The European **green funds** market

€22 billion

165 funds

Environment themed funds invest in companies that have a positive environmental impact (i.e. those active in water, energy and waste management). These funds have been available in Europe for several decades, but they really took off between 2006 and 2008 when green industries and renewable energies expanded considerably, helped by government subsidies. However, from 2009 to 2012, these activities - which require substantial debt and capital - were hit hard by the financial crisis, the collapse of the green bubble and the reduction in subsidies.

Uneven **market growth**

The Novethic Research Centre first analysed European green funds in 2009 and 2012. This third review looks at looks at how this market's development was impacted by the Paris Agreement and the COP 21 climate commitments, on the one hand, and the evolutions of business models in several cleantechs, starting with wind and solar energy segments, on the other hand.
Novethic once again analysed over 200 green funds[1] available in Europe, drawn from around ten financial databases (general databases or ones focused on green or environment funds). It then detailed the characteristics of the chosen funds. The comprehensive selection of funds that were analysed mainly comprises funds invested specifically in environment-related industries (water, energy and waste) and in themes that have a proven impact on the environment (clean transport, organic food, etc.). The selection also includes funds that pick companies based on their performance in terms of the environment or climate change. This specific approach, known as a low carbon approach, forms a niche segment that has recently emerged in Europe. The analysis that follows reviews the state of the market in 2016 and its trends over the past one, three and five years. It also explains the business trends that have led to the creation or closure of green investment products.

Key points

- The green funds market is **driven by the countries that pioneered responsible investment, like France which experiences strong growth and the major financial hubs like Switzerland and the United Kingdom**.
- The majority of European green funds are equity funds, but the market is gradually diversifying, in particular with **the emergence of green bonds funds** since 2015.
- The development of funds with broad investment themes and the success of funds investing in the water management segment are orienting a growing number of investors towards products whose **investment portfolios match their marketing claims**.
- The volume of funds deemed "light green" funds in this report, i.e. those with an misleading environmental strategy, has increased very little in recent years, while **"dark green" funds, which boast clearer environmental features, have seen their volume almost double over the past three years**.

(1) The scope of the analysis covers UCITS funds accessible to individual and institutional investors in Europe. Dedicated investment mandates and unlisted renewable energy infrastructure funds such as hedge funds, which are reserved for institutional investors, are addressed separately and are not included in the selection presented in this summary (see the full report for further details).

COUNTRY FOCUS

Four European countries with an interesting green or responsible investment dynamic were examined in order to determine what factors encourage the development of green investments: Germany, France, the Netherlands and Sweden (see pages 7 and 8).

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March 2017

Main **trends**

Green funds have gradually regained strength since the financial crisis

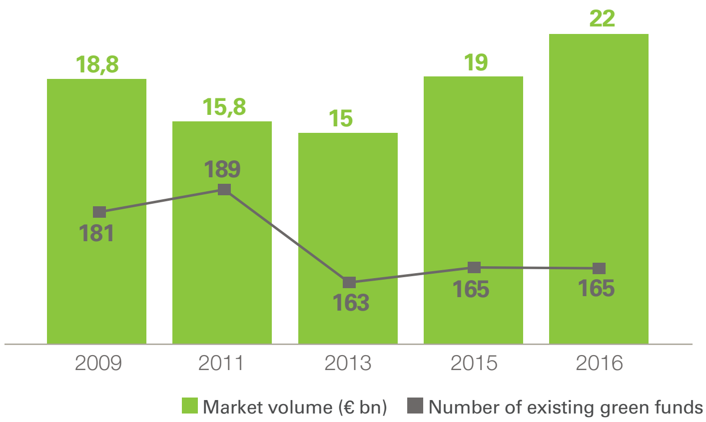
The selection used for our analysis includes **226 green funds** (which comprise 590 sub-funds or compartments) that have been sold in Europe and managed in 16 countries over the past ten years. Within this selection **165 funds** (466 share classes or sub-funds) were open for investments at 31 December 2016.

These **165 funds total €22 billion**. Assets under management began to rise again with the end of the crisis in 2013, and have seen **growth of 16% in 2016 and 47% over the past three years**, making the market bigger now than it was in 2009.

These volumes and their rate of growth are, however, limited as compared to total investments in green financing outside the confines of listed funds. By way of comparison, according to "*2015 figures on Responsible Investment in France*" (Novethic, 2016), green investments made via funds or directly in green infrastructure, green projects by unlisted companies and green bonds (excluding dedicated funds) amounted to €20.2 billion in France, while only €4.4 billion of this total were invested in listed green funds. The I4CE 2016 Landscape of Climate Finance in France reported that €32 billion was invested in climate mitigation in 2014, while investment needs for the low carbon transition in France are estimated at €25 billion per year over the period 2015-2035 (according to the ADEME ThreeME model and the CGDD [French General Commissioner for Sustainable Development]).

Green funds market trends

Source: Novethic



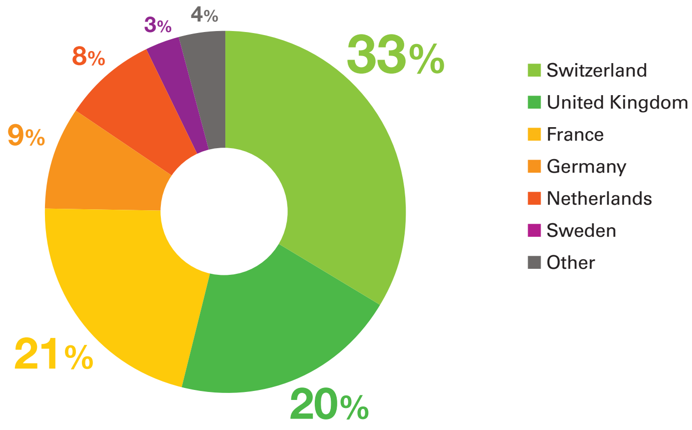
Geographic and sales trends for green funds

The market is driven by the countries that pioneered responsible investment like France and Europe's major financial hubs, led by Switzerland, the United Kingdom

Two points need to be emphasised regarding the geographical analysis of green funds. Firstly, as with mainstream funds, many green funds are not managed in the country in which they are registered (increasingly via UCITS registered in Luxembourg or Ireland). For the purposes of this report, the funds were broken down by the country in which they are effectively managed in order to assess the strength of players in this sector in each country. Secondly, 80% of funds are sold in more than three different countries. It is therefore extremely difficult to understand the key drivers of demand among investors. There are two main cases: funds managed in the United Kingdom or Switzerland, for example, are largely sold to investors in other European countries, especially in France, while funds managed in Northern Europe or Germany are mostly sold to domestic investors. Switzerland, and in particular the United Kingdom, are the only countries that saw an increase in the number of green funds between 2009 and 2016. Finally, the geographical breakdown by the number of funds rather than by assets under management reveals that there are proportionally more green fund managers in France, Germany, Sweden and the Netherlands than there are in Switzerland and the United Kingdom, which in turn have a number of funds managing bigger asset volumes.

Geographical breakdown of the green funds market (as a proportion of volumes managed in each country)

Source: Novethic



Market leaders

The management of green funds is highly concentrated among players that have developed and promoted green investment strategies and responsible investment for many years. The top ten fund managers are mainly based in Switzerland and the United Kingdom. They manage €14 billion in assets in around thirty green funds and account for two-thirds of the market's total assets. Almost all the asset managers in the top ten have signed the UN PRI and have proactive climate policies that complement their management of green funds: half have policies covering their portfolios' carbon footprint or carbon reduction measures, and half opt for shareholder engagement on climate matters.

Rank	Fund manager	Country	Number of green funds	Green AuM (€ M)
1	Pictet AM	Switzerland	3	4 585
2	BNP Paribas IP	France	8	2 541
3	Blackrock AM (including Ishare)	United Kingdom	5	1 656
4	Pioneer Investments	United Kingdom	1	978
5	RobecoSAM	Switzerland	2	933
6	ASN Bank	Nederlands	2	851
7	Triodos IM	Nederlands	3	938
8	ÖkoWorld	Germany	5	678
9	Jupiter AM	United Kingdom	2	628
10	Deutsche AM	Germany	3	545
Total			34	14 006

Source: Novethic

Institutional investors dominate the market

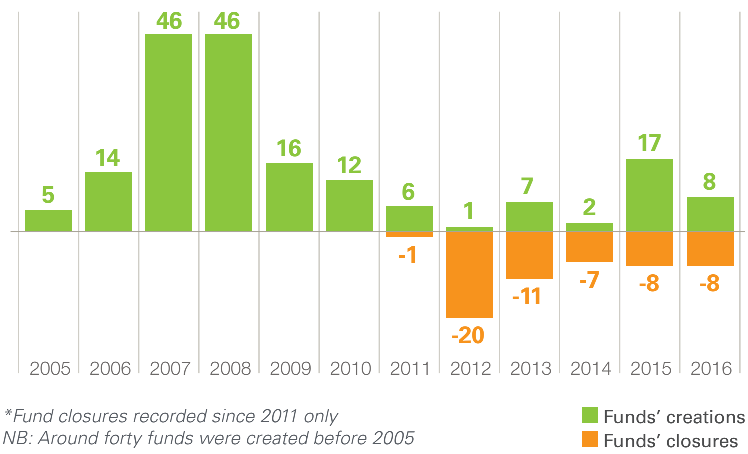
While it is difficult to know the exact breakdown of investors, institutional investors currently dominate the market. Only 15% of the sub-funds analysed have compartments reserved for individual investors. While certain banking networks (retail and private banks) are starting to promote green savings products, the sale of these funds remains mostly focused on institutional investors.

Analysis of the creation and closure of green investment products

The two previous editions of this report revealed investors' growing interest in green funds up to 2007, which saw the creation of more than a quarter of the 230 funds that were analysed and available during all of part of the past five years. The financial crisis hit green funds particularly hard in terms of their performance and investor redemptions, and this explains why, in 2011, the number of new products had fallen back to the level seen before 2005, reflecting a rapid downturn in the market. At the same time, UCITS regulations were imposing ever greater prudential and reporting requirements, which made smaller funds less profitable. This led to consolidation among products (closures, mergers or takeovers of the smallest green funds), which in turn increased the average size of funds (€143 million on average in 2016, compared with €96 million in 2011). This trend has continued over the past five years, though it masks a large number of creations of sub-funds within the same funds. For example, 170 sub-funds (over one-third of the sub-funds that are still active) have been opened since 2011, nearly 85% of which are still in activity. This has made green funds accessible to a far more diversified investor base (among both institutional and individual investors). In the past two years, 25 new funds have been launched on the market, reflecting new momentum among market players.

Creation and closure of green funds*

Source: Novethic



**Fund closures recorded since 2011 only*
NB: Around forty funds were created before 2005

Breakdown by asset class between 2011 and 2016

The vast majority of European green funds (around 85% by number and volume) are equity funds, but the market is gradually diversifying into bonds and has recorded a three-fold increase in the bond fund segment since 2015. This reflects growing interest in products whose environmental nature is easy to explain, as green bonds fund clearly-identified projects, which makes them easier to sell. However, the assets invested in these funds remain limited because many institutional investors either prefer to buy green bonds directly or they include them in non-green portfolios (see "*Green bonds: an investor's perspective*", Novethic, 2016).

Interaction between fund performance and net inflows

The analysis of inflows on this market requires detailed statistics on each sub-fund. Available data covers 350 sub-funds, representing €18,9 billion, or 85% of the market. Our review confirms renewed investor interest in green funds over the past 12-24 months, most likely driven by the impact of the Paris climate conference and green companies' return to favour on the stock market. So while fund performance barely kept the market afloat between 2011 and 2013, net inflows have been positive for the past year (5.3%), fuelling the growth in assets under management. The market growth was also nourished by a strong financial performance of the funds in 2016 (on average 6.3%) and the launch of new funds totaling €600 million by year end. The water theme captured most of the inflows (€ 760 million), with an average 11.8% inflows rate in 2016.

Funds' performance and net inflows

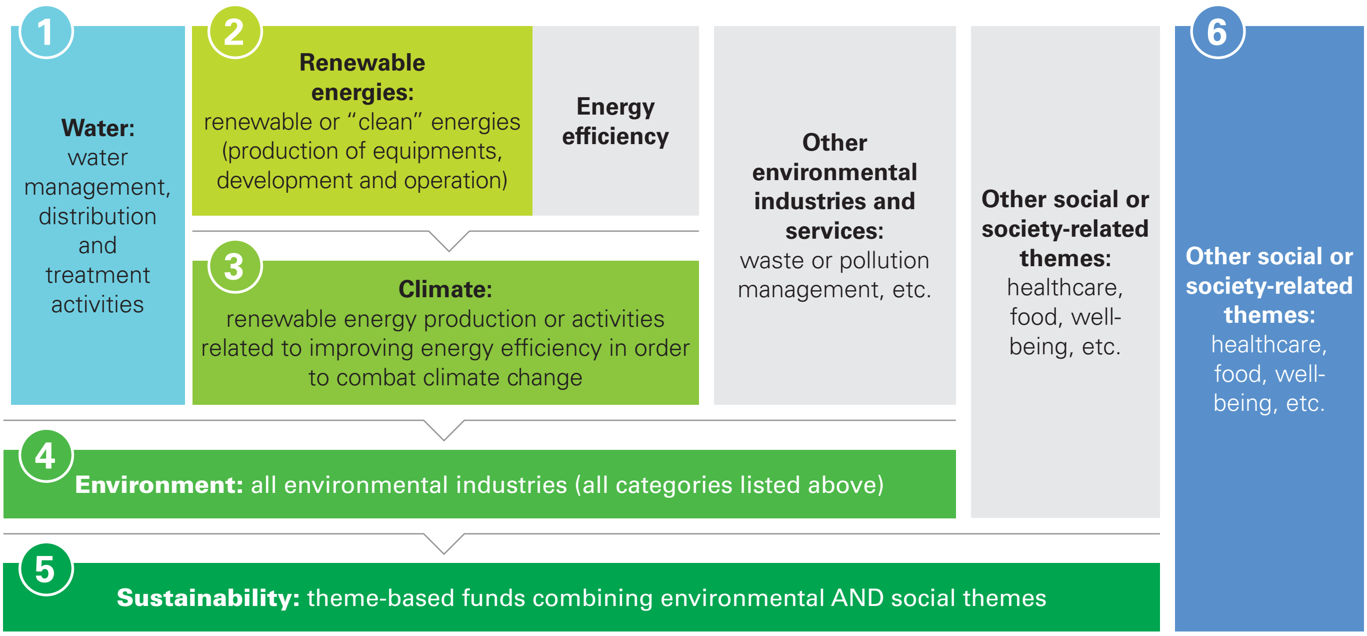
Source: Novethic

Category	AuM 2016 (€ M)	Inflow rate (%)	Average performance (%)
Sub-panel	18 857	5,3%	6,3%
Dark green	10 328	13,3%	5,9%
Light green	7 237	-4,0%	7,3%
Water	7 745	11,8%	9,2%
Environment	6 672	-0,2%	6,3%
Renewables	2 615	-2,5%	1,1%
Sustainable	606	15,5%	1,4%
Climate	714	11,2%	8,0%
Low carbon	358	24,8%	5,4%

Alignment of marketing with investment strategies

The information available to interpret funds' investment themes is very variable and often piecemeal. Some funds publish details of their portfolio, making it possible to clearly understand their investment strategy. Others describe the breakdown of their invested assets in their monthly or quarterly reports, providing information on their environment strategy and how it changes over time. But most of the time, very little information is available and it is impossible to assess the volumes invested in each environment segment with any accuracy, especially as the allocation by theme can evolve over time as the fund managers buy and sell securities.

As a result, two approaches were used to understand the marketing plan behind the launch of green funds and their success among investors, namely an analysis of the theme implied by the funds' names, and a classification of the themes promoted in sales literature (brochures, websites) and/or regulatory documentation (prospectus, KIID).
The funds of the sample were classified into six categories representative of the market:



NB: The "Energy efficiency", "Other environmental services" and "Other social themes" categories are not subject to statistical analysis here. There are no specific funds in the first two of these categories, and the third is part of a broader ESG approach; the corresponding funds cannot therefore be considered green unless they also (and primarily) include environmental themes.

To analyse the relevance of the marketing of the green funds selected and changes in the market over the past five years, an additional classification was made:

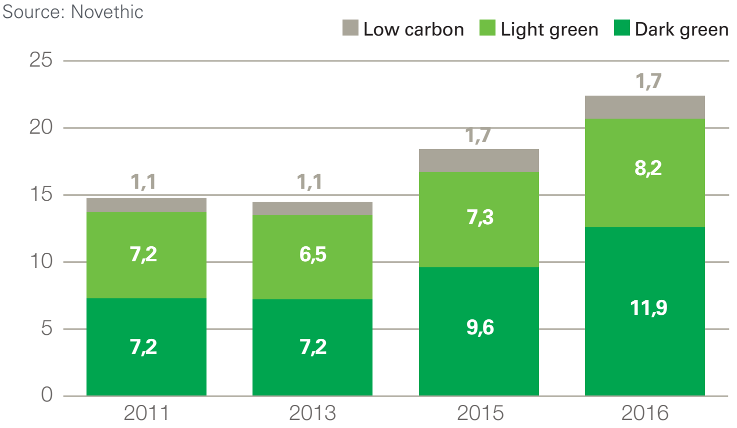
Green funds	**Dark green:** the theme implied by the fund's name matches its investment strategy and objective.
	Light green: the securities in the portfolio do not fully correspond to the fund's strategy and/or name.
Low carbon strategies	**Low carbon:** The fund strategy aims to reduce greenhouse gas emissions by selecting the lowest emitters in each business sector, including heavy industries, services and finance. This strategy differs to theme-based approaches because the portfolios invest in all business sectors, in line with the leading stock market indices. Consequently, this type of fund cannot be identified in an external analysis of the portfolio without knowing the carbon footprint of all the companies it invests in.

Green funds increasingly respect their sales positioning

The relative growth of funds with broad investment themes and the success of water themed funds seem to be directing a growing proportion of investors towards funds that closely follow their announced theme. While the volume of light green funds increased by 26% over the past three years, dark green funds saw their volume climb by 64% over the same period. This is notably due to 2016 inflows rate reaching a 13% average for dark green funds when light green funds showed 4% outflows over the same period.

Breakdown by compliance to marketing (AuM by category in € billion)

Source: Novethic

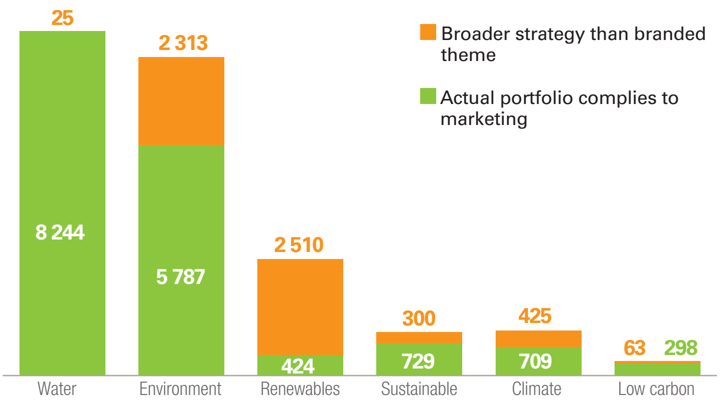


The climate and renewable energy themes are often extended to include other environmental sectors

An in-depth analysis of the funds, combined to the use of the classification as described above, helps identifying which investment strategies respect their funds' marketing approach the most.

Volumes by themes in € million

Source: Novethic



The water theme is clearly the most respected. Only one fund, representing less than 1% of assets in the category, extends its investment scope outside the announced theme.

In contrast, funds labelled as "climate" or "renewable energies" related frequently diversify into segments not referred to in their marketing material. While renewable energy funds tend to invest in energy efficiency alongside clean energy production, climate funds tend to include other environmental themes such as water or waste management, for example. Nearly a third of environment funds accept some diversification into themes with a social impact such as healthcare, or companies that have good environmental practices but no links with green activities. But investors do not appear to be taken in: on average inflows into the funds that respect their clearly-announced theme were four times bigger in 2016 compared to those into funds with misleading explanation of their strategies".

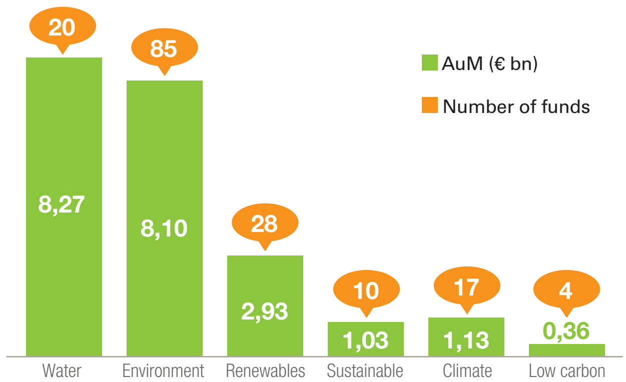
Winning strategies: focus on fund themes

Water is THE most successful individual theme among investors, but broader approaches are the most common

Analysis of fund names shows that asset managers seem to prefer diversified themes such as the environment or a combination of environmental and social themes. Including the recent development of "low carbon" funds, which track benchmarks in terms of industrial sector or category but focus their strategy on selecting securities that have a lower carbon impact than their peers, two-thirds of the market follows this type of broad theme- and sector-based approach.

Volumes by themes and compliance to marketing

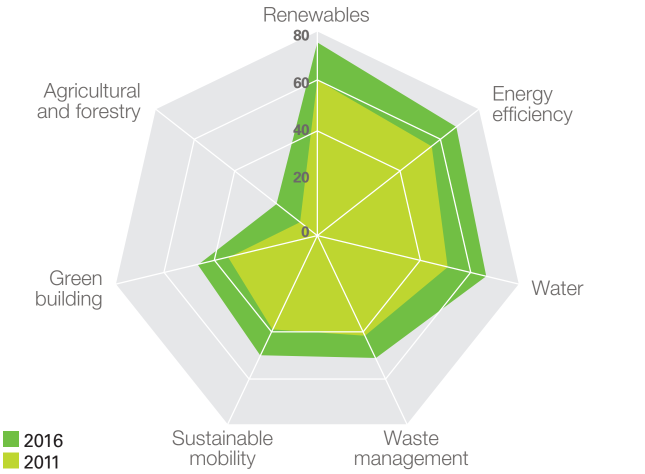
Source: Novethic



However, a few more specific themes are holding on and even expanding, despite their weak sector diversification (a feature that gave them a rough ride at the height of the financial crisis). These are dedicated climate funds and those specifically focused on renewable energies, and they still account for around 25% of funds and 20% of assets. But the theme that has attracted the most investor interest over time is water. While only around twenty European funds focus on water, they hold more than €8 billion in assets (nearly 40% of the market), and grew by nearly 10% between 2015 and 2016. This theme has several advantages: it is easily understood by investors and provides fund managers with relatively non-cyclical investments and a certain degree of diversification.

Energy efficiency and renewable energies are the most popular

Occurrence of themes in investment strategies (as % of total panel)



Examination of the available documentation identifies the themes that are present in investment portfolios over time, even though it is generally not possible to know the exact breakdown of each portfolio. In contrast to what is suggested by the funds' overall classification, the **renewable energies** theme is the most popular, and 120 funds in the selection, or 75% of the total, place these technologies at the heart of their investment strategy.

The **energy efficiency** theme is present in two-thirds of the funds, in particular among those with a climate focus and more general environmental funds. Water is present in 65% of funds, while other environmental technologies - waste management, pollution control, sustainable mobility and energy efficiency for buildings - are found in half of the funds. Agricultural and forestry resources, which offer scarce investment opportunities with proven environmental benefits, are only present in 20% of the funds.

Conclusion

This exhaustive analysis of European green funds shows that growth has returned to the sector. While the number of funds has remained relatively constant, invested assets have increased significantly since 2015. In several countries, the bullish trend is being driven by factors that are giving green funds more visibility and credibility, in particular among institutional investors, for example the 2015 Energy and Ecological Transition Act in France. In Sweden, individual investors can choose green funds for part of their retirement savings. The most emblematic themes include water and waste management and renewable energies. They allow fund managers to diversify the financial profile of the securities in their portfolios. Water themed funds are particularly popular and several funds have grown considerably in size over the past five years and now hold over €1 billion in assets.

Focus on **4 countries active in green funds**

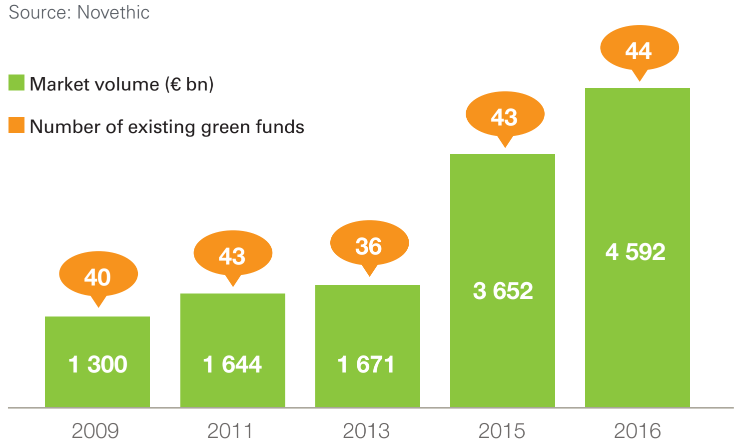
France

Responsible investment, including environment themed funds, has developed considerably in France over the past ten years. Article 173 of the French Energy and Ecological Transition Act could also give new impetus to the trend. For the first time, it obliges institutional investors to disclose how they manage climate risk and more generally how they integrate ESG criteria into their investment policy. This legislation aims to stimulate financing for the energy transition, and has been backed by the launch of a government-sponsored certification programme for green funds (EETC certification). EETC certification is awarded to funds that invest in sectors having a positive environmental impact, and that exclude companies active in the fossil fuel and nuclear energy sectors.

These initiatives have revitalised environmental investments, which have increased since 2015, boosted by the COP 21 climate conference. Institutional investors can fulfil their climate commitments in line with the SRI strategies set up in recent years. A number of banks and insurance companies now offer savings products focused on theme-based funds, which are attracting individual investors to environment funds.

French green funds' market trend

Source: Novethic



The bursting of the first green bubble and the financial crisis hit French green funds hard, as attested by the large number of fund closures in 2012 and 2013, but the market is now dynamic. It is shared between 16 asset management companies, which offer 44 funds totalling €4.6 billion - a record number of funds and assets in relation to other European countries. A number of asset managers are driving the market, including Mirova, Sycomore AM, BNP Paribas IP and Amundi. They have ranges of theme-based investment funds that include green bond and low carbon funds. The most popular theme in France is water, followed by products offering a variety of environmental themes. However, funds focused specifically on the climate and renewable energies are practically non-existent on the French market. One of the objectives of the EETC certification programme is to encourage their development, in particular for investments in renewable energy infrastructure.

Germany

Green investments were first promoted by a handful of modest-sized ethical banks in Germany that have enjoyed fast growth since the financial crisis. They were behind the first green fixed-income passbook savings accounts and regular savings accounts. These guaranteed savings products, which offer low returns, financed the development of early renewable energy solutions and spurred the growth of citizen-owned renewable energy cooperatives, the number of which increased from 66 in 2001 to 890 in 2014. As a result, 51% of the renewable energy facilities launched in Germany between 2000 and 2010 are owned by individuals and farmers. The energy transition policy, *Energiewende*, initially stimulated the creation of a number of dedicated financial products: closed-end funds, direct investments and co-funding projects for solar and wind power plants. The closed-end funds in particular offered attractive returns, but they incurred a high level of risk and often lacked transparency. German investors recall the Prokon scandal, in which a renewable energy firm used aggressive and misleading advertising to raise €1.4 billion from individual investors before going bankrupt in 2014. Changes were made to the regulatory framework in the aftermath of the scandal.

The mid-2016 reform of the *Energiewende*, which was intended to appease coal producers, failed to spark a renewed wave of green financing like that seen in France. Traditional banks and institutional investors are not very active in this segment and the market for listed green funds has only seen modest growth. While the volume of assets under management in Germany totals €2,600 billion and nearly 400 "sustainability" funds are on offer, German asset managers have only created around twenty green funds, totalling around €2 billion in assets. These funds are mostly positioned on broad environmental themes and there are virtually no funds dedicated to water, the climate or renewable energies. Consumer groups, NGOs and green parties' representatives are wary of the environmental promises made by financial firms, and it seems that greater transparency and more clarity in fund names are needed. FNG certification, which was launched in 2015 and in which Novethic is a partner, may help in this respect, but to revitalise the market, institutional investors, insurers and pension funds will need to be more active. The hosting of the forthcoming G20 meeting and COP 23 climate summit in Germany could also contribute.

Netherlands

The Netherlands probably has the most structured market in Europe, with complementary approaches from institutional investors, retail banks and individual investors. To leverage individual savings, in 1995, the Dutch government set up a tax-efficient solution called the Green Fund Scheme. Listed or unlisted equity or debt investment funds that invest mostly in domestic green projects enjoy tax benefits. Two specialist banks have particularly benefited from the system: ASN Bank and Triodos. They set up investment funds that now total hundreds of millions of euros and have been copied by the country's leading banks. The Green Fund Scheme has attracted investments of over €7 billion. But it has recently been undermined by two factors: first, a lack of green projects forced the main asset managers to close subscriptions, and second, low interest rates have largely limited the tax break which was intended to offset these products' low returns. These two factors could channel inflows into traditional green funds such as the first Dutch listed green bond fund set up by NN IP in 2016.

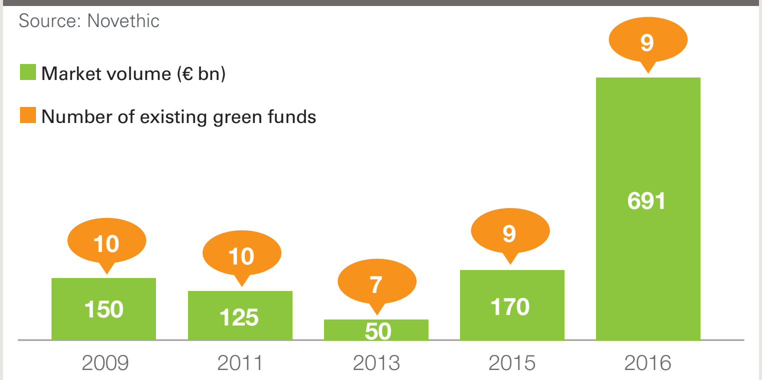
On the institutional side, NGOs, labour unions and the media keep a close watch on how Dutch pension funds and insurance companies use their reserves (€1,370 billion), and they are being encouraged to incorporate Environmental, Social and Governance (ESG) criteria into their investments. Several of them, led by ABP and PFZW, have adopted offensive strategies focused on two areas:

- **The incorporation of ESG criteria**. Several professional organisations, led by the Dutch Association of Investors for Sustainable Development (VBDO), have developed solutions to help institutional investors better manage their environmental and social risks. Each year, VBDO publishes a benchmark of progress made by pension funds and insurers, based on a detailed scoring system. This initiative has been extended to climate risk and is encouraging institutionals to measure their carbon footprint and take steps to significantly reduce it.
- **Investments with a major environmental and social impact**. These investments, which are in line with the Sustainable Development Goals, aim to demonstrate that major pension funds deliver social added value with a measurable impact for their beneficiaries and society as a whole. They are increasingly focusing on green technologies, in particular by investing in renewable energies and energy efficiency in buildings.

Sweden

The political movement in favour of the environment is very strong in Sweden. It is based on industrial initiatives and active dialogue between financial professionals and the government. In addition, the pension system allows employees to choose the investment fund in which a small portion of their retirement savings is invested. They can choose from 800 funds, among which environment and SRI funds are being given increasing visibility. This is due to an initiative sponsored by SWESIF, the Swedish forum for sustainable investment, and supported by the pension regulatory authority, which categorises and highlights the environmental and social features of the funds available. Around a quarter of the funds selected by employees follow a green or sustainability policy, and public interest in these funds seems to be growing. At the same time, professional organisations such as the Ethical Marketing Committee for Funds (ENF) and the Swedish Investment Fund Association have set transparency standards to clarify the names of sustainable and environmental investment funds. In addition, Nordic Ecolabel, a renowned certification standard for green products, is currently developing a specific methodology for sustainability funds. Its provisional specifications are restrictive, in particular regarding environmental aspects (mandatory exclusion of fossil fuels), and it has not yet received consensus approval from all players active in green and responsible investment.

Swedish green funds' market trend



Proactive institutional investors. In recent years, institutional investors - led by the seven AP funds that manage the country's pay-as-you-go pension system - have adopted proactive strategies to measure and reduce their portfolios' carbon footprint. To do this, some use low carbon mandates, which are particularly well-suited to their mostly index-based investment process, while others are increasing the portion of green assets in their portfolios, in particular forestry assets and investments in unlisted cleantech firms.

The European **green funds** market - March 2017

Survey conducted by Dominique Blanc, Edouard Plus and Marguerite Bonnin, Novethic research center.

Novethic, a part of the Caisse des Dépôts Group, is a French research centre on Responsible Investment. Founded in 2001, Novethic analyses the major trends and conducts studies on specific ESG topics. Novethic's SRI and green fund Labels provide a reliable reference point for responsible investment funds available on the European market. www.novethic.com

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