



momox

Green Bond Second Opinion

February 27, 2020

momox Holding Gmbh (the issuer) is a holding company with the sole purpose to own the shares in momox Gmbh (“momox”). momox is a digital re-commerce company with almost 20 million customers and more than 200 million articles purchased and sold over the course of momox’s 15 years history and mainly owned by Verdane, a specialized growth equity investment company. Through momox, the consumers can sell preowned books, DVDs/Blu-rays, CDs, games and fashion items at a fixed price.

The net proceeds from the bond financing will be used to finance the acquisition of 29% of the shares in momox, refinance existing debt and a shareholder distribution. As such there will be no project selection and bonds will not be linked directly to physical assets. Following the close of the green bond framework’s transaction, momox Holding Gmbh will own 100% of the shares in momox, i.e. the issuing entity, momox Holding Gmbh, has complete control over the green asset, namely momox. The company does not own any fossil fuel assets except for some company minibuses. The value of the company is mainly due to its customer base, business model and intellectual property.

momox’s business is wholly focused on providing digital re-commerce services for pre-owned/used products and aligns with the Green Bond Principles category “eco-efficient and/or circular economy adapted products, production technologies and processes”. Through reselling of products, the issuer assumes (not verified) reduced greenhouse gas (GHG) emissions through avoidance of a production process mainly of books, non-books media and fashion items amounting to a total 65,544kt of CO₂ in 2019 incl. respective emissions from returned products and delivery emissions according to momox’s own calculations. 88% of the total corporate emissions from momox stems from its electricity consumption in Germany and Poland which momox aims to reduce by 40% within 2020 compared to 2019 by purchasing green electricity.

momox has the potential to improve on several measures of sustainability. The company could, put in place additional policies/exclusions regarding climate impact of logistics and warehouse heating and the sustainability of products sold through the platform. In addition, momox could obtain external review for its impact reporting and implement TCFD recommendations.

Based on an assessment of the framework’s alignment with the Green Bond Principles, the project categories and momox’s governance, momox’s green bond framework receives the overall **CICERO Medium Green** shading and a governance score of **Good**.

SHADES OF GREEN

Based on our review, we rate the momox’s green bond framework **CICERO Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green bond framework. CICERO Shades of Green finds the governance procedures in momox’s framework to be **Good**.



GREEN BOND PRINCIPLES

The green bond framework is in line with the stated definition of green bonds within the Green Bond Principles. Investors should, however, be aware that since the proceeds are allocated to purchasing company shares, the framework is not fully aligned with all four components of the Green Bond Principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated February 2020. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green bond framework. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent.



2 Brief description of momox's green bond framework and related policies

momox Holding GmbH is a holding company with the sole purpose to own the shares in momox GmbH ("momox"). momox is a digital re-commerce company with almost 20 million customers and more than 200 million articles purchased and sold over the course of momox's 15 years history and mainly owned by Verdane, a specialized growth equity investment company. momox reported a turnover of EUR 246 million for 2019 and employs close to 1,700 people at six locations in Germany and Poland. It operates local websites and mobile apps in Germany, France, Austria, Belgium and the United Kingdom.

Through momox, the consumers can sell preowned books, DVDs/Blu-rays, CDs, games and fashion items at a fixed price. momox's terms and conditions only allow private consumers to sell to momox, i.e. retailers, wholesaler, producers or other companies cannot sell to momox or through the momox platform. A very small portion (approx. 1-2% of purchased items) is qualified through a manual check procedure, as not or barely used that momox can resell it as „as new/new". The pre-owned products are then carefully checked, and repaired if needed, before offered to customers online on medimops, momox-shop and ubup as well as external marketplaces such as eBay and Amazon. The marketplaces medimops, momox-shop and ubup are 100% owned by momox, only operate for momox and have no own major assets and/or fossil fuel based technology according to the issuer.

Environmental Strategies and Policies

Verdane, the majority owner of the issuer momox Holding GmbH, has a sustainability policy in place. Verdane has since 2008 offset the entirety of the firm's own carbon emissions annually. Verdane states that it "integrate[s] sustainability-related value creation and risk frameworks as part of the core underwriting and evaluation criteria." While Verdane is not a signatory to the United Nations Principles for Responsible Investment, it has established a Sustainable Growth & Shared Value Creation toolkit aiming at collecting actionable and relevant performance indicators which are used, e.g., where Verdane holds a board membership in a portfolio company. According to Verdane, one goal for 2020 is that every of its core companies have at least one ongoing sustainability initiative, at the board level.

The issuer is 100% owner of momox and has no other business activities. momox targets to reduce its ecological footprint through a circular economy approach within re-commerce. In 2019, the company reported total CO₂ emissions of 2,168t. 88% of the total emissions stem from momox's electricity consumption in Germany and Poland. The remaining corporate emissions stem from logistics and fuel consumption and currently omit emissions associated with heating of, e.g., rented warehouses and external logistics suppliers. The issuer aims to reduce absolute electricity emissions by 40% within 2020 compared to 2019 mainly through purchase of renewable energy certificates and, in a subsequent step, by purchasing electricity directly from a renewable energy provider.

Through reselling of products, the issuer assumes reduced greenhouse gas (GHG) emissions through avoidance of a production process of, e.g., books, non-books media and fashion items amounting to a total 65,544kt of CO₂ in 2019 incl. respective emissions from returned products and delivery emissions according to momox's own calculations that have not been externally reviewed. These emission savings exceed momox's corporate emissions approximately 30-foldt. In addition, momox estimates to save thousands of trees and billions of liters of water through reuse of books and fashion items. The issuer confirmed that there are currently no plans to expand its business to other articles or to expand the customer base beyond private customers.



According to the issuer, momox's company business model aims at enabling a circular economy solution for customers. This is mainly achieved by reduced selling barriers for used articles, and, therefore, extending the life span of products and, in addition, saving substantial amounts of emissions through avoidance of production emissions, e.g., from energy and chemicals. Despite shipping goods mainly to the German and French markets (86%), momox also sells goods internationally and does not have a policy to restrict orders of some volumes via air and sea shipping. While momox works with suppliers regarding low-carbon shipping, e.g., DHL's go green service, momox currently has no targets in place for intragroup logistics.

The issuer has additional initiatives in place to reduce its corporate environmental impact. In addition to several initiatives regarding recycling, reuse and waste management, momox also incentivises employees to use public transport and uses energy-efficient trucks in its operations and automatic heating controllers.

In the short term, momox has not planned to implement TCFD and has not per now performed a deeper analysis on the physical and transition climate risks. However, the issuer informed us that they will monitor climate change in the countries and may initiate physical climate risk assessments in the future as needed.

Use of proceeds

The net proceeds from the bond financing will be used to finance the acquisition of 29% of the shares in momox from Acton Capital, refinance existing debt and a shareholder distribution. Following the close of the green bond framework's transaction, momox Holding GmbH will own 100% of the shares in momox, i.e. the issuing entity, momox Holding GmbH has complete control over the green asset, namely momox. The company does not own any fossil fuel assets except for some company minibuses. The value of the company is mainly due to its customer base, business model and intellectual property. There are no other eligible assets under this framework. Verdane, the majority owner of momox holding GmbH, will continue to support and drive environmental enhancements by strengthening the positive CO₂ footprint from momox's operations.

momox's business is wholly focused on providing digital re-commerce services for pre-owned/used products and aligns with the Green Bond Principles category "eco-efficient and/or circular economy adapted products, production technologies and processes". momox has made substantial investments over the last three years, mainly in furniture for its warehouses as well as LED lighting installments.

Selection:

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

The investment in shares, refinance existing debt and a shareholder distribution in momox are the only eligible asset under this framework and momox, therefore, has no established green bond committee or other selection processes. The management of momox and the board of directors is responsible for managing the company's development toward further environmental and climate improvements. momox views the company as a pure play company as defined by the Green Bond Principles.

Management of proceeds

The net proceeds from the green bond issue will be transferred to a designated escrow account under the administration of Nordic Trustee. The proceeds will be released when 100% of the momox shares are fully



pledged and all existing debt is refinanced. momox does not expect to have any unallocated proceeds according to the issuer.

Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

momox has committed to report environmental impact indicators in the annual report or a separate sustainability report. momox's finance department and/or management is responsible to prepare the annual report. The report is reviewed by the board of directors and momox's external auditors. The indicators will include the following metrics:

- # books and media items circulated
- # fashion items circulated
- CO₂ emissions saved through enabling a circular economy
- Electricity consumption
- Transportation efficiency
- New and other implementations (other implemented initiatives for reducing emissions that are not mentioned in the green bond framework)
- Recycling of waste
- % of recycled materials used in packaging

momox will disclose external sources used for assumptions but no internal category-specific sales data. The impact reporting will not be externally reviewed.



3 Assessment of momox’s green bond framework and policies

The framework and procedures for momox’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where momox should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in momox’s green bond framework, we rate the framework **CICERO Medium Green**.

Eligible projects under the momox’s green bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Acquisition of momox shares	The net proceeds from the bond financing will be used to finance the acquisition of 29% of the shares in momox from Acton Capital, refinance existing debt and a shareholder distribution.	Medium Green <ul style="list-style-type: none">✓ Re-commerce can be an important building block towards a circular economy✓ momox has only a limited focus on potential emissions savings from transportation of goods (e.g., exclusion of air freight), type of goods sold, and sustainability of goods sold

Table 1. Eligible project categories



Background

According to IPCC's recent 1.5° report, "an assessment of the impacts [of a circular economy] on energy use and environmental issues is not available, but substitution could play a large role in reducing emissions".¹ Reusing, e.g., media products or fashion products within a circular economy can save resources, energy and emissions that are associated with the supply chain and production of those products. According to the Circularity Gap Reporting Initiative, the world is only 8.6% circular (compared to 9.1% in 2018) and has surpassed 100 billion tonnes of annual resource consumption.² A circular economy approach combined with sharing solutions offers a vast potential for substantial emissions reductions across different industries.

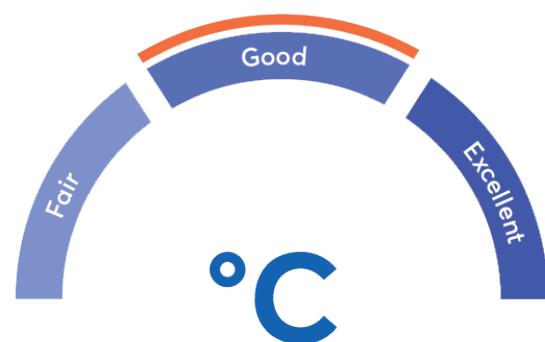
According to studies provided by the issuer, the production and material sourcing emissions for a paperback book amount to 2.7kg CO₂ per book³, while transportation emissions amount to only 3-5% of the book's emissions⁴. Similarly, approx. 9kg of CO₂ emissions are produced for a typical jeans⁵.

Media consumption through physical copies has changed significantly over the last years. According to the IEA, global internet traffic is expected to further double by 2022 to 4.2 zettabyte annually, while data centers are expected to decrease overall energy consumption due to continuous efficiency improvements.⁶ However, new digital platforms and means of media consumption have emerged and the IT sector has increased its greenhouse gas emissions share from 2.5% of global emissions to 3.7% in 2019.⁷ Some studies conclude that emissions from downloading and streaming of media content, such as video games, feature larger emissions than purchasing physical copies such as for video games⁸.

Governance Assessment

Four aspects are studied when assessing the momox's governance procedures: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

While momox has an overall commendable sustainability goal of enabling a circular economy and reducing emissions as well as reporting on relevant sustainability performance indicators, there are still several areas for the company to develop further. The company has a 40% emissions reduction target for electricity consumption, but currently does not address holistically emissions from heating as well as internal and external logistics. In addition, momox does not implement TCFD reporting and has no policies in place to, e.g., avoid air freight and/or servicing transatlantic customers. The green bond framework is in line with the stated definition of green bonds within the Green Bond Principles, which is to enable capital-raising and investment for new and existing projects with environmental benefits. Investors should however be aware that since the proceeds are



¹ https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf

² <https://www.circularity-gap.world/2020>

³ <https://www.deepdyve.com/lp/wiley/carbon-footprint-assessment-of-a-paperback-book-IZww8n2s4M>

⁴ <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

⁵ <http://mistrafuturefashion.com/wp-content/uploads/2015/06/Environmental-assessment-of-Swedish-fashion-consumption-LCA.pdf>

⁶ <https://www.iea.org/reports/tracking-buildings/data-centres-and-data-transmission-networks>

⁷ https://theshiftproject.org/wp-content/uploads/2019/03/Lean-ICT-Report_The-Shift-Project_2019.pdf

⁸ <https://onlinelibrary.wiley.com/doi/full/10.1111/jiec.12181>



allocated to financing the purchase of shares and refinancing debt, the framework is not fully aligned with all four components of the Green Bond Principles. The overall assessment of momox's governance structure and processes gives it a rating of **Good**.

Strengths

It is a strength that investments under this framework are wholly focused on enabling a circular economy business model. The company not only contributes to substantially reducing resources required for production of products, but also reduction of greenhouse gas emissions and water consumption associated with material sourcing, transportation and manufacturing of products.

It is a strength that the company focuses on an adaptable re-commerce platform for media and fashion products. This allows for high adaptability to changing user behavior and reduced risk of lock-in of potentially prospective obsolete infrastructure and technology.

Weaknesses

We find do not find material weaknesses in momox's green bond framework.

Pitfalls

Investment under this framework are solely dedicated to acquiring 100% of shares of momox. ICMA (the International Capital Market Association) suggests that general purpose bonds issued by "pure plays" should follow the Green Bond Principles as closely as possible, even if assets aren't singled out.⁹ Pure-play organisations are encouraged to adopt, where possible, the relevant best practice of the GBPs (e.g., for reporting).

As the whole company is in the focus of the green investment, CICERO Shades of Green views the broader application of the provided business model and associated rebound effects as a potential pitfall through efficiency improvements via re-commerce. When the cost of an activity is reduced there will be incentives to do more of the same activity. This implies that private sellers could have higher incentives to purchase "new products" as momox provides an efficient and easy-to-use platform to resell the products as well as that private customers might be incentivized to consume more "cheaper products" as prices are up to 70% lower than original prices according to momox. Further rebound effects include that customers might be incentivized to buy and own second-hand products instead of sharing them as well as providing easier sales opportunities for product groups within momox's current scope of products as well as the wider consumer good portfolio.

While the company currently focuses on books, other media-products and fashion, it nevertheless could potentially also adopt larger goods in the reselling market, such as, e.g., combustion engine cars in the future. The company is encouraged to closely monitor the environmental risks and benefits of all their product types. The issuer, however, confirmed that there are currently no plans to expand its business to other articles or to expand the customer base beyond private customers.

The company could improve its sustainability focus by addressing and reducing corporate emissions more comprehensively, especially from transportation service providers and heating, as well as sustainability requirements regarding climate friendly shipment, regional customer/seller distribution and sustainability of products sold over the platform and intergroup logistics.

momox does not intend to issue a separate green bond report. While momox will disclose some performance indicators and assumptions in its annual report, the company will not obtain a third-party verification of its impact reporting. This can be a pitfall, as some assumptions could be misleading. As an example, momox systematically

⁹ <https://www.icmagroup.org/green-social-and-sustainability-bonds/questions-and-answers/#QA3.7>



assumes zero emissions for shipments of parcels within Germany as DHL and its “go green” initiative offers “CO₂ neutral shipping” services counted with 0kg CO₂ of associated emissions shipped per parcel in Germany. Further, calculations assume fixed emission factors for “international” shipping and not for specific types of transportation, e.g., air freight. While this has only limited impact on the overall sustainability of momox’s business model, it nevertheless constitutes a pitfall that could be addressed through additional requirements.

The company works with several external marketplaces such as eBay and Amazon. While momox solely uses these platforms as market places, this can nonetheless materialize as pitfall as these companies operate on business models that do not necessarily have sustainability and climate in their focus, e.g., using non-renewable energy for operating their online presence.

An additional pitfall is posed by momox’s exposure to climate risks, both through transition and physical risks. The company could address this risk by implementing TCFD recommendations.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Momox' Green Bond Framework, February 2020	
2	Sustainability Strategy	Excel document with detailed CO2 saving estimations.
3	Verdane Sustainability and ESG Policy, February 2020	
4	Investor Presentation, February 2020	momox's investor presentation



Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

