the Environmental Ministry. Still, all investors participating in this study have chosen to disclose according to Article 173, even though two of them (2, 8) are not actually regulated by the provision due to their legal status. It appears to be a common view that choosing to 'explain' is not really an option for major actors (2, 3, 6, 7, 8, 9).

"I think they will continue to have the comply or explain approach. It works. It is hard to tell the public that you don't have an assessment of physical risks." (Mickaël Hellier, FRR)

"You can say the requirements are stupid and that this does not make sense from a business perspective, and explain that this is your position. But that is not so easy to defend right now." (Anne-Claire Abadie, Allianz GI)

While there seems to be consensus among the investors in this study that publishing a disclosure is practically mandatory even with the 'explain' option available, they appear to consider themselves rather free to choose how and where to release the information. Publishing separate documents for climate-related disclosures appears to be the most common approach (2, 8, 9). Only one of the investors in this study, ERAFP, has included the disclosure in their annual report. Jacky Prudhomme of BNP-IP informs that they intended to include their climate-related disclosure in the annual report, but that it was later moved to the appendices because their auditors were not equipped to review it. *"There is some flexibility in terms of where to publish"*, confirms Alexandra Bonnet from the Environmental Ministry.

As Prudhomme points out, only the main document of an organisation's annual report is normally subject to audit. Several participants mention that audit or some other type of external assurance would enhance the integrity and thus increase the value of climate disclosures (3, 7, 10). For the time being, however, none of the interviewees see the auditor industry sufficiently prepared to take on this task (ERAFP could not conform that their section on climate-related issues in the annual report has been audited). "We tested our report with the 'big four' [audit/ assurance companies²⁵]. They were completely unequipped and very passive", says Jacky Prudhomme from BNP IP. Grégoire Cousté of FIR again points to the lack of universally recognised indicators in this context: "Subjecting the disclosures to audit can be useful, but for that to happen I think the indicators have to merge". And even if there were unified indicators, Liudmila Strakodonskaya from CRED highlights, there are at the moment no mechanism in place to sanction organisations who misinform: "Investor reporting has to rely on corporate audits, but there are no procedures if the reported metrics aren't true". One could perhaps expect a 'watchdog' mechanism to be a key element of a disclosure regime; this does not seem to be the case with the FCTR for the time being. The Award appears to be the closest thing to a monitoring body in place at the moment, and this competition is based on voluntary submissions. Furthermore, because its submission deadline was almost half a year before the deadline for the actual disclosures (30 June 2017), it is possible that some actors were not able to participate simply because they were not ready. It appears that some actors are waiting for a new chance to submit next year; however, Alexandra Bonnet from the Ministry regrets that they might not be able to repeat it: "All this [the Award and the labels] is expensive to run... The award, I don't know if we can do it again this year".

A disclosure regime that is not monitored, Stan Dupré of the 2dii argues, is not executed: "At the moment, there is no one in charge of monitoring this. It is not really implemented. The market authorities do not touch it; they have bigger fish to fty." One important point here, mentioned by Liudmila Strakodonskaya at CRED, is that Article 173-VI is formally part of the French financial and monetary code. "That is the key of future development", she underlines: if the authorities decide to remove the 'comply or explain' principle in the future, they will have enforcement tools similar to those of corporate financial reporting. It is also worth repeating that Alexandra Bonnet from the Ministry informs that they have "set up a multi-stakeholder committee that will follow up", although none of the participants in this study mentioned this. It should be noted that the discussion with Bonnet took place several weeks after the other interviews were conducted; this decision might have been reached in the meantime. In lieu of a formal monitoring body, the WWF has volunteered to conduct a review and some kind of grading of the published disclosures.

²⁵ Deloitte, PwC, EY and KPMG are commonly referred to as 'the big four'.

point, and there are few details known to the disclosing actors represented in this thesis. Regardless, the WWF assessment was mentioned several times during interviews; the interviewees seem to consider it a serious feedback mechanism. *"The pressure will arrive when the [disclosure] report is published. And especially when the WWF publishes their assessment"*, says Pauline Lejay of ERAFP. She also assumes the assessment can be of good use to them as asset owners: *"We will study it, perhaps use it to benchmark asset managers internally"*. Jacky Prudhomme at BNP IP is however not convinced that a 'naming and shaming' mechanism by a third party will be easy to construct, because of the comply or explain-design: *"Should shaming then be only for those who did not provide disclosure, or also for those who tried but not hard enough?"*, he points out.

In sum, the formal rules established by the FCTR seem to be rather weak. For now, it seems like review initiatives voluntarily taken on by third parties like the environmental NGO WWF are the most tangible feedback mechanisms in place. Even with relatively weak formal monitoring mechanisms and no sanctioning tools in place, it appears from the findings that many actors consider 'cheating' to be risky. As Grégoire Cousté of FIR puts it: "*Lie and comply*'... *Someone will always try to do that, but the risks are enormous*".

5.3 Which positive impacts and the shortcomings of the FCTR that may be identified at this stage?

The third research question, and the last one to be dealt with in this analysis, is concerned with the positive impacts the different stakeholder groups see from the FCTR so far, and the limitations that have become apparent to them. This will function as a foundation for the recommendations that are presented in chapter 6.

5.3.1 Impact

As was mentioned in the section on norm development, the results from this study show that mobilisation and mainstreaming of thinking around climate-related issues are regarded the most substantial impact from the FCTR at this stage. Some interviewees use the term 'starting point' (2, 4, 8), which could imply that they see the current transparency regime as a spring board for something bigger.

"This is a good starting point of a long-term movement. We go in the right direction. But it takes time to change, and we have to accept that. Of course everybody would like to be aligned [with climate objectives] right now, but we can't." (Mickaël Hellier, FRR)

In general, the interviewees appear to be patient and not expect this type of policy to have any immediate effect: "*The law did not come too early because it was time to wake up, but it is too early for it to produce any useful results*", says Liudmila Strakodonskaya at CRED. Some interviewees are careful to underline, however, that they believe the FCTR has sped up some processes that were already going on, but slower and less widespread. "*This kind of regulation makes things go faster*", Ladislas Smia of Mirova states. Furthermore, there seems to be a common perception that 'what gets measured gets managed', as that old proverb goes. Measuring an investor's impact on climate and its contribution to a solution is the first step in actually reducing the impact and bringing about the solution.

"Some say there are no means in this, no results. I am convinced that if you disclose your policies, that is the first step of doing something because it allows people to engage with you on those terms." (Mickaël Hellier, FRR)

As will be returned to in section 5.3.2, however, there are contradictory views on how automatic this relationship between disclosure and action really is in the current situation. However, Stan Dupré of the 2dii has ambitions for the future employment of the information disclosed.

"One of our intentions with the French law was to enable soft negotiations between the Government and institutional investors on contributing to the Paris Agreement. This is also what the UN wants: they want to involve non-state actors in the implementation of the climate goals, to translate these goals into private sector goals. It could be something similar to what the EU commission does with car producers: they set targets in collaboration with the companies, then companies have to comply or get a tax. We think the finance sector will be central in this because of their influence on issuers [companies] and their ability to deliver financing."

(Stan Dupré, 2dii)

In addition to this idea about breaking down climate goals to company level and using disclosures to measure compliance, Dupré airs the concept of climate-oriented frameworks for tax reductions. As mentioned briefly, Dupré has previously drafted a proposal for a tax reform together with the former Prime Minister's think tank, of which the leader is now engaged in President Macron's economic reform program. "*That would be a dream*...", admits Alexandra Bonnet from the Ministry when confronted with this idea: "*Many people talk about it. Let's see*."

Another impact that can be identified in the findings is an increased awareness of climaterelated risks. This awareness can probably not be attributed to the FCTR alone; the TCFD's work on climate risk disclosures is well known amongst the participants and was several times referred to as the 'climate risk task force'. "*The TCFD perhaps focuses more on systemic risks*. But they have the same intention [as the FCTR], says Grégoire Cousté at FIR. It is also natural to believe the awareness of climate risks is due to an increased understanding of the possible financial implications of these risks. And, not least, as Martin Skancke of TCFD points out, that the magnitude of these risks as increasing steadily:

"Risk is not static; for example, transition risks are becoming more material to companies as political responses to the climate changes become more likely. Now that we are beginning to see policies and measures that do 'bite', these risks become material to more actors." (Martin Skankcke, TCFD)

This awareness of climate risks has translated into some concrete research and development projects in the organisations represented in the study. For example, Anne-Claire Abadie at Allianz GI explain that they are trying to develop models that predict the future performance of companies given the different (mostly transition-related) climate risks:

"We have a two-speed process. One is to be broad, to fulfil clients' expectations. When that means making a carbon footprint, we do that, but we publish it with a disclaimer... Then we have our specialists who are working with finding more relevant ways to do this. We do research on stranded assets, we try to model the impact of possible regulations on the margins, the profitability, of a company. We try to model adaptability, the flexibility of business models et cetera, but this is not easy to apply widely. At the moments these things are pilots, very specific studies. It is still on the side of ordinary risk assessment. We have had a research pilot to understand the mechanisms. But then in the day to day portfolio management, there is a lot of pressure. We use the pilot to see how the time you spend on this [risk analysis] pays off"

(Anne-Claire Abadie, Allianz GI)

This development has also been witnessed by CICERO. "10 years ago you had financial research and then you had environmental research, the two were not connected. Now they are", Christa Clapp observes. Jacky Prudhomme of BNP IP highlights that this development demands organisations to have the right competence: "This requires all the [investor] companies to have specialists in-house". Others talk of a partition; larger investors are feeding plenty of resources into research and development of methodology, while the smaller ones resign and simply hire a consultancy firm "to do a quick carbon footprint", as Ladislas Smia of Mirova put it. This seems to annoy some; "everybody should play the game", says Jacky Prudhomme at BNP IP. But as pointed out by Jochen Krimphoff from WWF, having the smaller investors on board is not necessary if the aim is to reduce systemic risks:

"So what if it is only the 'usual suspects' [asset owners and managers already active in this field] that comply with the law? It's the big fish that are important to reduce to systemic risks." (Jochen Krimphoff, WWF)

Generally, it seems like the participants have accepted that climate risk is something they will have to take into account in the years to come, and that climate-related risk disclosure will be required from one authority or the other. *"The FSB task force [TCFD] is probably going to swallow all this, but then at least it was a good idea to be an early mover"*, Richard Perkins at Grantham Research Institute on Climate Change and the Environment envisages.

This increased awareness of climate-related issues and risks has to some extent brought about changes in the investor organisations represented in this study. Two asset managers (2, 3) report having made new connections between the 'climate people' and the 'financial risk people' internally. "*The target group for our disclosure was our French clients, but actually, I think the most responding group of readers is the employees in our own organisation. It has been read internally quite a lot*", Anne-Claire Abadie from Allianz GI explains. Her organisation is stressing the training of all asset managers in ESG and climate risk questions. As is already mentioned, Allianz GI even did a major restructuring of their organisation to be better fit to handle climate-related issues. An interesting observation in this context is that some of the investors talk about changes in the ways they see themselves and their role in society, as illustrated by Jacky Prudhomme of BNP IP: "*This brings about new ways in which we consider our duty as investors*". And, he continues, *"it becomes clear that we have to update our definitions of fiduciary duty*". As we will return to in section 5.3.2, the issue of fiduciary duty is in fact one of great importance, but also a major obstacle, to the development of sustainable finance practices.

One final point that should be mentioned an an impact of the FCTR, is the international awareness this policy has created. Not only has the legislation had the wheels spinning inside the non-French branches of international asset managers, as with the case of Allianz; it has created a lot of attention in the international finance community. The topic was, for instance, brought up at several conferences that was attended in the data collection phase of this project even if the French case was not formally on the agenda. At the 7th annual Green Bonds Europe conference, Citi director Philip Brown called France "*everybody's hero in green finance*" (XXI). It is no secret that the French government (at least the previous one) saw a potential for spreading this transparency regime across the French borders. The Award and the two state-backed fund labels were intended for an international target group, as explained by Alexandra Bonnet from the Environmental Ministry: *"With the label and the award, we tried to reach out internationally. The award was very international, we had submission from different countries. For the label, we also want more international <i>investors*". The cooperation between the authorities and the 2dii has also expanded to the international stage:

"The government has commissioned me to represent France in the ISO process²⁶ to develop an international ISO standard for climate and the finance sector. I am co-chairing the working group with the UNFCCC. [...] I am also a member of the EU Commission's expert group on sustainable finance. There is consensus in the group to extend Article 173 to the EU in the context of the nonfinancial reporting directive."

(Stan Dupré, 2dii)

To conclude the findings presented in this section, the impact of the FCTR so far can be summarised in terms such as 'mobilisation' and 'mainstreaming', in France and internationally. The FCTR is regarded one of many elements in a wider, international development towards a deeper conscience in the finance community about climate-related impact and risks. The actors represented in this study seems to be embracing this development and seeking to contribute to it through various research and development programmes.

5.3.2 Limitations

The findings do show that the FCTR in its present composition also has considerable shortcomings, given that the aim of the policy is to contribute to bring about an energy transition. This section will present some of the key limitations mentioned in the interviews.

²⁶ ISO14097: Framework and principles for assessing and reporting investments and financing activities related to climate change.

Unclear disclosure requirements

Several interviewees brought up the lack of clarity in disclosure requirements as a major problem (1, 2, 3, 5, 6, 10). While the Article and its implementing decree list a number of issues to be mentioned in the disclosure, they provide very little guidance as to how these issues should be disclosed. Investors are de facto allowed to to whatever they want, as long as they explain the choices they make. Some openness in terms of methodology is clearly an advantage to investors who already did some kind of climate-related disclosure, as it allows them to keep their practices. It is furthermore obvious that the many of metrics and indicators that are used today are considered insufficient by the actors. In that sense, it is wise to keep the methodology requirements open to allow for innovation. However, it is apparent from the findings that some actors are quite overwhelmed by all this. To repeat the words of Jacky Prudhomme of BNP IP: "we are left alone". He explains that BNP IP has contacted the Ministry of Finance for guidance, but had to leave empty handed: "We asked the Ministry [of Finance] for scenarios we could use, or a good provider of metrics. They said their job was to create a framework, not to tell us how to implement it". Moreover, the lack of consistency in the metrics, indicators and scenarios employed by the actors makes comparing practically impossible. To revisit the words of Martin Skancke of the TCFD: "Investing is about choosing between options. For climate-related information to be relevant to an asset manager or an asset owner, it has to allow for comparing between actors". In other words; if the disclosures do not allow investors to compare investment options, and compare their own performance to others, investors will have very limited self-interest in the information disclosed.

Some participants voice concerns that while waiting for the right indicators, the FCTR may lock in wrong indicators. The most prominent example of this is the carbon footprint/carbon intensity indicator. Erwan Crehalet at CIB mentions a major asset owner that has committed to reducing carbon intensity, which means they are locked to this indicator for years to come. This commitment may of course result in an actual reduction in GHG emissions, but as Stan Dupré of the 2dii reminds us, it may as well result in no real changes at all: *'Those carbon footprint targets that you reach by changing allocation of a portfolio a little bit... I just cannot see that it has an influence on anything''.* Some interviewees stress that the call for carbon footprints did not come from the Ministry; this indicator is not really considered a central element of the Article or the implementation decree (1, 2, 5). This has also been clarified by the Ministry in an information meeting, Erwan Crehalet from CIB recalls: *''It is mentioned in the law, but only in an illustrative way. It is definitely not a recommendation*''. Regardless of the initial intention, the carbon footprint approach has been established within the investor organisations, as illustrated by Allianz GI:

"Internally at Allianz, I still hear people call it 'that law that requires us to publish carbon footprints'. When I say that maybe we should think of other indicators or other ways to report how we are positioned, they say no, it requires us to measure footprint. It was a mistake of communication at the beginning, and now it is very hard to change this"

(Anne-Claire Abadie, Allianz GI)

Some participants suggest that consultancy firms have helped establish the widespread use of this indicator (1, 2, 9, 10). "*My big concern is that consultancy firms took the opportunity to push for carbon footprints*", says Abadie from Allianz GI.

Another much-debated technicality regarding the disclosure is the use of scenarios. Even though it seems only a few investors have looked into how to measure their portfolio's alignment with reference scenarios (such as a policy scenario limiting global warming to two degrees) at this point, there are discussions about which scenarios to employ. "*Everyone uses the scenarios from the IEA, but the hypotheses they apply are wrong, they assume too much fossil fuels*", says Jacky Prudhomme at BNP IP. It appears to be the impression of many that investors generally choose the reference scenarios that make their portfolios look better. In that case, scenario analyses may conceal rather than reveal transition risks. CICERO supports a discussion around the use of scenarios, but for slightly different reasons:

"We think it is important to look closer at the scenarios everyone uses, like the scenarios by the [IEA] World Energy Outlook. Of course it is important to apply two degrees' scenarios, but it shouldn't be limited to two degrees, especially when considering physical risks. Our view is that unfortunately, two degrees' warming is not the most likely scenario, we are more likely headed for something like three degrees. This is a challenging topic to communicate; we still want investors and companies to aim for two degrees, but we have to recognise the tremendous changes that needs to be made to reach it. So we say two degrees is an important signal, but stress testing should also include higher scenarios." (Christa Clapp, CICERO)

CICERO's point is that different scenarios should be employed to analyse different types of risk; measuring the degree of alignment with a two-degree scenario can say something about the exposure to transition risk factors, such as carbon pricing. But as CICERO considers a two degree-scenario to be rather unlikely, they warn that analysing physical risks according to a scenario where warming is limited to two degrees may cause an under-estimation of the exposure to such risks. A related point is made by Liudmila Strakodonskaya at CRED: "The investors talk about climate risks, but the tools they use are mainly ESG methodologies and metrics". When no clear distinction is made in the Article between the disclosure on exposure to climate risk and on the contribution to reducing climate risks, investors may end up confusing the two in their quest for simplification. "They try to standardise, but the more standardised, the less prefund", Liudmila Strakodonskaya at CRED warns.

Low visibility of disclosures

Although the implementation decree of Article 173-VI states that the disclosed information should be "mentioned in the annual report", investors are in reality free to choose how to publish their disclosures as the law is not currently enforced. A challenge in this regard, brought up by Stan Dupré of the 2dii, is information accessibility. "One key point of the law is that disclosure should be done in a way that is understandable to the public", he says. This means both that the information should be technically comprehensible by a citizen, and that she should be able to find it. Alexandra Bonnet from the Ministry admits "it would be nice to have that [the publishing medium] streamlined. And also have a place, a platform where we can collect all the disclosures to make comparing easier. It is not easy to find all the reports in the web pages today". However, this does not appear to be major concern of the investors in this study. "I am not sure the disclosure will be useful for ordinary people, you won't understand much unless you are an expert like us", says Mickaël Hellier of FRR. "These reports… Does anybody read them?", Ladislas Smia from Mirova asks. Many seem to simply assume their disclosures will not be used by others. But as Stan Dupré of the 2dii points to, a disclosure scheme is not likely to bring about any changes if the information is not used: "You disclose, nobody reads the information or asks questions. Nothing bappen.".

Weak link between disclosure and action

This brings us to the next problem with the FCTR; the weak connection between disclosure and actions. "*The final goal, I think we all agree, is to reallocate our money toward what we think is compatible with a low-carbon world*", Anne-Claire Abadie from Allianz GI says. However, neither she nor any of the other interviewees see this as an effect of the FCTR as it is implemented today. Stan Dupré of the 2dii expands: "*The article demands investors to measure their impact, but doesn't say anything about what to do with the impact. It misses the link between disclosure and action*". If the ultimate goal of the transparency regime is to help direct investment flows into renewable energy, clean technology and other 'solution'-type projects, interviewees are reluctant to deem it a success. This has several reasons, the findings show. The most prevalent explanation is that the information asked for is

not seen as explicitly decision-relevant for the investors themselves (2, 3, 7, 10). "*The way it is done so far, at least in our fund, it is not very relevant for investment decisions*", Anne-Claire Abadie of Allianz GI says. The FCTR and other initiatives on climate risk may have created awareness on climate issues, but this awareness does in most cases not seem to penetrate the established investment routines of the asset managers (again, Mirova is the notable exemption). This is again closely linked with the lack of consistent indicators.

Some interviewees suggest that the disclosure regime could have had a deeper impact on investment decisions if it was more focused on climate-related opportunities, not only risks (9, 10, 11). Martin Skancke from the TCFD argues that this follows from the government ownership of the disclosure scheme:

"Regulators tend to be most concerned about the risks, the downsides. [...] A climate-related disclosure regime should not only look at the downside of climate-related risks, but also include a systematic assessment of opportunities. It should disclose how climate policies are considered in strategic analyses and choices made. The standard we propose this summer explicitly emphasises opportunities". (Martin Skancke, TCFD)

Liudmila Strakodonskaya from CRED highlights that opportunities are even harder to measure than risks, and that there is no commonly recognised methodology to do so. Ladislas Smia of Mirova suggests a greater emphasis on disclosing governance practices rather than results; there are less cheap solutions (like carbon footprints) available when reporting on strategies and decision making procedures. Grégoire Cousté at FIR expresses a similar stance: "*This [climate issues] needs to be integrated in the investors' strategies, and then, in the reporting*". The current disclosure framework, however, mainly emphasises the end results.

Side-stepping structural challenges

Several of the participants brought up particular structural features of the mainstream finance sector, such as the use of indices for benchmarking and the short time frames used to measure performance, as constraints to more sustainable sustainable investments (1, 3, 9, 10). Stan Dupré of the 2dii conveys that *"the problem is that we don't really have a benchmark to measure the alignment of investments with public policy goals"*. A similar line of reasoning is voiced by says Jacky Prudhomme of BNP IP: *"I am not quite sure it [disclosure] will change the way we invest as long as we are enslaved by the benchmarks"*. He later expands:

"Most of the time, our products are benchmarked. The goal is always to beat the index. If we say fossil fuels belong to the past and exclude them, we have a tracking error from the benchmark, and the clients cannot track the risk. As long as the index makers don't decarbonise the indices, or we get rid of the index entirely, we will be suffering from tracking error." (Jacky Prudhomme, BNP IP)

As Prudhomme here explains, the performance of an investment (and of the asset manager who makes it) is measured relative to an index over a short period of time. As long as that is the only real indicator of performance, climate-related indicators are bound to be secondary information, as expressed by Liudmila Strakodonskaya at CRED: *"Financial performance first, everything else is subsidiary, that is why they don't want to spend too much time on this"*. It is possible to argue that issues such as benchmarking and time horizons are exogenous to the scope of a transparency policy, as they are not directly linked to an information problem. However, it is also possible to see these issues in relation to information disclosure, as illustrated by Martin Skancke in the TCFD:

"Investors have a two-fold role in the use of climate-related information: they can be users of the information disclosed by companies, at the same time they should themselves disclose the risks their portfolios are exposed to [...]. The main challenge is to establish incentive structures that attract those who make investment decisions to actually use all this information". (Martin Skancke, TCFD)

In other words, the information that investors have to collect and prepare for their disclosures can and should be of interest to themselves, but the incentive systems they work within (i.e. the indicators used to measure their performance) does not support this. While disclosures alone cannot fix this problem, greater transparency of the mandates given to asset managers and the methods by which their performance is assessed could be a contribution, the findings show. In its current configuration, however, the FCTR is not perceived by the participants of this study to challenge these structural features of the finance sector.

To conclude this section, the findings leave the impression that the FCTR has clearly had an impact in terms of creating awareness of ESG issues and climate risks. Several strains of research and development work has been embarked on in the investor organisations, fully or partially as a response to this. Within the actors represented in this study, we have even seen an example of a restructuring of an organisation in order to better meet the challenges related to climate-related issues. Nevertheless, in most cases, the impact appears to be more in the 'starting point' category. The success of the FCTR, given that its objective is to contribute to the energy transition, will be decided by what the actors allow it to become in the future. A key question in this respect is whether it is politically feasible to adopt binding legislation that is sufficiently demanding, if this is against the will of powerful actors such as the large institutional investors. We will leave this question to the further discussion of the findings, which is the next part of this thesis.

6 Discussion

This thesis seeks to explore to which degree the FCTR represents an institutional structure that may contribute to align investment flows with public climate objectives, which is considered a precondition to achieve an energy transition (Randers, 2016). In this chapter, the findings presented in the previous chapter will be reviewed in light of the theoretical context laid out in chapter 3. The chapter has three main parts. The first part revisits research questions 2 and 1 (in that order) through an assessment of the institutional structure the FCTR represents and the factors and actors that has shaped it. Then, the second part moves on to research questions 3 and a discussion of the strengths and limitations of the FCTR in context of the framework for effective transparency policies proposed by the Transparency Policy Project (TPP) (Fung et al., 2007; Weil et al., 2006). This discussion culminates in the third section of the chapter, which proposes a set of recommendations for climate-related disclosure frameworks aimed at institutional investors.

6.1 What characterises the FCTR as institutional structure, and why?

One of the research questions guiding this study was kind of institutional structure(s) the FCTR represents. This entails establishing an overview of the components of the transparency regime (the law, the label, the award) and investigating how these in practice constitute institutions governing investor behaviour. As with the analysis, the following section will be guided by Vatn's three functions of an institution: norms, conventions, and formally sanctioned rules (2005 p. 6f).

Norms

The norm building aspect was found to be an important feature of the FCTR. A main reason for this is, as pointed out by CRED researcher Liudmila Strakodonskaya, that "*reporting should be a result of the things you do before reporting*". If there is no attention towards climate-related issues in an organisation, there is little to disclose. The importance of climate-related issues have only recently begun to dawn on many mainstream investors, so for the time being, initiatives that escalate the attention towards these issues are valuable nonetheless. Vatn identifies three stages of norm internalisation: *externalisation*, in which a routine is established but belongs only to those who created it; *objectivation*, a phase in which the routines are observed by others as 'facts' independent of those who created it; and finally, *internalisation*, when the routine becomes the 'natural order of things' (Vatn 2005 p. 31). If we consider the appreciation that "climate change is and will be

important to our enterprise, and we should act upon it" a norm, we will see that it has reached different phases in the different organisations in this study. Mirova, for example, can be said to have internalised this norm, as this recognition is the ultimate purpose of their existence²⁷. The other financial actors included in this study can arguably be found somewhere between the phases of externalisation and objectivation. They acknowledge the problem, but have not yet internalised any deep-trenching response to it.

Conventions

The findings of this study highlights the importance of conventions in an institutional structure aimed at governing financial actors. A convention, which according to Vatn has "the function of coordinating behaviour through creating regularity" (2005 p. 6), could in this context be a measure or an indicator of climate-related performance. Such conventions have proven crucial to convert climate-related information into indicators than make sense from a financial perspective, for instance through allowing comparison. "*Investors need to compare*", researcher Liudmila Strakodonskaya at CRED argues: "*If they cannot compare to a benchmark or a competitor, they don't know where they are*". Despite this recognition, Article 173-VI provides very little guidance on which methodology investors should employ. This does not only leave investors with a feeling of being "*left alone*", as expressed by Jacky Prudhomme of BNP IP; it also makes comparing practically useless.

There are, however, good reasons for the Ministry to keep all doors open in regards to measures and indicators. The lack of viable indicators to communicate climate-related issues is an international concern. The only commonly adopted approach so far appears to be carbon footprint and carbon intensity of a fund and this approach is criticised by most participants in this study for its shortcomings. The openness in methodology found in Article 173-VI encourages actors to engage in the development of measuring methodology, and the findings indeed include several examples where the actors have initiated research and development projects. However, the lack of centrally authorised indicators in a situation with state-backed disclosure can also lock in a condition of passiveness. Some participants indicate that this is the case with certain smaller or less engaged investors, who simply pay for a quick carbon footprint, as one interviewee suggests. If this appears to be fine with the authorities, other investors may ask why they should bother spending resources on research.

²⁷ Mirova was established as the responsible investment arm of mainstream asset manager Natixis in 2014. Their approach is generally to select securities from companies that will contribute to, and benefit from, a development along a trajectory that limits global warming to two degrees.

Finally, the lack of common indicators also complicates the use of labels, as this type of certification should be based on transparent and comparable methodology. Hence, the findings suggest an open approach to measures and indicators is pragmatic and useful in the current situation. The relevant Ministries should, however, strive to accelerate the development of consistent and comparable methodology than can, little by little, be introduced as a part of a more binding guideline. The 2dii and other interest organisations and civil society organisations can also have an important role to play in this.

Formal rules

The formal rule component of the FCTR is its weakest institutional feature, the findings show. Descriptions such as "more of a political marketing tool than a real law" and "not really mandatory" are given by actors from all stakeholder groups, including political authorities. While the FCTR is anchored in law through Article 173-VI, there are several features of the transparency regime that weakens its position as formal rule. The comply or explain-approach is perhaps the first thing to mention in this regard. With this element included in the provision, the lawmakers effectively removes the possibility of enforcing it. An actor who does not disclose cannot be sanctioned as long as it provides a minimum of explanation. Combined with the openness in terms of methodology, the comply or explain element furthermore makes it difficult to define a threshold for satisfactory disclosure. This is possibly the reason why a 'naming and shaming' mechanism has not been implemented, Jacky Prudhomme at BNP IP suggests: "It is hard to enact a 'name and shame' mechanism when we have a comply or explain approach. Should shaming then be only for those who did not provide disclosure, or also for those who tried but not hard enough?". These observations are in line with the findings from the Transparency Policy Project's assessment of 18 disclosure policies in the US: Authors Fung, Graham and Weil conclude that mandated disclosure schemes should not necessarily be considered watertight. Because political processes leading to the establishment of new rules (at least in democratic societies) are characterised by compromises and often subject to heavy lobbying from the impacted industries, these rules often end up with some kind of loophole that allows disclosers some room to mould compliance according to their own interests (Fung et al., 2007).

For the time being, compliance with Article 173 remains voluntary although with the exception that actors are asked to "explain why" they do not disclose. Again, however, there are no formal sanctions in place for actors who fail to make this explanation. Due to this, the level of formal rule-making element of the FCTR does not appear to be significantly higher than that of voluntary, non-state initiatives such as the Principles for Responsible Investments (PRI). The

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reputational risk related to non-compliance with any of these disclosure schemes should not nonetheless be overlooked. The interviewees in this study seem to agree that for reputational reasons, non-compliance is not really an option. A final point worth mentioning here is that the Government plans review of the implementation of Article 173 within two years after application, i.e. before the end of 2018 (see *Final decree on the implementation of Art. 173* in Appendix E). There are contradictory views amongst the interviewees of whether the Government will then tighten some of these 'loopholes', while one interviewee suggests the TCFD is "*probably going to swallow all this*" anyways (Richard Perkins, Grantham Research Institute on Climate Change and the Environment). To CRED researcher Liudmila Strakodonskaya, the fact that Article 173-VI is included in the financial code may be "*the key of future development*", as this opens up for integration with other forms of investor disclosure.

6.1.2 Why has this institutional structure emerged?

Returning to the first research question, the next section discusses how the political and financial environment in France at this specific point in time has shaped the FCTR into what it is. The repeating pattern here is recognizable from just about any process of institutional change: some actors and powers are advocating it; others are pushing against it. The institutional outcome is a sum of the influence from both sides. This section discusses the influence of some of the agents and existing institutions in shaping the present transparency regime.

Norm entrepreneurs

Finnemore and Sikkink employ a 'norm cycle' corresponding to the one described by Vatn (2005), but include a threshold or "tipping point" between the two first phases at which "a critical mass of [...] actors adopt the norm" (1998 p. 895). For this tipping point to be reached, they note, two elements are of importance: human agents serving as 'norm entrepreneurs', and organisational platforms for these entrepreneurs to act from (Finnemore and Sikkink. 1998 p. 896). In the context of FCTR, several norm entrepreneurs may be identified. Notably, the tireless agency of Stan Dupré appears to have had a major effect on the establishment of a (mandatory) climate disclosure discourse in France. The establishment of the 2dii with the sole purpose to advocate state-backed climate-related disclosures has strengthened this effect, as it equipped Dupré with an organisational platform from which to engage other individuals and initiate organisation-to-organisation cooperation such as the 'partnership' with the ministries of Environment and Finance. This has resulted not only in a legal article, a label and an award, but

also in setting sustainability on the agenda of mainstream investor organisations to a larger degree that could have been the case otherwise. It is apparent from the findings that other norm entrepreneurship has also been rooted outside the 2dii. The development of the FCTR would probably not have happened if there were not strong supporters of it in the major investor organisations, and in the responsible ministries (although these might to some extent be traced back to the agency of the 2dii). Moreover, the development of norms of climate consciousness amongst French investors also seem to be inspired by the ethos of the Financial Stability Board and its TCFD.

One of the strategies of norm entrepreneurs, following Finnemore and Sikkink, is *framing*. By this, they mean the "construction of cognitive frames" that, if successful, "resonate with broader public understandings and are adopted as new ways of talking about and understanding issues" (1998 p. 897). The findings of this study show that France's presidency of COP21 in 2015 facilitated new framings. Notably, the impetus of France's finance sector demonstrating leadership and "paving the way" for similar transparency regimes other places seems to have been well established. As an illustration of this, Stan Dupré of the 2dii explains that he had been involved in drafting a similar article a few years ago, which it was rejected by the Government. Then the idea of mandating climate-related disclosures for investors resurfaced after France was granted the presidency of COP21, and this time, it was adopted with strong support from the Government. "*Ségolène Royal [Minister of the Environment at that time] was one thousand percent for this*", Liudmila Strakodonskaya from CRED notes.

Norm entrepreneurs can be internal or external to the environment in which the norm emerges. In the case of the FCTR, strong driving forces seem to have been coming from within the finance environment. This appears to have been a key point of success, as the financial actors in this study does not seem to perceive the transparency regime as something that is imposed on them from above. What is interesting in the case of the FCTR is that actors within the finance community who were advocating climate-related disclosures chose to team up with the Government and push for a mandatory disclosure regime rather than joining an industry initiative (or founding their own). Article 173-VI has been the first approach to mandated climate-related disclosures for investors; in other markets, the industry has been more eager to self-regulate. As Campbell notes, the situation is often that "members of industry realize that it is better to control the regulatory process themselves than to be forced by the state to succumb to a process and a set of standards over which they would have little control" (Campbell p. 955). This also rhymes with an argument of Martin Skancke from the TCFD: "A legal provision can be static because it takes time to change it. Industry standards are often more dynamic, less burdened by bureaucracy. The actors can contribute in the standard making process and feel that they are a part of it. An industry standard will perhaps be more business relevant because the actors design it themselves, according to the needs they observe."

While the financial actors in this study are largely participating in voluntary climate-related reporting schemes (see table X) and seem to have a positive attitude towards the forthcoming recommendations of the TCFD, they appear to agree that the state-led FCTR is a good idea. This contrasts the situation in California, where the State Senate is currently processing a bill similar to Article 173-VI against the will of regulated entities. The board of CalSTRS, the Californian State Teachers' Retirement System, has voted to oppose the legislation as they see it as an infringement of their asset managers' ability to undertake their fiduciary duties. They also suggest it would be "impossible to implement" (CalSTRS, 2017). It is worth noting that CalSTRS is a signatory of a number of voluntary, climate-related disclosure and risk assessment initiatives.

The existence of 'policy communities'

The analysis mentioned the existing traditions of 'socially responsible' investing and the strong position of law as such, as possible explanations for the emergence of a government-led disclosure regime in France. The strong position of 'policy communities' in French policy processes offers another explanation of why the major French investors and interest organisations have chosen to advance their interests through government policy (Szarka 2002). Policy communities are defined by Jordan and Richardson (1983, p. 609) as "individuals and groups (be they public or private) who regularly interact in a given policy area". The individuals and groups who are able to partake in 'policy communities' are deemed "responsible and representative" by the government (Szarka 2002, p. 17). Muller (1992) extends the analysis further and labels this phenomena 'French-style corporatism' (in Szarka p 17-18). Although the label 'corporatism' has a bitter historical aftertaste, the process leading up to the adoption of Article 173-VI is doubtlessly a result of the influence by certain powerful non-state actors such as the 2dii. The findings of this study also show that actors from the investment industry have been active in this process, directly and indirectly. For instance, Mirova inform that they have "pushed for this kind of reform", the FIR indicates that they have close links to the MP that sponsored Article 173-VI, and Jacky Prudhomme from BNP IP mentions that he has been member of a drafting committee for the Article. It appears that while Article 173-VI is enshrined in national law, non-state actors have considerably influenced its content. The same is true for the

supplementary instruments, the Award and the Label. In other words, this policy regime exemplifies that institutional structures influence actors, but actors also strongly influence the institutions.Vatn (2005) suggests that actors' response to a policy instrument could depend as much on the perceived legitimacy of the measure as on the punishment structure. Support for this view is found in the works of Tyler (1990, 1997), which emphasise the 'relational legitimacy' of a legal instrument in explaining compliance. In this regard, one could argue that actor will comply with the FCTR thanks to its legitimacy.

Implications for notions of rationality

An important question related to the actors' appreciation of the FCTR then arises: has the industry's participation in the policy-making process results in a disclosure framework so 'kind' that investors do not really have to make any changes to their existing behaviour? Or it is possible that the existence and strengthening of the institutional structures associated with the FCTR has impacted the rationality of investors? In chapter 3, two possible outcomes were outlined in this regard. First, we may consider the possibility that the FCTR does not challenge the fundamental profit-maximising rationality of investors, but expands the investors' knowledge on climate-related risks and opportunities. If we accept that the human rationality is bounded, that is, "to look for satisfactory choices instead of optimal ones" (Simon, 1979 cited in Vatn, 2005 p. 118), this sounds reasonable. A satisfactory choice for a fund manager would be to employ the investment strategies and risk models that have 'always been used'. She knows how they work and which results to expect from them. As section 2.3 on climate-related risks and opportunities suggests, however, the conventional investment practices of mainstream investors may prove inadequate to manage the specific risks and opportunities related to climate change and the energy transition. The fund manager perhaps fails to factor in climate-related risks that are hidden in plain sight, or she fails to exploit investment opportunities with possible high returns because they do not quite 'fit into the model'. In either of these two hypothetical situations, the fund manager's reasoning and behaviour may be shifted in a more climate friendly direction without deviation from her fundamentally profit-maximising rationality.

The other possibility that was outlined in the theoretical context of this study was that the FCTR has the capacity to embed a social rationality in investors. A social rationality, as defined by Vatn (2005), implies that investors internalise norms such as 'acting for the common good' because it is the right thing to do even if it generates a lower return. An important insight from institutional economics in this regards, is that people have plural rationalities; which rationality 'trumps' the others and steers the decision, depends on the institutional context (Vatn, 2005 p.

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416). This may be illustrated by a famous quote by John Harsanyi: "People's behaviour can largely be explained in terms of two dominant interests: economic gain and social acceptance" (Harsanyi 1976 p 127). Even if this quote does not accommodate for the *reciprocal* type of social rationality, it could hold true for investors as organisations: their utility can be seen as two-fold, securing financial returns and maintaining a good reputation. There is some support for this in the empirical data: for example, the interviewees seem to agree that refraining from disclosing is not really an option, for reputational reasons. "*It is hard to tell the public that you don't have an assessment of physical risks*", as Mickaël Hellier of FRR expressed.

However, it remains the main impression from the findings that investors *are* working with measuring and disclosing their investments' climate impact and climate risks, but in a low-cost, rather superficial manner. *"Financial performance first, everything else is subsidiary, that is why they don't want to spend too much time on it*", observes Liudmila Strakodonskaya at CRED. Following this argument, climate-related issues are not at the moment considered related to financial performance.

6.2 The effectiveness of the FCTR

Chapter 3 on theoretical context outlined the Transparency Policy Project (TPP), an empirical study by researchers at Taubman Center for State and Local Government that produced a set of principles for effective transparency policies (Fung et al., 2007; Weil et al., 2006). The next sections discusses the strengths and limitations of the FCTR in light of these principles. As follows from the nature of the FCTR, some points are of more relevance than others. The concluding section seeks to answer the inevitable question: can climate-related disclosure really make any change?

Availability

The first principle set out by the TPP is information availability. While Article 173-VI asks investors to "mention in their annual report, and make available to their beneficiaries" the required information, this appears to be quite freely interpreted by the actors. Only one financial actor represented in this study informs that their disclosure is included in the annual report; the others have separate documents – some times in plural – for their climate-related disclosures. For standard corporate financial reporting, the format and the medium of the disclosure is quite standardised; a company curious about their rival's profitability or an employee looking for her boss' earnings would know where to look for it. A citizen who is curious about which climate-

related criteria are utilised to invest her pension savings, on the other hand, might have to dig for a while. The Environmental Ministry recognises that this is a problem.

While accepting a low number of citizens or clients looking up their disclosures, some investors explore other uses for the information than simply including it in a disclosure document. At BNP IP, they are experimenting with how to use the disclosed information in the marketing materials of their funds:

"Our colleagues at Marketing are incorporating the information we prepared for the disclosure into the main document of prospectus of our funds. These prospectuses have to be reviewed by the market authorities, we don't know yet how they will look at it. But we see this as a clear disclosure of how far each of our funds go in integrating ESG and climate change" (Jacky Prudhomme, BNP IP)

If the market authorities approves, this could prove a fruitful approach to information use. As will be discussed in the next point, a disclosure can have more effect if the information is convened to the information user in a decision situation.

Stakeholder engagement

The TPP finds that effective transparency policies activate stakeholders such as NGOs and civil society actors in using the information. The FCTR does formally and informally engage NGOs and interest organisations in 'watchdog' roles, for instance through the multi-stakeholder committee established to review submissions for the Award. The WWF has furthermore pledged to conduct a review of published disclosures, although on its own initiative.

The FCTR does not specifically target ordinary citizens for the time being. It appears to be a belief of both investors and authorities that ordinary people do not care about these types of disclosures. In response to this assumption, Stan Dupré of the 2dii upholds that "one key point of the law is that disclosure should be done in a way that is understandable to the public". While it may hold true that very few citizens examine the annual reports of investors, there seems to be a growing international interest in the investors' climate-related performance. The rapid growth of the "divestment" movement illustrates this. According to Ayling and Gunningham (2015), this increasingly popular transnational advocacy movement of NGOs, students and other citizens operates as a norm entrepreneur for investors and thus a form of private environmental governance. Moreover, the so-called "millennial" generation (referred to as individuals between 18 and 34 years of age) are found to be significantly more concerned about the ethical aspects of

their investments that their parents' generation. A Canadian survey from 2016 suggests that millennial investors are more than twice as likely as their parents "to be interested in investments dedicated to solving social or environmental problems" (58 versus 25 percent). Likewise, they are more than twice as likely to "believe that companies with good social and environmental practices can provide investors with better protection against downside risks" than their parents (52 versus 21 percent) (Responsible Investment Association, 2016 p. 2-3). Hence, the potential for this generation to be more active users of climate-related information disclosed by investors (for example when this generation starts their pension savings) should not be underestimated.

Management attention

The TPP emphasises that the entire disclosing organisation, including top management, should be involved in the disclosure process. This does not necessarily mean that producing the disclosure is a joint effort, but rather that all levels are aware of the indicators that are reported upon and the organisation's performance. The findings from this study are mixed in this regard. Some interviewees explain that the climate-related disclosure has become a lengthy and highly specialised exercise requiring expert competency both to produce and to decipher. One asset manager explains that their organisation has reorganised in order to be able to handle climaterelated issues. It is too early to judge whether this will create an 'island of climate people' or, on the contrary, help integrate climate-related issues into the entire structure in a better way. Some participants inform that their climate strategies are backed by top levels of management, including the CFO. However, as long as the disclosures are not required to pass an organisation's board, it is more difficult to hold managers directly accountable for the disclosed information.

Sustainability

The term 'sustainability' is likely to confuse in this context of 'sustainable finance', but here, the word refers to a transparency policy's ability to sustain over time. According to the TPP, there is a higher chance of sustaining a disclosure scheme if at least some disclosures experience benefits from it. In the case of the present FCTR, it appears from the findings that the participants in this study support the regime, although some of them are frustrated with certain aspects of it. Generally, it seems like the participants consider the disclosure scheme to constitute a comparable advantage to them. "We see this as an opportunity to go see some new clients", Ladislas Smia at Mirova simply puts it.

Metrics

It emerges from the findings that the problem of metrics and indicators is the main obstacle to the actual decision-relevance of climate-related information. As the open approach of Article 173 allows investors to employ any indicators they see fit, comparison between actors renders useless. Comparison is a fundamental mechanism of the investment industry: asset owners need to compare asset managers, asset managers need to compare companies and securities to buy. For mutual funds or voluntary pension funds, ordinary citizens also need to compare the options they have for their savings. The findings show that the methodology used today does not facilitate such comparisons.

The TPP warns that over-simplifying indicators may disincentivise innovation, or cause the organisation to direct their improvement effort towards too few or even the wrong issues. The use of the carbon footprint/carbon intensity indicator appears to tick all of the above boxes. It incentivises investors to buy securities that have a slightly lower emission, rather than looking for investments that contribute to the energy transition, interviewees point out. Furthermore, the interviewees argue that the 'mainstream' interpretation of the disclosure requirements puts too much emphasis on current and historical results (such as last year's GHG intensity) and downside risks, and too little on governance structures and opportunities. A shift towards more governance and opportunity-focussed disclosure can be constructive. It entails fewer 'cheap options' like carbon footprints, and embodies a more positive-minded approach. However, these issues are perhaps even more difficult to measure through consistent and comparable indicators than are climate risks and impacts. One final concern related to metrics is that the lack of specified indicators may cause investors to confuse indicators measuring risk and impact. This should be considered when scenarios are used as a reference point; for instance, referring to a two degrees' scenario can be useful to indicate innovation, but not physical climate risks.

Format

The TPP insists that format of a disclosure should be determined by its purpose, in order to minimise users' search costs. One way of doing this is to distil the main points of information into simple indicators that are accessible to information users in the setting where the information is relevant. The TPP uses the example of "smiley" symbols on restaurant fronts as a successful translation of complex information into a simple and relevant indicator for information users. Of course, not all information is an appropriate subject to such a simplification. Nevertheless, it could be worth looking into how lengthy disclosure documents can be translated into something that is more comprehendible for a non-expert information user.

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CICERO has established a "shades of green" rating for their third party reviews of green bonds (light green is good, but dark green is better) and are now testing a similar concept of "shades of [climate] risk". The idea is to convert climate researchers' risk analysis into a visible and uncomplicated indicator. A similar idea seems to be underpinning the Energy and Ecological Transition for Climate Label (TEEC): A green label for a fund is an easily understandable indicator of climate consciousness for clients and beneficiaries. However, a certification one has to apply for is different from a mandatory rating in that it only provides information about the actors who have voluntarily organised a certification process. While the information conveyed through a simple colour indicator will not be enough to satisfy the information needs of an expert information user, it can be useful to engage the public. Knowing that your performance is communicated to an audience can also boost the investors' motivation to improve their work on climate-related issues, in a similar way that the Norwegian Food Safety Authority has observed restaurants act upon the smiley rating. "Once the result of the inspection is communicated through a Smiley symbol, there is an extra stimulus to making an all-out effort to create a consistently hygienic business", they state in their guidelines for the smiley rating (Mattilsynet, n.d.).

Review & update

The TPP recognises that the reality subject to disclosure will always be moving. Hence, it recommends a mechanism of periodical feedback on the relevance and achievement of the disclosure framework. This is taken into account in the case of the FCTR; Article 173-VI imposes on itself a review within two years. As this review will be conducted a year and a half after the completion of this project, it is too early to judge how constructive this review will be in adjusting the transparency regime.

Sanctions

Disclosure may come at a cost, both from producing data and from revealing details. Because of this, there is always a chance that some actors will falsify information or fail to disclose at all. Following this argument, noncompliance should be sanctioned, as recommended by the TPP. This is not the case with the FCTR. Article 173 is not enforced, in the way that no governmental body has any responsibility to oversee it and there are no formal sanctions in place for noncompliers. In that sense, this disclosure regime is not substantially more demanding than a voluntary scheme with the same content would be.

Other means of enforcement

The TPP suggests complementing formal sanction structures with other enforcement mechanisms such as audit requirements and 'watchdog' functions. The findings of this study show that investors do not see auditing as mandatory under the current disclosure framework. There is a lack of clarity around the question of monitoring bodies. The Environmental Ministry informs that they have established such a body, but at the time of the interviews, none of the participants seemed to be aware of this. In fact, Stand Dupré from the 2dii suggested establishing such a government-run monitoring committee. It should be repeated that the concern for reputational risks itself appears to serve as a 'mean of enforcement'.

Interaction with other policy instruments

It is a key point of the TPP that disclosure policies should be "considered a complement and not a replacement for other forms of public intervention" (Fung et al., 2007 p. 179). Participants in this study proposes several policy tools that could be useful in combination with climate-related disclosure. One example is that disclosed information can form a basis for taxation or tax breaks. Another possibility is the negotiation of climate targets between companies and government, as Stand Dupré of 2dii suggests. However, these policy instruments rely on transparent and consistent metrics and indicators. Hence, this use of the disclosed information has to be a second step after metrics and indicators are improved.

6.2.1 Is disclosure ever enough to make a difference?

Before we move on to the final element of this thesis, the recommendations for other disclosure regimes, it is appropriate to ask whether a disclosure policy can really make a change in investment flows.

'No', Harmes concludes. His key argument is the "specific incentives and constraints faced by different institutional investors", notably the intense competition between fund managers that force them to ignore any long-term risks or non-financial aspects such as climate concerns (Harmes, 2011 p. 108). From an institutional perspective, this is only half a truth: there are certainly incentives and constraints that push investors in a less sustainable direction. At the same time, these incentives and constraints have been created in an institutional context in the past and can be changed in the future. However, as Vatn notes, it is important to understand the difference between choices that are based on internalised motivations such as conventions and norms, and situations where "choices can be influenced only by changes in *external reward*

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structures" (Vatn 2005 p. 13, emphasis in original). In this case, the external reward structures as outlined in section 3.3.1 may have such a strong influence on investors' choices that norms or conventions do not have the capacity to influence choices. In this regard, more transparency around such unsustainable reward structures could be one possible remedy.

Harmes' second argument against effective climate-related disclosure regimes relates to the issue of *arbitrage*. Arbitrage entails that even if a number of investors should sell out of a company for instance because of climate concerns, other investors would see the same company as undervalued and take the opportunity to buy up, until the price is back at its market value level (Harmes, 2011 p. 108f). Harmes sees this as the deathblow to any plea that institutional changes in some organisations may bring about a change in the real economy. While arbitrage undoubtedly poses a challenge to investors who employ divestment strategies, it should be noted that the investors represented in this study only divests or excludes a small part of their universes of eligible investments. The other main form of investor signalling, shareholder engagement is not affected by arbitrage.

6.3 Recommendations

Debates about climate-related investor disclosures take place on several levels of government and in a number of jurisdictions and markets these days. This thesis seeks to contribute to inform this debate through proposing a set of recommendations for future disclosure frameworks as well as the updating of FCTR. Although some of the points may be considered politically complicated to realise, I hope the following recommendations can at least provide some food for thought.

1. Define purpose

The first thing a disclosure framework should do is to define its purpose. Is the objective to reduce systemic risks? Create financial incentives for firms to reduce their emissions? Direct finance flows towards tomorrow's solutions? Educate the general public about the climate performance of investors? Other features should then derive from this defined purpose. A single disclosure framework can have plural purposes, as long as methodological requirements provide clarity in which metrics and indicators answer to which purpose.

2. Define target groups

Related to the definition of a purpose is the definition of target groups. As with purposes, one framework may have plural target groups as long as the disclosure requirements cater for the specific information needs of each of them. A question underpinning the disclosure framework should be "how do we want the target group to act upon this information?" In this regard, considering the plural rationalities of information users can be useful. What kind of rationality is the disclosure aimed to appeal to, and how?

3. Define disclosure format and publishing channel

In a future of defined and well-working metrics and indicators (see point 3), it may be appropriate to require investors to integrate the disclosure into their annual report, and thus subject it to audit. In the meantime, however, deciding on a less demanding but still streamlined format of the disclosure is a good start. While it may be too early to recommend or require the use of certain metrics and indicators over others, it should be possible to define more clearly the components a disclosure should include. This would illuminate the differences in current methodological approaches. Furthermore, requiring investors to upload disclosures to a common platform could speed up the competition amongst actors and make the information easily available to regulators, peers, researchers, civil society actors and other stakeholders.

4. Seek to consolidate metrics and indicators ...

Consistent and comparable metrics and indicators are key to producing decision-relevant disclosures. While it is widely recognised that measures employed to they are neither consistent nor comparable, policy makers can speed up the development processes through regular assessment of 'best practice' and subsequent release of guidelines. Last year's best practice should be this year's mainstream disclosure! In the process of deciding what is 'best practice', policy makers should strive to include several perspectives including that of economic and environmental researchers. Providing research & development funding or other incentives for actors, financial or non-financial, that develop methodology in open codes is another possibility. A list of recommended or required metrics and indicators should depart from the definition of target group and disclosure format, but could generally include items related to the exposure and management of physical climate-related risks and transitional climate-related risks,

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investments in opportunities related to the energy transition, indicators of environmental and climate impact of funds (including but not limited to measures including GHG emissions).

5. ... but accept that one size does not fit all

Investors are different in many ways; so are their funds and investment strategies. Arriving at unified disclosure form that covers all these different features is impossible. The materiality approach recognisable from conventional risk disclosure²⁸ can be a key to avoiding "death by disclosure": Investors have to define which climate-related issues are of most relevance and importance to their specific situation, and then disclose on these issues according to best practice in the areas in question.

6. Prescribe scenarios as reference points

Policy and climate change scenarios can provide useful insight into the alignment of investments with climate targets, and the exposure to climate risks. Hence, the use of scenarios should be encouraged. This should however be followed by guidance on how scenarios should be employed. A clear distinction should be made between scenario analysis on how a fund *contributes to* realising a two degrees scenario, and analysis of the *risks* related to global warming of more than two degrees, for instance.

7. Dare to enforce

A disclosure scheme should be enforced through monitoring of disclosures and sanctioning of non-compliance. A comply or explain provision does not necessarily exclude enforcement, as long as the threshold between the two is defined in order to avoid an 'anything goes' approach. If an investor chooses to comply, it should face clear requirements for which components a disclosure should include, where it should be published, et cetera. Investors choosing to 'explain' should have to state this loud and clear.

8. Link disclosure to other policy instruments

In a situation of far-from-perfect metrics and indicators, this perhaps remains a utopia for another while. But if and when a considerable improvement in methodology has been

²⁸ The concept of materiality in climate risk disclosure is advocated by the TCFD, and is one of the main points of their preliminary recommendations (TCFD, 2016).

achieved, disclosed information could be linked to various policy instruments – carrots and/or sticks.

9. Endeavour international harmonisation

Finally, climate-related disclosure policy is a field where international cooperation and harmonisation is highly beneficial. Many financial actors operate in multiple markets and jurisdictions; hence, a harmonisation of disclosure requirements avoids unnecessary costs to actors. In a future where climate-related disclosures could be perceived a considerable burden by investors, international harmonisation is also a way of preventing legal loopholes ("free havens").

7 Conclusion and implications

"It is a characteristic of humans that we tend to steer clear of information that requires us to change", Club of Rome-president Anders Wijkman said at Omstilt 2017. This recognition forms the fundament for the FCTR, as well as other policies aimed to mitigate our negative impact on the climate. This past year has proven that state leaders as well as ordinary citizens can choose deliberately to look in the opposite direction when our times' perhaps greatest challenge, the climate changes, are brought up. That is the blessing and the curse of a liberal democracy: policy makers have limited powers to impose costly actions on citizens or companies (or presidents, for that matter). In a political environment where direct regulations are unpopular, disclosure-based policies have gained momentum. The FCTR, the focal point of this study, enters a long line of climate-related disclosure schemes. However, as it represents the first attempt at mandating such disclosures for institutional investors, it is a particularly interesting case.

This study first set out to investigate *what* the FCTR is, and how it can be understood as political phenomenon. The first key finding in this regard is that while enshrined in national law, the FCTR is not substantially more 'mandatory' than voluntary disclosure schemes. However, the signalling effect from the state backing such a policy should not be underestimated, neither should the reputational risk related to noncompliance with a state mandate. The strong links between civil society actors, industry actors and government actors may be identified as an important reason why this provision ended up in national law.

The second research question looked into the institutional structures the FCTR represents. The study finds that the FCTR, and the institutional foundation it builds on, has strengthened the development of 'climate conscious' norms amongst institutional investors. The role of 'norm entrepreneurs' from interest organisations, and to some degree the Government and the finance industry, has been identified as an important factor in the norm building; so has the momentum created by the French presidency of COP21. However, the climate conscious norms seem to be at a pre-internalised stage as of now, and their implications for investor choices appear to be limited. Nonetheless, it appears from the findings that investors feel obliged to comply with the law for reputational reasons. Another key finding is that the FCTR has sped up the research and development efforts into metrics and indicators usable to measure climate-related risks, opportunities, and impact. The final institutional aspect of the FCTR, formal rules, appears rather weak as the FCTR is constructed on a *comply or explain* fundament and does not currently have any formal monitoring body or sanction structures.

The third and fourth research questions aimed to identify impacts and shortcomings of the FCTR in its current shape, and to translate this into a set of recommendations for the future development of climate-related disclosures for institutional investors. In that sense, section 6.3 of this study serves as a conclusion and a proposal for future research at the same time.

In sum, the FCTR represents an innovation in public policy and some patience to judge its impact should be exercised. Although direct impacts identifiable from the policy at the moment are limited, the institutional perspective sheds light on the iterative process of institutional structures and brings hope that the FCTR and other climate-related disclosures can nudge investors in a more sustainable direction – and in turn be nudged.

8 Bibliography

Note: Because of technical problems with EndNote, this alphabetical list of sources is not complete. It is followed by a non-alphabetical list with the remaining sources. I cannot do anything but apologise for this. The problem will be sought solved in the digital (Fronter) submission of the thesis.

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Appendices

Appendix A: Interviews

Organisation	Type of organisation	Name of interviewee	Position	Interview method ²⁹
2 degree investing initiative	Interest organisation	Stan Dupré	Founder and CEO	P, SS
Allianz GI	Asset management	Anne-Claire Abadie	SRI portfolio manager	P, SS
BNP Paribas Asset Management	Asset management	Jacky Prudhomme	Head of ESG integration	P, SS
CICERO Center for International Climate and Environmental Research	Research center	Christa Clapp	Head of climate finance	P, SS
Crédit Agregole Corporate and Investment Bank	Investment bank	Erwan Crehalet	Green bonds and climate risk analyst	P, US
ERAFP (Établissement de retraite additionnelle de la fonction publique)	Asset owner (pension scheme)	Marie Marchais	SRI officer	T, SS
ERAFP (Établissement de retraite additionnelle de la fonction publique)	Asset owner (pension scheme)	Pauline Lejay	SRI responsible	T, SS
Finance Norway	Industry organisation	Agathe Schjetlein	Principal advisor, sustainability	P, US*
FIR (French Social Investment Forum)	Multi-stakeholder think tank	Grégoire Cousté	Executive director	P, SS
FIR (French Investment Forum)	Multi-stakeholder think tank	Thiên-Minh Polodna	SRI consultant	P, SS
Fonds de reserve pour les retraites (FRR)	Asset owner (pension fund)	Mickaël Hellier	Head of responsible investment	T, SS

²⁹ Interview method:

P = personal meeting

T = telephone interview

SS = semi-structured interview

US = unstructured interview/conversation

^{* =} conversation in casual setting (not interview setting)

Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science	Research institute	Richard Perkins	Associate professor of Environmental Geography	P, US*
Ministry for the Ecological and Inclusive Transition, Republic of France	Public authority	authority Alexandra Bonnet		P, US*
Mirova Responsible Investing	Asset management	Ladislas Smia	Deputy head of ESG research	P, SS
Paris Center for Law and Economics at Paris II University	Research center	Liudmila Strakodonskaya	PhD candidate, socially responsible investment	P, SS
TCFD (The Financial Stability Board's Task Force on Climate- related Financial Disclosures)	Industry-led task force	Martin Skancke ³⁰	Task force member (data user side)	T, SS
WWF-France	Environmental NGO	Jochen Krimphoff	Deputy director, green finance	P, US*

³⁰ Martin Skancke is member of the TCFD, but also chair of the Princliples of Responsible Investment's board. Mr. Skancke was interviewed in Norwegian; quotes are translated by the author with the best intention to represent the interviewee's views.

Appendix B: Interview guide

1: Ba	ckground		
1.1	Could you please briefly introduce me to the organisation you work for? (incl. AuM, ownership, general risk approach, typical time horizon ++)		
1.2	Could you please briefly introduce me to your organisation's history of greenhouse gas accounting, climate-related reporting (voluntary initiatives) and incorporation of ESG (environmental, social, governance) factors in investment strategies?		
1.3	What is the general approach with regard to including climate issues in your company's investment policy and risk management? + Why is this?		
1.4	How does your organisation's work on climate related issues relate to your CSR work?		
Before 2	verarching questions ve move on, I would like to ask a few overarching questions about your last published climate disclosure. We will go more into depth on this is is just to get an overall impression of the disclosure you have produced.		
2.1	What are the main components of your last climate-related disclosure?		
2.2	What is your organisation seeking to achieve by producing this disclosure? + How does this relate to the purpose of the legislation?		
23	Which actors' needs is your disclosure designed to serve?		

3: The process of adopting the FCTR

2.3

3.1	What do you think the lawmakers want to achieve by adopting this regulation? What appears to you to be their motivation?
3.2	How would you describe the political process leading up to the adoption of the Energy Transition Law and Article 173 specifically? + What were the roles of the government, the finance industry, NGOs, individuals?
3.3	Has your organisation been involved, or invited to participate, in the process leading up to the regulation?
3.4	What is your view on legally binding disclosure schemes, versus voluntary, market-driven reporting schemes such as the Portfolio Decarbonisation Coalition or the Montreal Pledge?
3.5	What do you think of the actual content of the bill and the guiding documents? + Would you suggest any alterations to it?

3.6	What is your view on the labels and the award introduced in relation to the Article 173? Has your organisation participated in any of these?			
4: The disclosure process				
4.1	In which ways has the implementation of Article 173 impacted your company's disclosure routines?			
4.2	Which sections of your organisation has been working on the disclosure?			
4.2	+ How is the management level involved in the work? Did they verify or sign anything?			
4.3	Are you building new capacity / expanding the departments who work on this? In that case, what kind of competence? Environmental specialists, CSR, PR?			
4.4	Is any of the work on the disclosure outsourced to other organisations like consultancy firms?			
4.5	How has the climate disclosure process related to your risk assessment processes?			
4.6	How and where will you publish your report?			
4.7	Will the disclosure report be subject to external audit? Why/why not?			
5: Im	npact of the disclosure			
	Who do you think will read your climate disclosure?			
5.1	+ Who do you want to read it?			
5.2	Has the disclosure process added any new knowledge about your portfolio or the risks related to it?			
5.3	Is your organisation considering to make any changes to the composition of your investment portfolio or investment strategies following this disclosure?			
5.4	Has your organisation formulated any new goals or ambitions following the disclosure process?			
5.5	Will the climate related information you prepared for the disclosure be integrated into investment decisions?			
5.6	How will it be used in your internal and external communication work?			

5.7	How would you evaluate the general potential of climate related disclosure schemes to facilitate an energy transition?				
6: Sta	6: Stakeholder engagement				
6.1	Have you received any feedback from clients or other stakeholders regarding your last disclosure?				
6.2	Have you made contact with any environmental NGOs or other civil society organisations during this past year that you have not been in touch with previously?				
6.3	Are you experiencing that NGOs or other civil society actors are using the information you disclosed to make your organisation change behaviour or strategies?				
7: Fu	iture outlooks				
7.1	Have you noted any aspects of this year's work with climate-related issues that may be changed in the next year?				
7.2	Do you see your organisation involving in the investee companies in new ways in the coming years, motivated by this disclosure?				
7.3	So, now French authorities have instructed large institutional investors to disclose on climate-related issues. Do you think it will really change anything?				

Appendix C: Speaker references

Ref #	Speaker name	Title	Organisation	Conference
XVIII	Anders Wijkman	Co-president	Club of Rome	Omstilt 2017
XIX	Michael Wilkins	Managing Director and Task force member	S&P Global Ratings TCFD	7 th annual Green Bonds Europe Conference
XX	Lars Eibeholm	Head of Treasury <i>and</i> Expert group member	Nordic Investment Bank HLEG	7 th annual Green Bonds Europe Conference
XXI	Philip Brown	Managing director, Head of green and social bond origination	Citi	7 th annual Green Bonds Europe Conference
XXII	Johanna Köb	Responsible investment analyst	Zurich Insurance	7 th annual Green Bonds Europe Conference

Appendix D: Attended conferences and seminars

Date	Event name	Organised by	Location	Key speakers
20 June 2016	6 th annual Green Bonds Europe Conference	Environmental Finance	London, UK	Henry Shilling, senior vice president at Moody's Investors Service; Massamba Thioye, manager of the Sustainable Development Mechanism Programme at UNFCC; Igor Shishlov, project manager at the Institute for Climate Economics; Peter Ellsworth, director of the Investor Program at Ceres
29-31 August 2016	4th Nordic Conference on Climate Change Adaptation: From Research to Action and Transformation	University of Bergen & Uni Research	Bergen, NO	Vidar Helgesen, Norwegian Minister of Climate and Environment; Karen O'Brien, Professor of Sociology and Human Geography at the University of Oslo; Mia Ebeltoft, Deputy Director at Finance Norway; Ellen Hambro, Director General of the Norwegian Environment Agency
23-24 November 2016	ZERO Conference 2016	ZERO Zero Emssion Resource Organisation	Oslo, NO	Laurent Fabius, president of COP 21; Anthony Hobley, CEO Carbon Tracker Initiative; Connie Hedegaard and Idar Kreutzer from the Norwegian government's expert panel on green competitiveness; David Saddington, Climate Change Communicator
7 February 2017	Annual ICMA and NCMF Joint Seminar: Bond market developments	International Capital Market Association (ICMA) and Nordic Capital Markets Forum (NCMF)	Oslo, NO	Nicholas Pfaff, Senior director, ICMA
9 February 2017	Omstilt 2017 ("Transformed 2017")	The Norwegian Research Council	Oslo, NO	Elke Weber, Professor of Psychology and Public Affairs, Princeton University; Ben Caldecott, Director of the Sustainable Finance Programme at the University of Oxford Smith School of Enterprise and the Environment; Anders Wijkman, co-president of the Club of Rome; Linda Steg, Professor of Environmental Psychology at the University of Groningen
28 February 2017	Den grønne råvaren ("The green commodity")	Finance Norway	Oslo, NO	Peter Bakker, president of the World Business Council for Sustainable Development; Kristin Halvorsen, director of Cicero Center for International Climate and Environmental Research; Butch Bacani, programme leader of the Principles for Sustainable Insurance Initiative under the UNEP

19 June 2017	7 th annual Green Bonds Europe Conference	Environmental Finance	London, UK	Sean Kidney, CEO of Climate Bonds Initiative; Michael Wilkins, managing director of S&P Global Ratings and member of the TCFD; Lars Eibehol, head of Treastury at the Nordic Investment Banks and member of the EU HLEG; Jochen Krimphoff, deputy director of Green Finance, WWF- France, Alexandra Bonnet, deputy head of the Economic Department of the Ecological and Inclusive Transition, Republic of France.
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2. Final content of Article 173 (ex-48) of the Energy Transition Law⁹

The following is an excerpt of the most relevant portions of Article 173, translated to English. Note that all requirements apply from the fiscal year ending on December 31, 2016.

Key: Normal text= clarifying and contextual text added by the authors Bold= direct translation Red= Highlighted by the authors of this paper and discussed in Section 3

III. Listed companies shall disclose, in the annual report subject to the vote of the shareholders: "the financial risks related to the effects of climate change and the measures adopted by the company to reduce them, by implementing a low-carbon strategy in every component of its activities."

IV. The annual report shall include, in addition to the reporting on social and environmental consequences of the company's activity (already mandatory in France) "the consequences on climate change of the company's activities and of the use of goods and services it produces.10"

A. Banks and credit institutions shall disclose, in the mandatory annual risk report, "the risk of excessive leverage and the risks evidenced in the frame of the stress tests that are regularly implemented". This provision is not specific to climate risks.

B. "The government shall submit a report to Parliament on the implementation of a scenario of regular stress-tests reflecting the risks associated with climate change, at the latest on December 31, 2016."

VI. Institutional investors (i.e. institutions regulated by French insurance law, mutual funds, French "Institutions de prévoyance", public institutions, public pension funds, investment companies with variable share capital11) shall "mention in their annual report, and make available to their beneficiaries, information on how their investment decision-making process takes social, environmental and governance criteria into consideration, and the means implemented to contribute to the energy and ecological transition. They shall specify the nature of those criteria and the way they are implemented, following a presentation to be stipulated in a decree. They shall indicate how they exert the voting rights attached to the financial instruments resulting from those choices.

The decree provided for in the previous paragraph specifies the information that needs to be disclosed for each objective, depending on whether the entity exceeds thresholds defined in that same decree or not. The information relative to the consideration of environmental objectives includes: the exposure to climate-related risks, including the GHG emissions associated with assets owned, and the contribution to the international goal of limiting global warming and to the achievement of the objectives of the energy and ecological transition. That contribution will be assessed in particular with regards to indicative targets defined according to the nature of their activities and investments, in a way that is consistent with the national low-carbon strategy provided by the Environmental Code. When appropriate, the entities mentioned in this paragraph shall explain the reasons why their contribution is below the targets set for the closed financial vear."

⁹²º Investing Initiative will not be held liable for any errors or omissions in the translation. The original text in French is available on the website of the National Assembly http://www.assemblee-nationale.fr/14/ta/ta0575.asp. (seen August 4, 2015). ³⁹ This could be interpreted as Corporate Value Chain reporting (scope 3, following the definition of the GHG protocol).

¹¹ In French: SICAV, "Société d'investissement à capital variable



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