

SUMMER 2022

Sustainable Housing Outlook



Introduction

It gives us great pleasure to present the first edition of RITTERWALD's Sustainable Housing Outlook to coincide with the European Federation for Living (EFL) Berlin conference, kindly hosted by Gewobag.

In 2017 EFL highlighted the relevance of the ESG concept to social housing providers across Europe and recognised the importance of bridging the sector to ESG investors to both expand and diversify their lender base. In 2019 this resulted in the launch of RITTERWALD's Certified Sustainable Housing Label, an ESG accreditation that not only demonstrates corporate ESG credentials to the debt capital markets, it also facilitates stakeholder management and provides validated data for corporate ESG reports. Municipal housing association Gewobag (70,000+ homes) is one of the active supporters and launching Label holder.

Three years later the ESG concept has become part of our daily vocabulary and it appears in different terminologies: sustainability, socially responsibility, ethical investment, and impact investing. Because of the ESG concept penetrating the mainstream there have been a multitude of developments that are interrelated and challenging to track. Some relate to strategic tools for company action (materiality analyses and UN Sustainable Development Goals), others to reporting requirements (ESRS, DNK, GRI), regulations (EU taxonomy incl. Social taxonomy, CSRD), and others to ESG accreditations (Certified Sustainable Housing Label, Sustainability Risk Assessments, ESG ratings).

Housing providers now demonstrate their ESG credentials to their lenders and other stakeholders including tenants, the regulator, local government, and partners in the supply chain. Although ESG is a global phenomenon, it has been embraced at a different pace in the social housing sector across Europe. Updating the sector on advances in ESG and sustainability is the key driver for RITTERWALD to publish the Sustainable Housing Outlook.

This Sustainable Housing Outlook provides social housing providers across Europe with an accessible overview of developments in the world of ESG and social housing. In this way we can share our knowledge and expertise gained from working with valued clients across the social and affordable housing industry. This first edition introduces ESG in Western European housing. In the next outlook we will address energy management and the related business models that could be adopted by social housing providers.

Some of the highlights of this first outlook are:

- The social housing sector will continue to be well positioned in the ESG market if it keeps enhancing its ESG credentials.
- Social housing providers are becoming more data driven organisations: ESG metrics support and enhance this drive.
- Global capital is re-directed into sustainable investments reflecting risk, return and social and environmental impact.
- Two faces of ESG have emerged: financial risk assessment and social impact assessment.

We plan to release the outlook to coincide with EFL conferences.
We welcome your comments of this inaugural edition.

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In 2019 RITTERWALD
launched its Certified Sustainable Housing Label,

1 Looking forward only after looking back first

About 25 years ago the term sustainability was only heard among environmentalists. Today it has become an everyday business term. For a long-time sustainability was referred to as the three Ps: People, Planet, Profit. It referred to Society, Environment and Economy in a way that people could understand and agreed upon and that these needs should be considered in a balanced way. Then climate change became the dominating theme of the ESG agenda.

Since COP21 in Paris in 2015, sustainability has become more visible in the political world. The Paris Agreement represented a global wake up call. Something momentous happened: almost every country in the Conference of the Parties (COP), except for four, agreed to work together to limit global warming to below 2 degrees with a further ambition to limit the increase to 1.5 degrees. To achieve this ambition they agreed to release funds to deliver on these goals. In addition the participating countries were given their homework: they committed to bring forward national carbon reduction plans and to submit their plans for review and updating every five years. The latest plans were presented to COP26 in Glasgow in 2021.

Since Paris the mission of each country has become more critical as material risks have been increasingly revealed. Sustainability became visible on political agendas and governments increasingly emphasised the importance of social responsibility in the private sector. Company shareholders have therefore been drawn into the sustainability debate. Society has also started demanding that companies, both public and private, serve a social purpose as stakeholder capitalism has gained more traction. This concept suggests that to prosper over time, every company must not only deliver on financial performance, but also show how it makes a positive contribution to society. Companies increasingly are being expected to not only benefit shareholders and customers but also employees, and the communities in which they operate.

The gamechanger in the financial markets came in 2018 when Larry Fink, the founder and chief executive of investment firm BlackRock publicly urged all companies to articulate their purpose and how they benefit all stakeholders.

Investment markets started to refer to the ESG concept and increasingly require companies to demonstrate their ESG credentials in their credit application process alongside traditional financial measures. Yet, ESG investing did not come overnight. Prior to the attention for ESG, companies were already demonstrating that they were acting socially responsible (SRI) by actively excluding certain sectors, including child labour, fashion and tobacco, and choosing investments based on engagement and specific ethical guidelines. ESG, SRI and impact investors want to demonstrate how they make their contribution to a better world.

With ESG investors entering the stock markets or existing investors amending their mandates, financial markets and corporate shareholders start talking ESG. For example the London Stock Market has added a Sustainable Bond Market segment to its exchange. Shareholders increasingly direct companies to introduce and enhance their ESG performance supported by government regulations. This is causing a shift from exclusionary into inclusionary investment allocations. Because this shift is moving fast and it involves trillions of dollars, withdrawing from markets is easier than identify new ESG investments. Moreover, investors must avoid greenwashing. ESG investors were therefore seeking new markets, and this explains how social and affordable housing was identified on the investor's radars.

With the 2008 Global Financial Crisis still in mind and the huge bailouts of banks by national governments, tectonic shifts in capital allocation required new and additional regulation. Legislation is increasing and seems centred among Basel, and London and Frankfurt. Non-financial disclosure has become the new buzzword: report about your ESG performance and show the world what your company contributes to a better world.

Financial markets and national Governments are moving towards more detailed ESG disclosures fast. Now that financial markets are talking and breathing ESG, housing companies that can demonstrate their ESG credentials benefit.

2 ESG in social housing

In only 5 years' time, ESG credentials in the social housing sector have evolved from a niche into mainstream market for sustainable finance. The growth from niche to mainstream makes sense because social housing providers across Europe:

- Have a strong narrative towards social impact: their mission and business are about the wellbeing of tenants and building strong communities.
- Show an increasing awareness of their ecological footprint and are designated frontrunners in setting the retrofitting/decarbonisation agenda in the rental sector.
- Face increasingly strict and close monitoring by the national regulator.

Since the issuance of the Certified Sustainable Housing Label, the focus on ESG has grown steadily creating a rising demand for sustainability related services among our clients across Europe. In all cases we enable our clients to demonstrate and enhance their ESG credentials.

ESG Accreditation

Certified Sustainable Housing Label and Sustainable Housing Assessment (captured product for aggregators, banks, and funds).

ESG Reporting

Compliant with taxonomies and reporting standards (in UK the Sustainability Reporting Standard).

Sustainability Strategy

Materiality analysis to support priorities and decarbonisation transition plan on the pathway to net zero.

Sustainable Finance

Finance frameworks for preparing issuance of GSS bonds (ICMA compliant) or raising sustainability-linked loans (LMA compliant).

Outlook

Our expectation is that ESG in social housing is here to stay from a policy, regulatory and finance perspective, despite a backlash from a minority of traditional investors. As a result, social housing providers need to actively work on their ESG strategy and position ESG at the core of their business operations:

- Debt capital markets will look for more ESG related debt products: investors have made ESG as mandatory part of their mandate to fund managers.
- Social housing providers are raising the bar in demonstrating their ESG credentials: more and better-quality data, not only on social, but also on environmental dimension.
- Social housing providers are better capable of demonstrating the link to selected SDGs.

3 Sustainable bond issuances on the rise

As figure 1 shows, over the last 5 years, one can notice a strong increase in issuances of Green, Social and Sustainability bonds (GSS) worldwide, from US\$ 200bn in 2017 to more than US\$ 1trn in 2021. And it is expected to increase with approx. 30% in 2022. For social and affordable housing providers, mostly dealing with non-recourse corporate finance, the social and sustainability bonds are most important: green bonds (mostly offered as recourse project finance) are used for new housing construction meeting high energy efficient standards (EPC A or B in the UK).

As figure 2 shows, the worldwide proceeds of approximately 15% of the social bonds and 40% of the sustainability bonds issued in 2021 were used in the built environment: US\$ 42.0bn was invested in affordable housing: this is 45% of all direct and indirect bonds (US\$ 94.0bn) that can be related to social and affordable housing. And we expect that a large share of the growth in 2022 will reinforce this trend:

- New housing delivery: due to demographics (growth in number of households and net migration) for at least in the next decade there will be a substantial shortage of social and affordable housing that will be privately financed through bond issuances, either directly by the housing provider or through dedicated housing bond aggregators.
- Retrofitting/decarbonisation: the current ambition in reduction of greenhouse gas emissions and future legislation, retrofitting the legacy housing stock will require substantial capital. The expectation is that only a small part (10–25%) will be provided through government grants. The remaining money must come from debt capital markets and revenues through sales of existing stock.

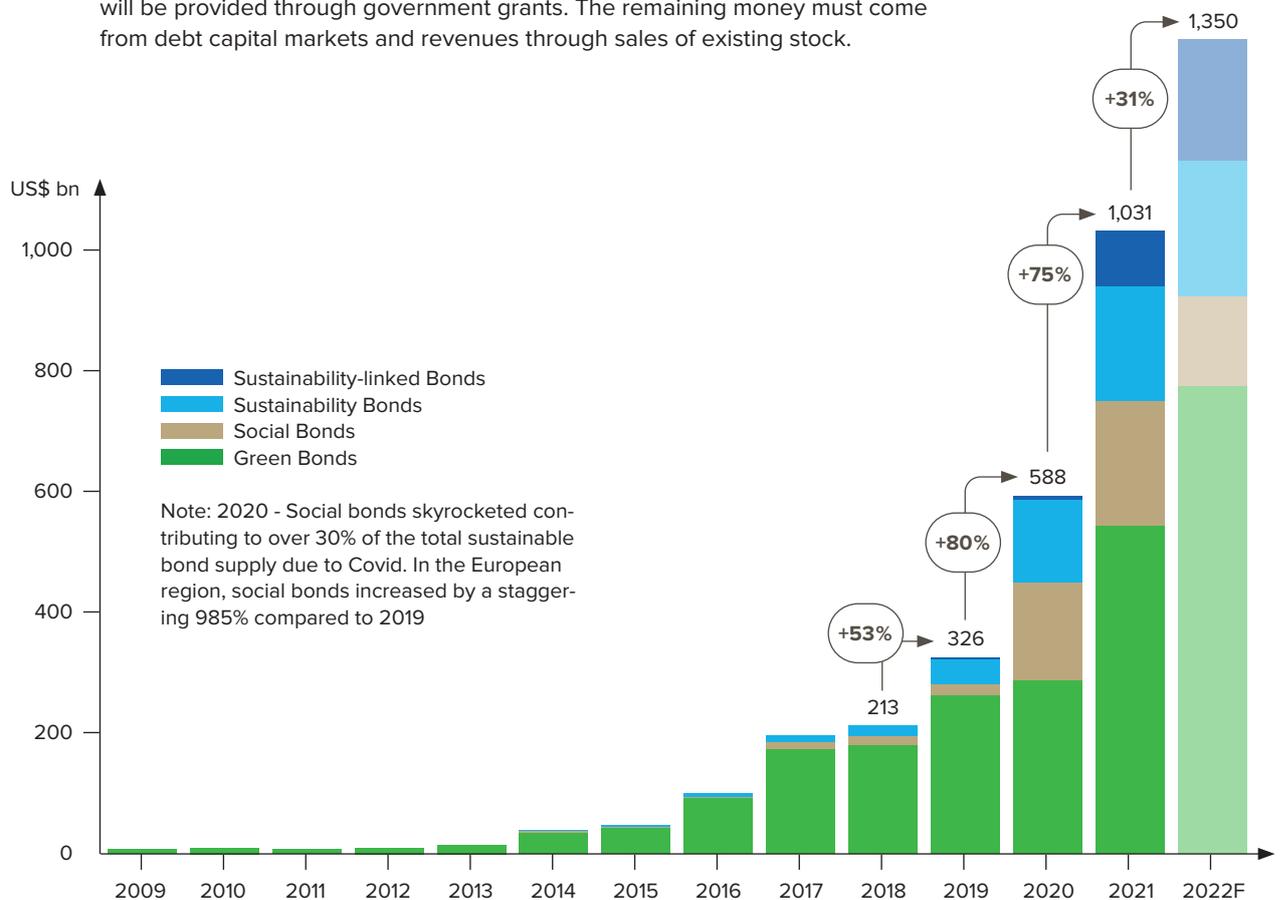


Figure 1: Market development for Green, Social and Sustainability Bonds (GSS-Bonds)
Sources: Moody's, Sustainable Bond Insights, RITTERWALD

It is expected that this capital demand can be provided by debt capital markets if social and affordable housing further grows in to an ESG asset class: for an increasing number of global ESG investors social and affordable housing will be regarded as a residential asset class with low risk-adjusted returns. The stability of the regulatory environment and government (rent) policies are key conditions.

Another visible trend in the social housing sector, particularly in the UK market, is the growth in raising sustainability-linked loans by social housing providers. This type of loan does incentivise housing providers' sustainability performance by linking the interest margin to the improvement of the borrower' ESG score or to the improvement on tailored sustainability key performance indicators, mostly social one (education, job training). BNP Paribas pioneered this debt product in 2017 and nowadays most commercial banks (NatWest, Lloyds, MUFG, Barclays, ING, ABN AMRO among others) offer sustainability linked loans.

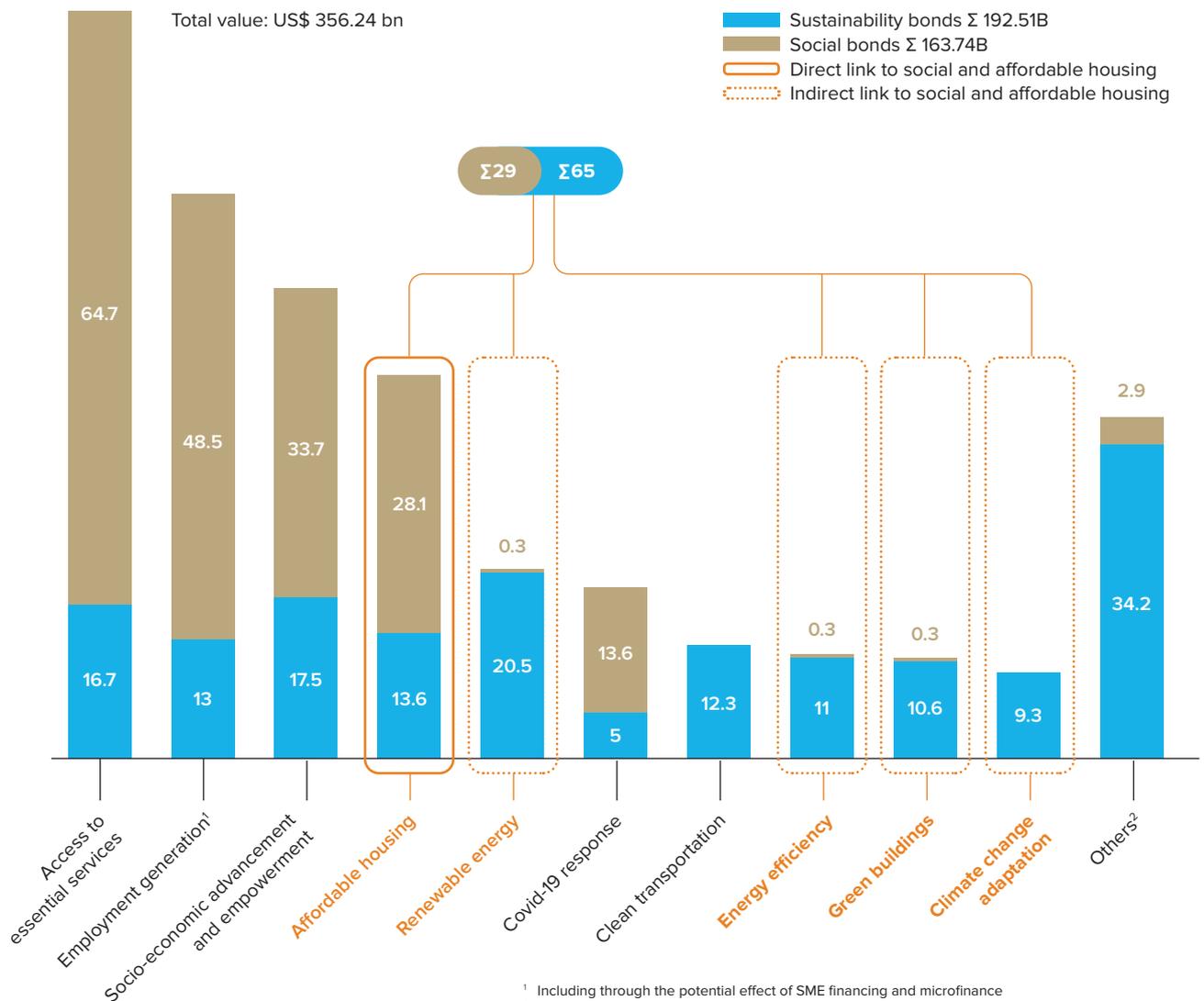


Figure 2:
Use of proceeds breakdown of social bonds issued in 2021 (worldwide in US\$B)
Sources: RITTERWALD, Sustainable Bonds Insight Environmental Finance

¹ Including through the potential effect of SME financing and microfinance
² Including: Food Security / Sustainable water management / Pollution Prevention Control / Sustainable management of living natural resources / Terrestrial and aquatic biodiversity conservation a.o.

4 Alignment with UN Sustainable Development Goals

Prior to issuing a GSS-bond, the issuer needs to compile a finance framework addressing the ICMA Principles and Guidelines and needs a SPO (Second Party Opinion). In the framework the issuer must also substantiate the alignment to the UN Sustainable Development Goals. As figure 3 shows SDG 7 (Affordable and Clean Energy) and SDG 11 (Sustainable Cities and Communities) are most often connected to the use of proceeds of GSS-bond.

Even though there are connections with several of the 17 SDGs, SDG 7 and SDG 11 are most referred to in most finance frameworks from social housing providers. Others, for instance SDG 1 (No poverty) and SDG 13 (Climate action) are also regularly included. A differentiation is also made if a housing provider is issuing a Social Bond or a Sustainability Bond: the latter combining the use of proceeds for social and environmental goals.

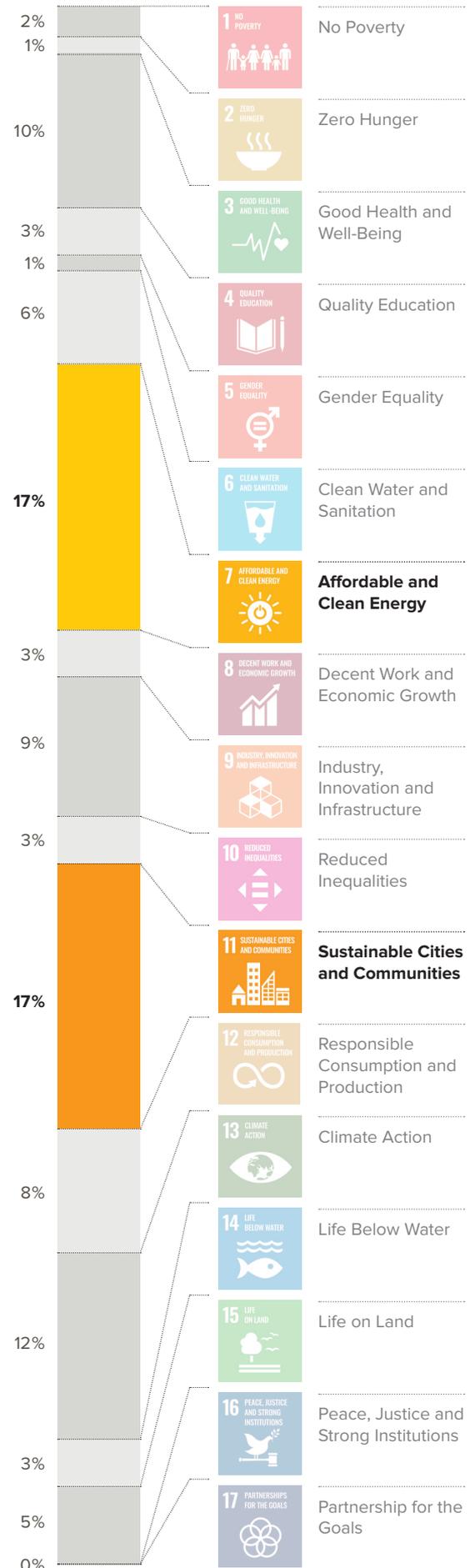


Figure 3: Use of Proceeds Percentage per SDG (worldwide)
Sources: Sustainable Bonds Insight Environmental Finance, RITTERWALD

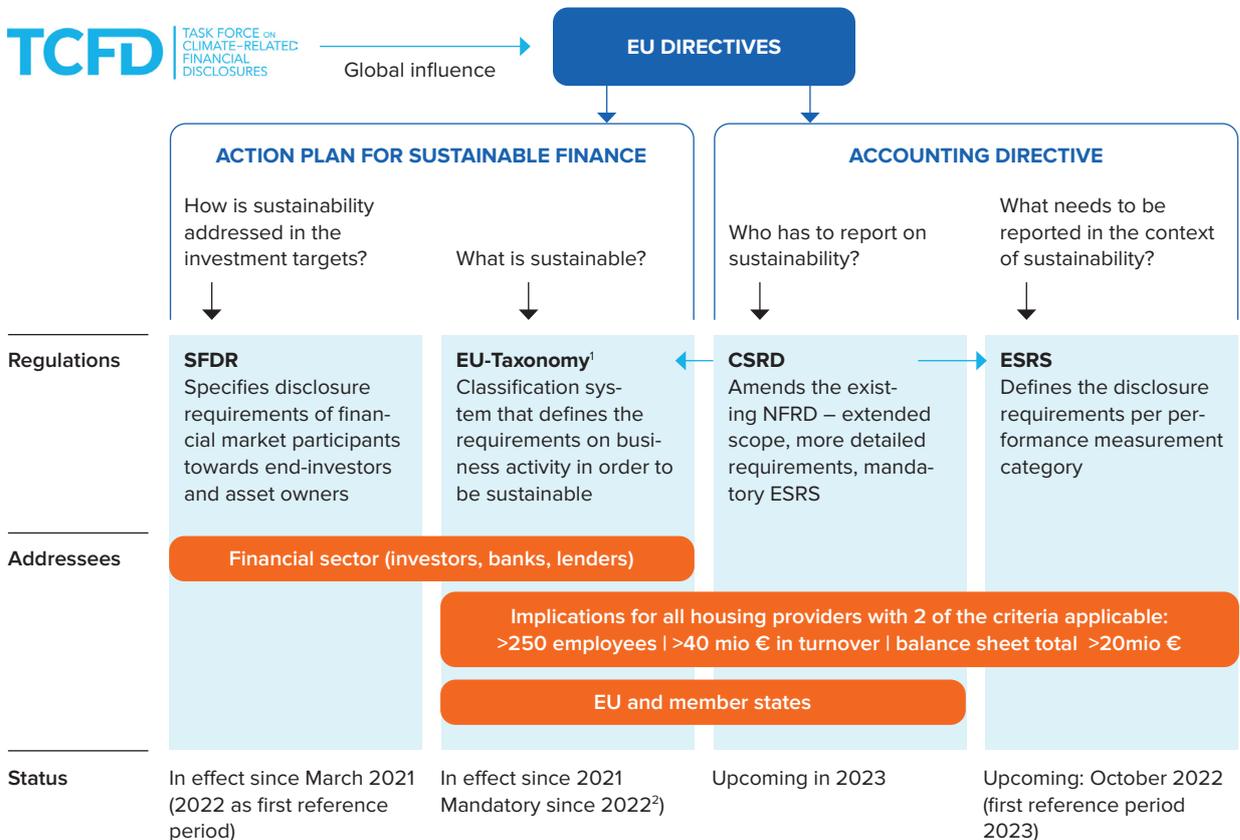
5 Trends in sustainability regulations

On the global level, most of the regulations are driven by the recommendations of the Task Force on Climate related Disclosures (TCFD). And in the EU by the EU directives related to sustainable finance (SFDR and EU-taxonomy) and accounting (CSRD and ESRS). It applies to EU and member states. Post Brexit, in the UK there are similar regulatory requirements.

Task Force on Climate related Disclosures — The TCFD was originated by the Financial Stability Board (FSB) in 2015. In 2017, the TCFD released its recommendations to help companies provide better information to support informed capital allocation. TCFD interrelated recommendations are structured around governance, strategy, risk management and metrics and targets. The recommendations are supported by 11 recommended disclosures (TCFD framework). The FSB has asked the Task Force to continue its work, promoting adoption of the TCFD framework and preparing annual status reports, the latest is of September 2021.

Sustainable Finance Disclosure Regulation — The SFDR specifies disclosure requirements of participants in financial market towards end-investors and asset owners regarding their sustainability targets. The SFDR is in effect since March 2021 and 2022 counts as its first reference period.

Figure 4:
Market Trends Sustainability – Regulations
Sources: SFDR, EU Taxonomy, CSRD, ESRS, RITTERWALD



¹ Not all sectors are yet included in the EU-Taxonomy
² Since then the Addressees are defined by the CSRD criteria

EU-Taxonomy – The EU-taxonomy (and similar in UK) is a classification system that defines the requirements on business activities to be called sustainable. The EU taxonomy is in effect since 2021 and mandatory since 2022 (compliant companies defined in CSRD criteria).

Corporate Sustainability Reporting Directive (CSRD) – The CSRD determines which companies must report on sustainability. Compared to the NFRD (Non-Financial Reporting Directive) a much larger share of companies will need to report on sustainability.

European Sustainability Reporting Standard – The ESRS defines the disclosure requirements per performance measurement category.

Outlook

Social housing providers in EU have or will have to comply with EU-taxonomy, CSRD and ESRS if 2 of these 3 criteria apply to them:

- More than 250 employees
- More than €40m annual turnover
- More than €20m balance sheet

This has major consequences for all housing providers. Until now, sustainability regulations were only affecting the big companies. However, with the low thresholds in annual turnover and balance sheet, it is wake up time for companies across most industries, including social and affordable housing. In figure 4 we have summarized the current and shortly forthcoming regulatory environment in EU.

6 Sustainability Reporting Standard in United Kingdom

In the UK the social housing and financial sector together took the initiative to develop a Sustainability Reporting Standard (SRS), launched in November 2020. Since then, it has been adopted by over 100 housing associations across the UK and last month the first review of the SRS Board has been published. Some key findings from housing providers:

- SRS helps drive strategic direction, operational decision-making, and ambition for ESG performance.
- SRS improves credibility on sustainability management with current and prospective lenders and investors.

And some key findings from banks and investors:

- SRS is seen as 'best practice'.
- SRS provides assurance on ESG management and is influencing funding decision making.

RITTERWALD made major contributions to the SRS by sharing its criteria and metrics developed and applied in its Certified Sustainable Housing Label (CSHL). SRS and CSHL are aligned and can use same data sets.

7 Selected countries

Ambitious policies

As figure 5 shows all countries have aspirational ambitions about reduction of greenhouse gas emissions: 2030 is the first deadline to review the Paris Climate Agreement (compared to 1990). France and the Netherlands set their ambition at 49%, the United Kingdom at 54% and Germany at 55%. It is good to be aware that these ambitions were set prior to the corona pandemic and the war in Ukraine: the latter have brought the funding of the climate goals in competition with until recently unforeseen government spending: reducing energy cost for its citizens and increased spending for the country's defence. In its pathways to net zero, all governments rely on similar measures such as increasing the share of renewables in heating and cooling, introducing heat pumps (or hybrids to start with). And all social housing providers, although designated frontrunner in retrofitting the rental housing stock, also must deal with the so-called landlord-tenant conundrum: most of the retrofitting cost are with the landlord while the benefits are with the tenant by a lower energy bill.

	 Germany	 UK	 France	 Netherlands
 GHG reduction goal (in comparison to 1990)	55% by 2030	54% by 2030	49% by 2030	49% by 2030
 Share of renewables in heating & cooling	Data 2018 – 14% Goal 2030 – 27%	Data 2018 – 8% Goal 2030 – 27% in general	Data 2018 – 22% Goal 2030 – 38% for heating (32% in general)	Data 2018 – 6% Goal 2030 – not developed yet (31% in overall energy consumption)
 Heat pumps	The installation of heat pumps is being subsidized with 35%. If it replaces oil heating, additional 10% subsidy is granted.	Grants to encourage the installation of low carbon heating systems such as heat pumps are provided by the Decarbonisation Fund for Social Housing	The Coup de Pouce (Helping Hand) scheme for energy savings is focused on replacing old boilers with e.g. heat pumps (FR)	The Sustainable Energy Investment Subsidy (ISDE) offers 85 million € annually until 2030 for sustainable installations such as heat pumps
 Landlord-tenant conundrum	Current rental law allows the property owner to pass on the cost of energy-efficient refurbishment to the tenant. Ideally, the increase in cold rent equals the reduced operating cost	The Private Rented Sector Regulation sets a minimum performance level of EPC E in rented units prior to re-letting	The grand plan d'investissement – GPI (Big Investment Plan) includes a four billion euros budget for the renovation of 'energy sieves' (EPC F or G) in the social housing stock (FR)	Aim for housing cost-neutrality for house owners through <ul style="list-style-type: none"> • Conditions for scaling matters up • Proposals to alleviate the remaining operating shortfall of building-specific measures through pricing and subsidizing measures

Figure 5: Market Trends Sustainability – Country Specifics

Outlook

Although debt capital is available and most social housing providers across Europe are in financially sound condition, their debt capacity will not be sufficient to accomplish the set goals. In other words, government must step in in a timely manner or ambitions must be lowered and or postponed.

Bond issuances

Larger social housing providers in the UK (primarily England) are issuers of public GSS bonds. Some of them have issued several GSS bonds over the last year couple of years. A good example is Clarion Housing Group, that until now issued more than €1,0bn. Other were used already to issuing regular bonds but did their inaugural GSS bond such as Places for People, Peabody, and Metropolitan Thames Valley.

Figure 6:
Selected issues of GSS bonds
from the housing industry

Country	Company	Date of issuance	Type of Lender	Type of issuance	Volume of issuance
Germany	Berlin Hyp AG	2021	Bank	Green Bond	€ 0.5 bn
	BKS Bank	2021	Bank	Green Bond	€ 0.005 bn
	KFW	2021	Bank	Green Bond	Various
	Deutsche Wohnen	2021	HA	Green Bond	€ 1 bn
	Vonovia	2021	HA	Green Bond	€ 0.6 bn
	Gewobag	2021	HA	Social Bond	€ 0.5 bn
	LEG	2021	HA	Sustainability Bond	€ 0.6 bn
	Degewo	Feb 2022	HA	Sustainability-linked Loan	€ 0.5 bn
	Vonovia	March 2022	HA	2 Social; 1 Green	€ 2.5 bn
UK	CWG	2021	HA	Green Bond	€ 1.07 bn
	NatWest	2021	Bank	Social Bond	€ 1 bn
	Paragon	2021	Bank	Green Bond	€ 0.15 bn
	MORHomes	2021	Bond Aggr.	Sustainability Bond	€ 0.03 bn
	LiveWest	2021	HA	Sustainability Bond	€ 0.29 bn
	THFC	2021	Bond Aggr.	Sustainability Bond	€ 0.09 bn
	L&Q	2022	HA	Sustainability-linked Bond	€ 0.35 bn
	MTVH	2021	HA	Sustainability Bond	€ 0.29 bn
	Broadland	2021	HA	Sustainability Bond	€ 0.02 bn
	Peabody	2022	HA	Sustainability Linked Loan	€ 0.09 bn
	Alliance Homes	2022	HA	Sustainability Linked Loan	€ 0.09 bn
	Peabody	2022	HA	Sustainability Bond	€ 0.41 bn
	Places for People	2022	HA	Sustainability Bond	€ 0.35 bn
Clarion	2019-22	HA	Multiple Bonds and SLL	€ 1.11 bn	
Netherlands	BNG	2021	Bank	Social Bond	€ 1.5 bn
	BNG	2020	Bank	Sustainability Bond	€ 1 bn
	NWB	2021	Bank	SDG Housing Bond	€ 1 bn
France	CDC	2020	Bank	Sustainability Bond	€ 0.5 bn
	ALS	2021	Social Housing Agency	Sustainability Bond	€ 1 bn

Bond aggregators THFC and MORhomes both issued their first Sustainability Bond. One should also include the increasing number of ESG labelled private placements, both bonds and loans, that are issued and raised, mostly medium sized volumes.

In Germany it is primarily the stock listed housing companies such as Vonovia and LEG among others issuing GSS bonds, including Green Bonds for new construction. More recently also German -municipal- housing associations start issuing bonds. Last year Gewobag issued its inaugural €0.5bn Social Bond.

In both the UK and Germany also commercial banks (NatWest, Berlin Hyp among others) issue GSS housing bonds that they lend on to housing companies.

And in Germany (KfW), Netherlands and France also state banks issue GSS bonds that they lend on to social housing providers. In the Netherlands BNG and NWB, the two sector banks, have market share of 85% in the debt finance for the housing associations. The same we see in France with the French public sector financial institution Caisse des Dépôts et Consignations (CDC).

Outlook

We expect further growth of GSS Bonds or we should say GSSS. The additional S is for Sustainability-linked Bonds: UK based housing association L&Q issued the first one this year. Social and affordable housing remains an attractive and growing asset class for ESG investors worldwide.

With the increasing need for additional debt for new construction and retrofitting, GSSS bonds will gain importance. And we expect an increasing role for bond aggregators across Europe for those social housing providers that -due to size, capacity and subsequent risk profile- are not able to access the debt capital markets themselves. Except for the large housing providers, also growing in number due to mergers, who will keep doing own-name bond transaction on a regular basis, bond aggregators will issue frequently and in high volumes: this makes it easier for them to access competitively prices long term debt.

RITTERWALD is a pan-European real estate consultancy, incorporated 11 years ago in Germany. We are committed to supporting the social and affordable housing industry. We are working with housing companies across Europe on different sustainability related services, of which an important one is ESG accreditation through the Certified Sustainable Housing Label (CSHL). The CSHL compliments our wider business consulting services; corporate sustainability strategies, business optimisation, organisational change, corporate growth and restructuring. RITTERWALD's team combines extensive knowledge of residential real estate and housing, business process re-engineering and corporate strategy.

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