

IDW KNOWLEDGE PAPER

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ACCOUNTING FOR 'GREEN' FINANCING

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1. EXECUTIVE SUMMARY

Many governments around the world have committed to a more sustainable economy and society by signing the Paris Agreement on Climate Change and the UN 2030 Agenda for Sustainable Development. The European Union sees itself in a pioneering role and, on the basis of the EU action plan 'Financing Sustainable Growth' published in March 2018, is pursuing, among other things, the goal of redirecting capital towards sustainable investments¹ in order to achieve sustainable and inclusive growth. In this context, the European Commission is committed to developing a EU Standard for Green Bonds. The proposal for a regulation on European green bonds was published in July 2021². The 'European Green Bond Standard (EUGBS)', which will be subject to voluntarily application in the future, is intended to help investors identify high-quality 'green' bonds and facilitate the issuance of these bonds.

Not only is the demand for 'green' financing increasing, but the number of issuers is also growing steadily. In the meantime, a multitude of differently structured 'green' financing can be observed on the market. The spectrum ranges from financial instruments that barely differ from classic loan financing to instruments with a comprehensive 'green' design. So far, little attention has been paid to their accounting treatment. Currently, there are no regulations in IFRS or [German] commercial accounting legislation that specifically deal with financial reporting for this type of financial instruments.

In the case of 'green' financial assets with cash flows that are variable due to sustainability factors, the investor focus is primarily on the assessment of the conditions affecting contractual cash flow characteristics within the scope of the classification according to IFRS 9, because this is used in particular to determine accounting at amortised cost. On the liabilities side, the analysis of 'green' financial liabilities for existing embedded derivatives that have to be separated from the host and accounted for as derivatives under certain conditions poses challenges for issuers. The current application issues are probably mainly due to the fact that when IFRS 9 was adopted in 2014 'green' financial instruments hardly played a role. In the meantime, however, the circumstances have changed significantly. Financing with a contractual link between cash flows and sustainability factors has arrived in the capital market and is likely to become a widespread means of financing in the near future.

From the point of view of the [auditing] profession, it is therefore an urgent need to address this new type of financial instruments intensively, including related financial reporting aspects both on a global level (IFRS) and on a national level (HGB) [German Commercial Code – Handelsgesetzbuch]. Especially as far as the international standard setter is concerned, it would be desirable for clear regulations, giving legal certainty, to be developed with regard to this special type of financing. The capital market needs reliable and clearly comprehensible information. For example, clarifying the basic principle as well as the elements of 'basic lending arrangements' according to IFRS 9 would be a comparatively simple way to address this. In this context clarification is needed as to the extent to which contractual agreements on sustainability factors and the resulting variability of cash flows are in line with the basic principle of the standard.



2. INTRODUCTION

Due to the increasing importance of the topic of 'sustainability' in politics, business and society, the question of whether financing has an environmental focus, respects social aspects or has some reference to responsible corporate governance: sustainable or 'green' financing that takes into account ESG factors (environment, social, governance) is receiving more attention than ever before. Within the European Union, in March 2018 the European Commission laid the foundation for financing sustainable growth with its action plan³. With the announcement of the 'Renewed Sustainable Finance Strategy' contained in the so-called 'European Green Deal'⁴, the European Commission is consistent in pursuing this path⁵.

Among other things, the need for policy and regulatory developments to promote sustainable finance stems from issuers' and investors' concerns regarding the potential reputational risks of

'green labelling' certain financial instruments, uncertainty as to the nature of the projects that can be financed, and the complex and potentially costly reporting procedures and external verification⁶. This is especially true given the fact that both the demand for this type of financing is continuously increasing and the circle of issuers is constantly growing. In the meantime, a large number of differently structured 'green' finance products can be observed on the market. These include so-called green bonds or green loans, which stipulate that the proceeds of the issue will be invested in sustainable projects. There is also an increasing demand for, and offerings of, so-called ESG-linked instruments, which provide for a variable interest rate dependent on the development of one or more ESG factors. These in part new and diverse designs of classic financial instruments pose both accounting and reporting challenges to both investors and issuers. Since there is currently no uniform legal framework that specifically deals with this type of financial instrument, and little practical experience with the accounting treatment of 'green' financing, it is currently not possible to ensure a uniform approach either with regard to the design of the instruments or to their accounting by investors and issuers. Therefore, discretionary decisions are unavoidable to a certain extent. Careful consideration and an appropriate analysis of each individual case is thus required.

This IDW Knowledge Paper is intended, on the one hand, to highlight the current challenges in accounting for this new type of financing and, on the other hand, to provide initial suggestions and propose approaches for further discussion. Such a discussion is urgently needed to ensure a reliable basis for companies' financial statements provide a relevant, transparent and comparable presentation of 'green' financial instruments.

This paper first discusses the importance of 'green' financing for the development of a more sustainable economy and society. In this context, the paper then outlines the current European initiatives aimed at establishing the necessary political, legal and societal framework (section 3.1.). This is followed by an outline of the different and increasingly diverse types of 'green' financing (section 3.2.). Sections 4 and 5 focus on accounting issues – from an investor and issuer perspective, respectively. Even though this IDW Knowledge Paper is primarily concerned with the current IFRS regulations, similar or comparable issues also arise in the regard to accounting according to [German] commercial law requirements. These issues are discussed at the end of each of the two sections. Finally, the paper presents initial suggestions and proposed approaches, which are to be understood as constituting a contribution to the ongoing discussions – both at a national and international level (section 5.). The explanations conclude with a brief outlook (section 6.).



3. 'GREEN' FINANCING IN PRACTICE

3.1. Political and regulatory developments

Many governments have committed to a more sustainable economy and society by signing the Paris Agreement on Climate Change and the UN 2030 Agenda for Sustainable Development. Although many countries are already making progress, the European Union seems to be the economic area where development is currently

most advanced. To illustrate this, it is worth looking at the EU Action Plan 'Financing Sustainable Growth' published in March 2018⁷, which forms the basis for the European Commission's⁸ 'Renewed Sustainable Finance Strategy'⁹ announced in the 'European Green Deal' and published in early July 2021.

The goals of the EU Action Plan essentially aim to:

- reorient capital flows towards sustainable investment to achieve sustainable and inclusive growth;
- manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues; and
- foster transparency and long-termism in financial and economic activity.

To achieve these goals, the European Commission – in addition to developing a classification system for environmentally sustainable economic activities (EU Taxonomy)¹⁰ and publishing guidelines to improve the publication of climate-relevant information¹¹, further standards and labels for sustainable financial products¹² – has also committed to developing an EU Standard for Green Bonds¹³.

This standard is intended to provide clear and comparable criteria for the issuance of green bonds in the EU. In June 2020, the European Commission published a consultation paper on this issue¹⁴. This consultation was based on the final report of the Technical Expert Group on Sustainable Finance (EU-TEG)¹⁵ and the guidelines for an EU Green Bond Standard on which their report¹⁶ is based. The planned EU Green Bond Standard is conceptually a voluntary standard, primarily aimed at issuers who wish to follow best practice¹⁷, which can be applied to the issuance of green bonds to finance pro-

jects both within and outside the EU¹⁸. It is therefore not surprising that the standard is intended to build on the Green Bond Principles¹⁹ developed by the International Capital Market Association (ICMA) and the Green Loan Principles²⁰ developed jointly by the Loan Market Association (LMA), the Asia Pacific Loan Market Association (APLMA) and the Loan Syndications and Trading Association (LSTA). These two frameworks already serve as voluntary process guidelines and have established themselves internationally as recognised benchmarks²¹.

The classification of bonds as green bonds is based on the use of issue proceeds as defined by the EU taxonomy. Adopted in June 2020, this classification system for environmentally sustainable economic activities aims to bridge the existing gap between the international objective to steer future investments towards more sustainable growth and current investment practices, and to clearly signal to investors which types of corporate activities are compatible with the transition to low-carbon emissions, climate change adaptation and other environmental objectives²². Furthermore, the EU Green Bond Standard will make the publication of a company-specific green bond issuance framework mandatory. This will include explanations on the 'green' characteristics of the underlying projects or activities, the consistency with the issuer's overall strategy, the management process, reporting and external review plans, as well as other features of green bond issuance. In addition to providing a general framework for green bond issuance, the EU Green Bond Standard will also include mandatory reporting on

the use of funds (allocation reporting) and the resulting environmental impact (impact reporting), similar to the disclosure requirements of the Green Bond Principles.

As the confidence of capital market participants in unaudited information is known to be limited²³, the voluntary external verification of information provided by companies in connection with the issuance of 'green' bonds – e.g. on the basis of the disclosure requirements of the Green Bond Principles – has already established itself as common practice prior to the publica-

tion of the EU Green Bond Standard. The EU Green Bond Standard will follow suit and provide for a mandatory review of the qualification as an EU Green Bond as well as the orientation of issues and its compatibility with the company-specific framework prior to the issuance of green bonds. The final report on the use of funds will probably also be subject to a mandatory review²⁴. A detailed overview of the design of 'green' financing and corresponding review services can be found in the IDW Knowledge Paper 'Green Bonds'²⁵.

3.2. Types of 'green' financing

A wide range of 'green' financing is observable in the market. This ranges from financial instruments that hardly differ from classic loan financing to instruments with a comprehensive 'green' design (so-called 'full green exposure'). **Green bonds** are probably the most widespread financial instruments. The basic design of a green bond in terms of structure, yield or risk of financing does not necessarily have to differ from that of a conventional bond. The main difference is that the funds raised through the issuance of a green bond must be

used to (re)finance a 'green' project. Some examples of suitable 'green' projects include renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living natural resources and land use, clean transport or even sustainable water and waste management.

The ICMA²⁶ Green Bond Principles describe the following four possible forms of a green bond:²⁷

<p>Standard Green Use of Proceeds Bond</p>	<p>A standard recourse-to-the-issuer debt obligation aligned with the Green Bond Principles.</p>
<p>Green Revenue Bond</p>	<p>A non-recourse-to-the-issuer debt obligation aligned with the Green Bond Principles in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes etc., and whose use of proceeds go to related or unrelated Green Project(s).</p>
<p>Green Project Bond</p>	<p>A project bond for a single or multiple Green Project(s) for which the investor has direct exposure to the risk of the project(s) with or without potential recourse to the issuer, and that is aligned with the Green Bond Principles.</p>
<p>Green Securitised Bond</p>	<p>A bond collateralised by one or more specific Green Project(s), including but not limited to covered bonds, asset backed securities, mortgage backed securities, and other structures; and aligned with the Green Bond Principles. The first source of repayment is generally the cash flows of the assets.</p>

Fig. 1: Types of green bonds

The list is not exhaustive, as there can be numerous variations in practice due to the lively market development. The types of green bonds mentioned by ICMA should therefore be viewed as a rough classification. Certain design features that are used as a basis for the analysis of the accounting impact of green financing in subsequent sections are not only found in green bonds but are also anchored in other forms of green financing. Therefore, the conclusions drawn also apply to products other than green bonds if they are designed in the same way.

Green loans are another type of 'green' financing.²⁸ These also serve to fully or partially

finance or refinance new and/or existing 'green' projects.

In addition, more and more **'green' debentures** are now being issued in Germany. With regard to the specific 'green' design features of this type of 'green' financing, there are no significant differences to green bonds or green loans: here, too, there is no generally applicable definition of a 'green' debenture. The only characteristic of 'green' debentures is that the issue proceeds are used exclusively for 'green' projects.

'Green' finance also takes the form of financial instruments whose interest rate depends on

one or more sustainability factors or ratings, or on individually determined parameters (e.g., CO₂ emissions). These are often referred to as **ESG-linked instruments**. This means that the interest rate and thus the (re-)financing costs decrease (increase) when the sustainability rating or the defined sustainability factor improves (deteriorates). However, compared

to the instruments described thus far, the funds raised do not have to be used to (re-)finance a 'green' project. Instruments with ESG components observable in the market take the form of bonds, loans or even debentures.

The types of 'green' financing are summarised again in the following overview:

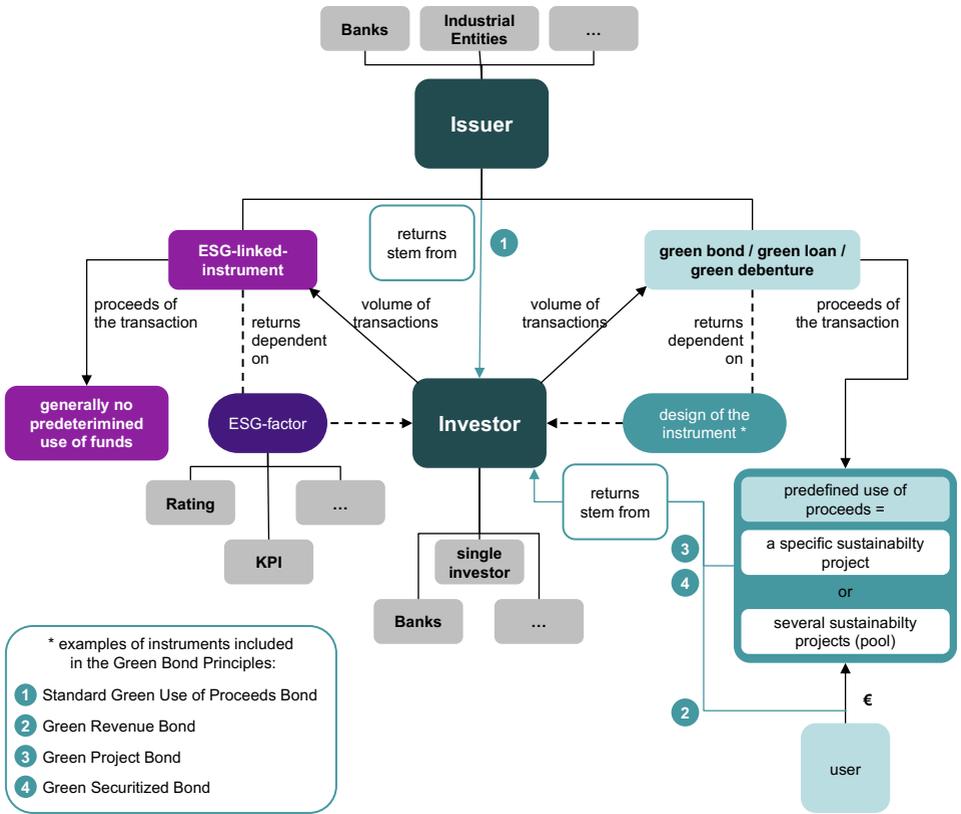


Fig. 2: Types of 'green' financing



4. ACCOUNTING FOR 'GREEN' FINANCING FROM AN INVESTOR PERSPECTIVE

4.1. Overview of current relevant IFRS requirements

General

If an investor decides to purchase a 'green' financial product, the question arises as to how this is to be presented in the statement of financial position. The requirements for accounting for financial assets according to IFRS 9 Financial Instruments are relevant here. The standard published by the IASB in 2014 does not contain any special requirements for sustainable or 'green' financial instruments. Accordingly, all financial assets, irrespective of whether they are 'green' or not, are to be classified according to the general requirements upon initial recognition, which determines the measurement basis for their subsequent measurement.

The following two criteria²⁹ are decisive for the classification of financial assets

- The business model criterion, and
- the contractual cash flow characteristic.

Business model criterion

Business models (BM) are oriented towards the specific management of financial assets. Consequently, an investor has to determine whether a financial asset is held within a business model whose objective is, for example, to hold financial assets in order to collect contractual cash flows (BM = 'hold to collect'), to generate cash flows by selling financial assets (other BM, e.g., 'trade') or a mixture of both, i.e. to collect contractual cash flows and to sell financial assets (BM = 'hold to collect and sell'). The business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. The investor's intentions with regard to individual instruments are not decisive. The classification is made at a higher level of aggregation than that of an individual financial instrument.³⁰

Contractual cash flow characteristic

The contractual cash flow characteristics, on the other hand, must be examined individually for each financial instrument when there is an intention to allocate it to the business models 'hold' or 'hold and sell'. It is met if the contractual terms of a financial asset give rise on specific dates to cash flows that are solely payments of principal and interest on the principal amount outstanding [also referred to as SPPI criterion].³¹

Accordingly, a financial asset meets the SPPI criterion only if the contractual cash flows are consistent with a 'basic lending arrangement' in which fees for the time value of money and for credit risk are normally the principal components of interest. However, the interest on such an arrangement may also include fees for other typical credit risks and costs associated with holding a financial asset. Thus, variability in cash flows reflecting credit risk would cause a financial asset to satisfy the SPPI criterion. A profit margin taken into account in the interest rate does not prevent the SPPI criterion from being fulfilled.³²

IFRS 9 has separate requirements for assessing the SPPI criterion for so-called non-recourse financing and for so-called contractually linked instruments. These are also explained in more detail in the following section and presented in the context of 'green' financing.

Interaction between the business model criterion and the contractual cash flow characteristic (SPPI)

Provided the SPPI criterion is fulfilled, and depending on the prevailing business model, a measurement at amortised cost (BM = 'hold to collect') or at fair value through other comprehensive income (BM = 'hold to collect and sell') is possible. If the SPPI criterion is not fulfilled, a measurement at fair value through profit or loss is required – regardless of the business model.

4.2. Financial reporting challenges in connection with 'green' financing

4.2.1. Classification

Variability of cash flows due to ESG factors

In the case of a contractual link to a sustainability factor, due to the resulting variability of the cash flows the question arises as to whether the financial asset fulfils the SPPI criterion.

Some factors that may lead to variability in cash flows relate to the long-term profitability of an issuer and may be an expression of credit risk. This can also apply to sustainability factors (ESG factors) in the context of a 'green' financial product. If an entity issues green bonds or enters into sustainable financial agreements, the interest rate on the financial asset may vary during its term depending on a sustainability factor or rating. As long as the achievement of a green factor leads to a change in the interest rate and the interest rate change also leads to a corresponding change in the credit risk, this should not prevent the contractual cash flow characteristic from being met.³³ The increasing inclusion of sustainability factors in ratings also suggests that these factors may contribute to the issuer's credit risk.

A comprehensive analysis is required in assessing whether a financial asset with a contractual link to one or more ESG factors fulfils the SPPI criterion. This is conceivable, for example, on the basis of the following criteria, whereby the criteria mentioned are not to be regarded as conclusive and it basically depends on the

respective individual case.³⁴

1. Nature of asset financed: Financing a particular asset whose value is influenced by 'green' measures, and which is at the same time collateralised by way of a security interest in that asset³⁵, is more likely to meet the SPPI criterion. The reason for this is that the value of the collateral could be favourably influenced if the entity (borrower) meets or even exceeds certain sustainability factors, which would result in a lower loss given default and therefore a lower level of credit risk. In contrast, in the case of unsecured 'green' financing, a direct influence of the specific sustainability factors on the credit risk is rather unlikely, which should also make the fulfilment of SPPI criterion less likely.

2. Nature of the borrower: For an entity that is directly exposed to a relatively small extent in economic terms to the sustainability factors agreed in the context of 'green' financing (e.g., asset manager), it is less likely for the specific sustainability factors to reflect a change in the credit risk. If, on the other hand, an entity is also directly exposed economically to the contractually agreed sustainability factors (e.g., electricity producer with statutory CO₂ limits and corresponding interest rate adjustment depending on CO₂ emissions), the specific sustainability factor is more likely to have a direct influence on the credit risk.

3. Specificity of the sustainability factors: If the contractual cash flows of a green finance product vary according to a variety of different sustainability factors (e.g., tax transparency, water consumption and labour standards), any ensuing 'green' variability is unlikely to mirror a change in credit risk. In contrast, if contractual cash flows depend on a narrowly defined sustainability factor, it is more likely that the variability in contractual cash flows resulting from the sustainability factor reflects a change in credit risk.

Non-recourse financing

In the case of non-recourse financing, there is no right of recourse of the holder to the issuer, i.e., the returns in the form of payments of principal and interest of a bond stem exclusively from the revenues of the underlying projects.³⁶

Assessing the SPPI criterion of such financial instruments requires an analysis of the characteristics of the contractually agreed payments from the financial asset and thus a 'look through' to the underlying assets or the payments from these assets.³⁷ In assessing whether a non-recourse finance product meets the SPPI criterion, both the contractual arrangements and the finance product's primary risk from an economic perspective are relevant. With regard to the primary risk, this may depend on whether the focus is more on asset risk or credit risk.

In the case of green revenue bonds³⁸, the contractual cash flows of the financial asset are based exclusively on the revenues generated by the underlying 'green' projects. Consequently, the payments of principal and interest are dependent on the success of the 'green' projects. If the asset risk is in the foreground because, for example, the contractual cash flows will not be paid if the 'green' project is not successful and recourse to the issuer is not contractually provided for, there may be a conflict with the SPPI criterion of IFRS 9. Contractual agreements that provide that project proceeds in excess of the agreed principal and interest payments are also distributed to the investors are also likely to be in violation of this criterion.

In the case of green revenue bonds³⁹, the contractual cash flows are based solely on a specific 'green' project. If no right of recourse to the issuer and the underlying asset is agreed upon, the SPPI criterion is also not fulfilled with regard to these 'green' finance products if there is primarily an asset risk and this does not result in cash flows that are solely payments of principal and interest on the principal amount outstanding. In addition, however, there are also green project bonds that provide for a right of recourse to the issuer and/or the underlying project. In these cases, the question arises again whether the characteristics of a 'basic lending arrangement' are fulfilled and consequently whether contractual conditions exist that conflict with the contractual cash flow requirements of IFRS 9.

Contractually linked instruments

An issuer may prioritise payments to holders of financial assets by using multiple contractually linked instruments to create credit risk concentration (tranches) by allocating defaults to other financial instruments first [i.e., subordination ranking of tranches]. Green securitised bonds⁴⁰ constitute such contractually linked financial instruments.

In such cases, several conditions must be met cumulatively in order to satisfy the SPPI criterion.⁴¹ This firstly requires that the contractual terms of the tranche itself (without 'look-through' to the underlying pool of financial instruments) establish only principal and interest payments on the principal amount outstanding, but also an assessment of the underlying pool of financial instruments regarding the cash flow characteristics set out in IFRS 9.B4.1.23 et seq.. Further the exposure to credit risk in the underlying pool of financial instruments inherent in the tranche has to be compared to the exposure to credit risk of the underlying portfolio of financial instruments.

If the underlying pool of financial instruments are composed only of non-financial assets (e.g., several wind turbines), it will preclude the SPPI criterion from being met. However, the underlying pool can also consist of financial instruments, e.g., loans financing the construction of

wind turbines. The assessment of the contractual cash flow criteria is also particularly important where the underlying pool of financial instruments include instruments with cash flows variability due to ESG factors.

The 'de minimis' and 'not genuine' factors

Besides the general assessment of the materiality of the impact of ESG factors on cash flow variability, the question arises as to whether the requirements of IFRS 9.B4.1.18 may also be applicable. According to this paragraph, neither contractual agreements that can only have an extremely minor (de minimis) effect on the contractual cash flows from the financial asset nor that are to be classified as not genuine are relevant in the context of the assessment of the cash flow characteristic.

In general, the 'not genuine' factor should not be relevant for 'green' financing. The 'de minimis' factor, on the other hand, could potentially be applicable in individual cases. Taking into account the increasing regulation of which products may be called 'green' at all, and the conscious decision of investors in favour of 'green' financial products that also deserve this label, it seems increasingly unlikely in the future that the contractual linkage with one or more ESG factors will only have an extremely minor (de minimis) impact on the contractual cash flows.



4.2.2. Measurement

A financial asset that does not meet the SPPI criterion of IFRS 9 must be measured at fair value through profit or loss. The requirements of IFRS 13 Fair Value Measurement are applicable for this. In the case of 'green' financial instruments, among other things, it is necessary to clarify how the linkage to one or more ESG factors affects the measurement at fair value and thus also the categorisation in the fair value hierarchy according to IFRS 13.72 et seq.

Further measurement issues may arise in connection with the determination of expected credit losses according to IFRS 9. Depending on the extent to which sustainability factors influence the issuer's rating or credit risk, it may be necessary to analyse any effects on the loss allowance to be recognised under IFRS 9⁴². Were there to be such an impact, for example, in the case of an ESG-linked bond that is measured at amortised cost due to the fulfilment of the cash flow characteristic and the business model 'hold to collect', a deterioration of the ESG factor underlying the contractual (variable) cash flows would lead to the recognition of a higher loss allowance. In this case, it would also be conceivable that the credit risk has increased significantly since initial recognition and thus it would no longer be appropriate to measure the loss allowance for the financial asset only at an amount equal to 12-month expected credit losses; instead, the expected credit losses over the remaining life-time of the financial asset would have to be recognised.

4.2.3. Disclosures

When accounting for financial instruments, both the disclosure requirements specific to financial instruments under IFRS 7 and the disclosure requirements that may result from the general principles for the presentation of financial statements under IAS 1 must be observed.

According to IFRS 7, there are basically no specific requirements for 'green' financial instruments. The relevant requirements for all financial instruments have to be applied. However, it should be noted that IFRS 7 establishes a number of specific disclosure requirements for different classes of financial instruments. This is relevant for 'green' financing, especially with regard to the disclosures on credit risk, so that the disclosures required to be published to date must now also be presented separately for this class of financial instruments. In the case of measurement at amortised cost, the fair value of the financial

instrument must also be disclosed in the notes in accordance with IFRS 7.25 et seq.

According to IAS 1, above all the disclosures on judgements and estimation uncertainty are likely to be relevant. In the case of 'green' financing with a high degree of uncertainty (e.g., with regard to the fulfilment of the SPPI criterion), it will be necessary to take account of users' increased information requirements with regard to the assumptions and estimates used. This could be the case, for example, with non-recourse financing. However, the respective design must be assessed on a case-by-case basis.

In addition, the disclosure requirements of IFRS 13 must be observed when determining the fair value. Particular attention will have to be paid to the categorisation of the financial instruments concerned to the three levels of the fair value hierarchy.

A brief look at German GAAP

The German GAAP presentation [i.e., pursuant to the German Commercial Code: Handelsgesetzbuch (HGB)] of 'green' financing from the investor perspective is based – as is the case under IFRS – on the general requirements for the presentation of (financial) assets in the balance sheet⁴³. Depending on the given purpose and thus whether the financial asset is intended to serve business operations on a permanent basis, 'green' finance products have to be classified either as fixed assets or as current assets and accounted for accordingly.⁴⁴ Consequently, depending on the individual case, the presentation of 'green' finance products is possible within different items on the balance sheet.

In accordance with § [Article] 253 Abs. [para] 1 Satz [sentence] 1 HGB, initial measurement is at acquisition cost. In accordance with the realisation principle these [amounts] may not be exceeded in subsequent (re)measurement⁴⁵. According to § 253 Abs. 3 Satz 5 HGB in the case of an expected permanent impairment an unscheduled write-down to a lower fair value has to be made for fixed assets; in the case of an expected non-permanent impairment, there is a write-down option according to § 253 Abs. 3 Satz 6 HGB. In the case of 'green' current assets, pursuant to § 253 Abs. 4 HGB the strict principle of lower of cost or market value applies. According to this [principle], the assets are to be written down to the lower of the values resulting from a stock exchange or market price at the balance sheet date or the value attributed to them when no stock exchange or market price is available.⁴⁶ Neither in the context of initial nor subsequent (re)valuation are there any specific regulations for the accounting of 'green' financing in the sense of the principles-based commercial accounting.

In contrast to IFRS⁴⁷, not only the issuer of, but also the investor in, a 'green' financing product must assess whether it is a structured financial instrument within which an embedded derivative has to be separated and accounted for separately.⁴⁸ In the case of a structured financial instrument – which includes both assets of a receivable nature (e.g., amounts due from loans and securities) and corresponding liabilities – a host contract is legally linked to one or more embedded derivatives.⁴⁹ In principle, structured financial instruments must be accounted for as a single financial instrument. However, in deviation from this principle, two instruments are involved if the embedded derivative leads to significantly increased or additional (different) risks and opportunities. The derivative must then be separated from the host contract and accounted for separately.⁵⁰ Section 4 presents potential cases for application in connection with 'green' financing.

The [German] commercial law provisions [German GAAP] do not require separate note disclosures for 'green' financing, so that the general requirements apply. In addition to the disclosures of accounting policies for financial instruments⁵¹, § 285 Nr. [nos.] 18, 19 and 20 and § 314 Abs. 1 Nr. 10, 11 and 12 HGB contain disclosure requirements for certain financial instruments that may be relevant for 'green' financing in individual cases, depending on their structure.

In the management report, 'green' financing must also be taken into account in accordance with the general requirements.⁵² The requirements for the group management report are further specified⁵³ in [German Accounting Standard] GAS 20, which provides for separate reporting on the use of financial instruments.



5. ACCOUNTING FOR 'GREEN' FINANCING FROM AN ISSUER PERSPECTIVE

If a 'green' financial instrument is a financial liability, it is necessary to assess whether it contains an embedded derivative that must be separated out and therefore accounted for separately. For this purpose, the first step is to clarify whether the definition of a derivative within the meaning of IFRS 9 is met.

A derivative is a financial instrument or another contract within the scope of the standard when it demonstrates the following three characteristics cumulatively⁵⁵:

1. its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case

of a non-financial variable that the variable is not specific to one of the parties to the contract (also referred to as 'underlying');

2. it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and
3. it is settled at a future date.

For most of the types of green bonds and green loans described in section 2.2., it cannot be assumed that the definition of a derivative is fulfilled, at least with regard to sustainability aspects, because the contractual arrangements usually only provide for the financing of

a 'green' project, without specifying sustainability-specific impacts on the agreed cash flows.⁵⁶ However, this may be particularly pertinent for ESG-linked bonds, for which the interest rates are usually contractually linked to a company-specific sustainability factor or to the issuer's sustainability rating and thus the value of the bond is also subject to changes depending on an 'underlying'. Nevertheless, for such a linkage the definition of a derivative cannot be regarded as fulfilled across the board, since for the assessment of the first criterion mentioned above it is still decisive as to whether the sustainability factor represents a financial or a non-financial variable of the contracting party.

The assessment of the type of variable (i.e., financial vs. non-financial) depends primarily on whether the sustainability factors have a direct influence on the issuer's credit risk.

If the issuer concludes that the specific sustainability factor linked to the contractual cash flows of the financial liability has a direct

impact on the issuer's credit risk, the sustainability factor is primarily a component of credit risk and therefore qualifies as a financial variable. In this case, the definition of an embedded derivative would be fulfilled. Following on from this, IFRS 9.4.3.3 requires an assessment of whether the embedded derivative should be separated from the host contract. In line with the previous conclusion that the sustainability factor has a direct impact on the issuer's credit risk, the economic characteristics and risks of the embedded derivative and the host contract can be considered as being closely related. Therefore, the embedded derivative is not separated.

If the specific sustainability factor linked to the contractual cash flows of the financial liability has no direct impact on the issuer's credit risk, the sustainability factor is a non-financial variable that is also entity specific. It has yet to be clarified whether or not such cases of non-financial variables that are specific to a contracting party are excluded from the definition of a derivative in the meaning of IFRS 9.⁵⁷

A brief look at German GAAP

In principle, the accounting treatment of 'green' financing from the issuer's point of view, as for all liabilities, is that these are to be recognised at their settlement amount in accordance with § 253 Abs. 1 Satz 2 HGB⁵⁸. If the settlement amount of a liability is higher than the issue amount, the difference may be recognised as deferred income in accordance with

§ 250 Abs. 3 HGB, which is to be released to income on a pro rata basis. If this option is not exercised, the difference is recognised directly as an expense.

With regard to the subsequent (re)measurement the so-called maximum value principle applies. According to this principle, the devaluation of a liability below the initially recognised settlement amount is not permissible. However, an increase in the liability is required if the settlement amount increases. In order to comply with the realisation and imparity principle, it may be necessary in the case of 'green' financing when the contractually agreed repayment amount depends significantly on the success of the project (e.g., in the case of green project bonds) to recognise an amount above the issue amount as a liability. However, this is not a special feature of 'green' financing, but also applies to other project financing.

The issuer of a 'green' financing must check whether an embedded derivative is to be separated and accounted for separately. The mere fact that the variability of the interest rate of an issued financial instrument is based on the development of ESG factors does not result in any accounting peculiarities compared to financial instruments that bear interest at a different variable rate. The settlement amount of cash benefit obligations corresponds to the non-discounted nominal value.⁵⁹ Changes in contractually agreed interest payments therefore have no impact on the settlement amount of the liability.

In the issuer's management report, the information on the capital structure in accordance with GAS 20.81 et seq. is particularly relevant. For further required disclosures in the notes and management report, please refer to the comments on commercial law in section 3.



6. CONCLUSION AND POSSIBLE SOLUTIONS

For investors the most significant aspect of 'green' financial assets with cash flow variability stemming from sustainability factors is the assessment of the SPPI criterion in the context of the classification according to IFRS 9, since this determines whether they are recognised at fair value or at amortised cost. On the liabilities side, it is the analysis of 'green' financial liabilities for existing embedded derivatives that have to be separated under certain conditions especially poses challenges to issuers.

The present problems in applying the current IFRS to 'green' financing probably also stem from the fact that 'green' financial instruments hardly played a role in practice at the time IFRS 9 was adopted in 2014 and thus the standard setter did not need to address them specifically. In the meantime, however, the circumstances have changed significantly. Instruments that have a contractual linkage between cash flows and sustainability factors have now arrived within the capital market

and are likely to become a widespread means of financing in the near future. In the EU, a major driver of this development is the political will from the 'Green Deal'.

As presented above, the assessment of the SPPI criterion is not free from interpretation uncertainty. This impacts all parties involved, including the supervisory authorities. Interpretation certainty in regard to this issue is only likely to be achieved if the IASB addresses this issue and establishes clear requirements, thus giving legal certainty specifically for this type of financing. A functioning capital market requires rules and regulations that are robust and clearly comprehensible.⁶⁰ For example, clarifying the basic principle as well as the elements of 'basic lending arrangements' according to IFRS 9 would be a comparatively simple way for the international standard setter to address this. In this context there should be a clear statement that certain contractual agreements as to sustainability factors and the resulting variability of cash flows are in line with the basic principle of the standard. This should be supplemented by corresponding explanations in the application guidance to IFRS 9. A number of permissible ESG factors could thus be established (e.g., with reference to existing 'green' taxonomies), without of itself resulting in 'green' financial

instruments being measured at fair value through profit or loss. This could eliminate any unintended accounting consequences, which might otherwise stand in the way of the political and societal intention to change investment behaviour towards sustainable products.

In view of the current IASB agenda, in principle the upcoming post-implementation review (PiR) of IFRS 9⁶¹ would be suitable for addressing this issue and filling the gap in existing regulations. However, in view of the current rapid European, but also global developments in this area, there is a need to acknowledge that the timetable for a possible revision of the standard as a result of the PiR is likely to come too late. Therefore, it seems desirable in the short term for the IASB to include a separate project aimed towards a limited amendment of IFRS 9 in its work plan. In the past the IASB has proven that it can react at short notice to urgent market developments which have an impact on accounting (e.g., in the context of the IBOR Reform as well as in the introduction of clearing central counterparties in derivatives trading) and thus contribute to the appropriate and consistent application of IFRS. From the IDW's point of view, the importance of this issue justifies rapid and decisive action on the part of the standard setter.



7. OUTLOOK

Taken as a whole, the European efforts to develop a more sustainable economy and society and the resulting increasing importance accorded to 'green' financing are to be welcomed. The development of an EU-wide taxonomy (in particular providing a clear definition of 'green activities'), the standardisation of disclosure requirements and the creation of an EU Green Bond Standard should foster companies' willingness to issue 'green' financing, and, at the same time, especially with regard to investors, increase the transparency and comparability of the various products.

The number of issues of 'green' financial products is expected to increase further in the coming years. Likewise, the diversity and complexity of such products will increase. Therefore, an intensive discussion as to how to deal with issues concerning the accounting for these novel financial instruments is indispensable. In order to achieve the most appropriate and transparent presentation possible in reporting entities' financial statements, it is essential that the respective requirements of the two sets of standards (IFRS/German GAAP) are interpreted and applied in a sensible manner on a case-by-case basis, as there are currently no special regulations at either international or national level governing the accounting of 'green' financing.

From the point of view of the [German auditing] profession, it is urgently necessary to deal intensively with this new type of financial instruments and their accounting both at the global level (IFRS) and at the national level (German GAAP). As far as the international standard setter (IASB) in particular is concerned, it would be desirable for a new project to be put on the agenda in the short term in order to clarify the issues presented concerning accounting for 'green' financing and, if necessary, to make adjustments to the respective requirements or their interpretation.

FOOTNOTES

- ¹ See in this regard also the publication of the Sustainable Finance Advisory Council of the German Federal Government, *Shifting the Trillions – A Sustainable Financial System for the Great Transformation*, 31 Recommendations, of 24.02.2021.
- ² Available at: https://ec.europa.eu/finance/docs/law/210704-proposal-green-bonds-standard_en.pdf.
- ³ See European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, Action Plan: Financing Sustainable Growth, of 08.03.2018, available at: [https:// Register of Commission Documents – COM\(2018\)97 \(europa.eu\)](https://Register of Commission Documents – COM(2018)97 (europa.eu))
- ⁴ See European Commission, Strategy for Financing the Transition to a Sustainable Economy, of 06.07.2021, available at https://ec.europa.eu/finance/docs/law/210704-communication-sustainable-finance-strategy_en.pdf
- ⁵ See European Commission, Communication from the Commission: 'The European Green Deal', of 11.12.2019, available at: <https://eur-lex.europa.eu/legal-content/DE/TXT/HTML/?uri=CELEX:52019DC0640&from=EN>.
- ⁶ See EU Technical Expert Group on Sustainable Finance (hereinafter: EU-TEG), Usability Guide: EU Green Bond Standard, March 2020, p. 11 et seq., available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-green-bond-standard-usability-guide_en.pdf.
- ⁷ See footnote 3.
- ⁸ See footnote 5.
- ⁹ See footnote 4.
- ¹⁰ See Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088, OJ EU No. L 198 of 22.06.2020, p. 13 (so-called EU Taxonomy Regulation).
- ¹¹ See European Commission, Delegated regulation (EU) supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives, preliminary version of 04.06.2021, available at: [: https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800_en.pdf).
- ¹² For progress on transparent reporting through the development of a classification system for environmentally sustainable economic activities or the Sustainable Finance Disclosure Regulation, see IDW, Position Paper, Sustainable Finance as Part of the Sustainable Transformation – Implications for Credit Institutions, p. 15 [only available in German language].
- ¹³ For current project information from the European Commission see: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard_de.
- ¹⁴ See European Commission, Targeted consultation document: Establishment of an EU Green Bond Standard, June 2020 https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/2020-eu-green-bond-standard-consultation-document_en.pdf.

- ¹⁵ See EU-TEG, Technical Report, March 2020, available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf
- ¹⁶ See EU-TEG, Usability Guide: EU Green Bond Standard, op. cit.
- ¹⁷ Critics see an increased likelihood of mandatory application of the Green Bond Standard due to the planned linkage of the Green Bond Standard with the already published EU Taxonomy Regulation (see footnote 10), which could become a binding standard for all sustainable activities. see inter alia Centrum für europäische Politik (cep), Die künftige EU-Strategie zur nachhaltigen Finanzierung, cep-Input Nr. 23, 2020, p. 1, 4 seq.
- ¹⁸ See EU-TEG, Usability Guide: EU Green Bond Standard, op. cit., p. 11.
- ¹⁹ See International Capital Market Association (ICMA), Green Bond Principles, June 2021, p. 4, available at: <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf>.
- ²⁰ See LMA/APLMA/LSTA, Green Loan Principles, December 2018, available at: https://www.lma.eu.com/application/files/9115/4452/5458/7741_LM_Green_Loan_Principles_Booklet_V8.pdf.
- ²¹ Due to the existence of these two recognised benchmarks, critics see no need to establish a public EU standard for green bonds. See Centrum für europäische Politik (cep), The EU Green Bond Standard (GBS), cep-Input, No. 3, 2019, available at: https://www.cep.eu/fileadmin/user_upload/cep.eu/Studien/cepInput_Green_Bonds/EU_Green_Bond_Standard_GBS_.pdf.
- ²² See EU-TEG, Usability Guide: EU Green Bond Standard, op. cit., p. 13.
- ²³ At the EU level, in the course of the revision of the European CSR Directive, there is currently intensive discussion on the design of a statutory assurance requirement for non-financial information by the auditor. According to the proposal for a new directive submitted on 21 April 2021, a mandatory assurance engagement with limited assurance is envisaged (see the European Commission's proposal for a directive, available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0189>). See also the IDW position paper 'Zukunft der nichtfinanziellen Berichterstattung und deren Prüfung' (Future of non-financial reporting and its audit) of 16.10.2020 [also available in English].
- ²⁴ See EU-TEG, Usability Guide: EU Green Bond Standard, op. cit. In addition, the EU Green Bond Standard is expected to contain a number of detailed specifications on the necessary qualification of the verifying party, which does not necessarily have to be the auditor.
- ²⁵ See IDW, Knowledge Paper, Green Bonds – Towards a reliable market for green bonds, of 16.02.2021, available at: German language original: <https://www.idw.de/idw/medien/idw-knowledge-paper> and convenience translation in English: <https://www.idw.de/the-idw>.
- ²⁶ See footnote 19.
- ²⁷ See ICMA, Green Bond Principles, as above., Appendix I, p. 8.
- ²⁸ See LMA/APLMA/LSTA, Green Loan Principles, op. cit. p. 2.
- ²⁹ See IFRS 9.4.1.1.
- ³⁰ See IFRS 9.4.1.2 et seqq. in connection with IFRS 9.B4.1.1 et seqq. For a detailed explanation, see IDW Statement on

Accounting: Einzelfragen der Bilanzierung von Finanzinstrumenten nach IFRS 9 (IDW RS HFA 48) (as of 11 September 2018), Section 4.1.2. [only available in German language.]

³¹ See IFRS 9.4.1.1(b) and IFRS 9.4.1.2(b) and IFRS 9.4.1.2A(b).

³² See IFRS 9.4.1.3(b) and IFRS 9.B4.1.7A.

³³ However, a comprehensive analysis is always necessary. See also the comments in the following paragraph.

³⁴ See PwC, Manual of Accounting, IFRS 2021 – Vol. 2, FAQ 42.41.1, p. 42088.

³⁵ See also the following comments on non-recourse financing.

³⁶ See IDW RS HFA 48, para. 204 et seq.

³⁷ See IFRS 9.B4.1.17.

³⁸ See section 2.2: Types of 'green' financing.

³⁹ See section 2.2: Types of 'green' financing.

⁴⁰ See section 2.2: Types of 'green' financing.

⁴¹ See IFRS 9.B4.1.20 et seq. and IDW RS HFA 48, para. 218 et seq.

⁴² For the basic regulations of IFRS 9 on the impairment of financial instruments, see IDW RS HFA 48, section 5.2.

⁴³ In addition to the general accounting requirements under [German] commercial law, there are supplementary sector-specific requirements for credit institutions and financial services institutions in §§ 340 to 340o HGB.

⁴⁴ See § 247 and § 253 Abs. 3 et seq. HGB.

⁴⁵ An exception is made for financial instruments in the trading portfolio of credit institutions, which are measured at fair value less a risk discount in accordance with § 340e Abs. 3 HGB.

⁴⁶ If the 'green' financing is a receivable, the write-offs are to be made at the value of the receivables attributable to them on the balance sheet date, see § 253 Abs. 4 Satz 2 HGB. On the application of the lower of cost or market rule to securities, see Schubert/Berberich, in: Grottel et al. (eds.), Beck'scher Bilanz-Kommentar, 12th ed., § 253 HGB, Note 609 et seq.

⁴⁷ See section 4 on issuer accounting. With regard to the asset side, IFRS 9.4.3.2 states that a hybrid contract must be classified in its entirety under IFRS 9 if the host contract is an asset within the scope of IFRS 9.

⁴⁸ For the definition of derivative financial instruments, see IDW RH HFA 1.005 (as at: 06.08.2018), para. 4 et seq. [available only in German]. For uniform or separate accounting of structured financial instruments, see IDW RS HFA 22 (as of 11 September 2015) [available only in German].

⁴⁹ Compared to non-structured financial instruments, structured financial instruments within the meaning of IDW RS HFA 22 [available only in German] have special features that affect the interest rate, the term and/or the payment of the financial instruments. For the definition and scope of application, see IDW RS HFA 22, para. 2 et seq.

⁵⁰ See IDW RS HFA 22, points 6 to 10. For typical examples of required separate accounting, see point 16. For excep-

tions in which uniform accounting is applied, see point 13 et seq.

- ⁵¹ See § 284 Abs. 2 Nr. 1 and § 313 Abs. 1 Satz 3 Nr. 1 HGB.
- ⁵² See in particular § 289 Abs. 2 Nr. 1 and § 315 Abs. 2 Nr. 1 HGB.
- ⁵³ Even though GAS 20 specifies the group management report in accordance with § 315 HGB, the GAS has a spill-over effect on management reporting in accordance with § 289 HGB, see IDW, WP Handbuch, Wirtschaftsprüfung & Rechnungslegung, 17th ed., Chapter F, paragraphs 1366 to 1368 [only available in German].
- ⁵⁴ GAS 20 provides for reporting by the group management on the risk objectives and risk management methods in connection with financial instruments used, see GAS 20 'Group Management Report', paragraphs 179 to 187.
- ⁵⁵ See IFRS 9, Appendix A, in connection with. IFRS 9.4.3.1 et seq.
- ⁵⁶ Nevertheless, in these cases – as with all other financial liabilities – the existence of and the obligation to separate embedded derivatives (e.g., early termination or extension options) must be examined in accordance with IFRS 9.4.3.1 and IFRS 9, Appendix A, irrespective of any sustainability aspects.
- ⁵⁷ The IFRS Interpretations Committee (IFRS IC) was also unable to provide clarity in this regard within the framework of an agenda decision. See IFRS IC, IFRIC Update, Agenda Decision 'Classification of a GDP-linked security', September 2012.
- ⁵⁸ An exception is made for financial instruments in the trading portfolio of credit institutions, which are measured at fair value less a risk discount in accordance with § 340e Abs. 3 HGB.
- ⁵⁹ See Häublein/Hoffmann-Theinert, BeckOK HGB, 32nd edition, status: 15.04.2021, § 253, marginal no. 11.1 as well as BFH of 04.03.1976, IV R 78/72, BStBl. II 1977, p. 380.
- ⁶⁰ See also the call of the Sustainable Finance Advisory Council of the German Federal Government, Shifting the Trillions – A Sustainable Financial System for the Great Transformation, 31 Recommendations of 24.02.2021, p. 17, available at: Sustainable Finance-Beirat (sustainable-finance-beirat.de).
- ⁶¹ See IFRS Foundation project page on the PiR of IFRS 9: IFRS – Post-implementation Review of IFRS 9—Classification and Measurement.

**This knowledge paper was approved by the IDW Working Group
„Finanzinstrumente nach IFRS“.**

We are looking forward to receiving your comments. Please send them to Kerstin Klinner or to Prof. Dr. Bernd Stibi, Institut der Wirtschaftsprüfer in Deutschland e.V., Postfach 320580, 40420 Düsseldorf (by post) or to klinner@idw.de or stibi@idw.de by email.

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