



Tornator

Green Finance Second Opinion

September 18, 2019

Tornator is a Finnish forest management company with operations in Finland, Estonia and Romania. The core business is wood production (timber) and the sale of cutting rights. It operates in accordance with the internationally recognized certification schemes FSC and PEFC and has built its business around the concept of 'sustainable forestry'. Sustainable forestry has positive climate impacts, both in the growing phase (when trees act as CO₂ sinks) and in the use phase (when wood products can replace fossil-fuel intensive ones).

The company has created a Green Finance Framework which provides a detailed and sound framework for climate-friendly investments. Use-of-proceeds are restricted to sustainable forest operations (purchase and maintenance of land primarily) and nature conservation measures. The Green Finance Framework describes transparent and clear methods for managing proceeds, selecting projects – including veto power, and annually reporting on spending and impacts. The reports will be externally verified- providing increased credibility to investors.

Commercial forestry has long traditions in Finland and the regulatory framework of the industry is well established and enforced. The operations of Tornator can therefore be seen as low-risk from a sustainability perspective. Certification via FSC, PEFC or both (in the case of Estonia and Finland) ensures compliance with internationally recognised standards and implies that investments deemed as eligible under the Green Finance Framework adhere to a high standard.

Tornator has a well established sustainability profile but we encourage even greater emphasis on future issues which may affect its resilience to climate change. Tornator has in place sound sustainability policies, which are reported on annually. They are largely driven by FSC certification requirements and Finnish forestry law and regulations. They company has a long-term business plan, but more emphasis could be given to climate scenarios and resiliency thinking. CICERO also encourages Tornator to analyse the options for running its operations with the increased use of renewable fuels or electric vehicles. Lastly, as a matter of good practice, when publishing CO₂ emission reduction estimates, the company is encouraged to publish the methodology used along with any results.

SHADES OF GREEN

Based on our review, we rate Tornator's green finance framework **CICERO Dark Green**.

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in Tornator's framework to be Good.



GREEN BOND / LOAN PRINCIPLES

Based on this review, this framework is found in alignment with the Green Bond and Green Loan Principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of Tornator's Green Finance Framework dated **August 29 2019**. This second opinion remains relevant to all green bonds and 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 issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer. Second opinions are restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO Green is not responsible for an institution's implementation of a framework, nor does it guarantee or certify the climate effects of investments in eligible projects.

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 of the green funding. 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 issuer'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 funding framework. CICERO Green considers four factors in its review of an issuer's governance processes: 1) the policies and goals of relevance to the green funding 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 Tornator's green finance framework and related policies

Tornator is a Finnish forest management company. The company owns forests in Finland, Estonia and Romania, with Finnish operations dominating (90 % of revenues). The core business is wood production (timber) and the sale of cutting rights. The company is the largest private landowner in Finland and engages in land management activities such as the planning and sale of waterfront plots for holiday homes, for wind farm developments and the leasing of land for hunting purposes.

In 2018 the Group's net sales totalled ca. €13 million, and the balance sheet value is about €1.6 billion. The Group has a total of some 180 employees. Tornator is a public limited company and its main shareholders are Finnish pension insurance companies and the bioeconomy company Stora Enso.

Environmental Strategies and Policies:

Tornator's operations are based on 'sustainable forestry' which means that the regrowth of the forest is equal to or exceed cuttings in any given year. Other environmental principles underpinning sustainable forestry include protecting native and threatened species, complying with international and national regulations and guidelines, and minimizing environmental impacts of operations.

In addition to environmental sustainability, the company focuses on long term economic and social sustainability through responsible management of resources, employees and local stakeholders. The company is owned by long-term owners and its business plan has a 100-year perspective. Policies and goals are set out in the annual report and are updated annually.

Tornator's forests in Finland and Estonia are compliant with both Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) criteria, while in Romania they are FSC-compliant. When acquiring additional forest land Tornator will, if not already FSC or PEFC certified, take action to have the forest land FSC and PEFC certified in accordance to the latest standards.

Tornator promotes forest biodiversity by establishing new conservation areas and performing nature management (habitats protection, restoration of peatlands, and fire control practices) in its commercial forests. Tornator has in total almost 17 000 hectares of private nature conservation areas (out of a total land holding of just under 700,000 hectares)

Tornator supports the United Nations Sustainable Development Goals (SDGs) and has identified six key goals relevant to its own business and stakeholders. The selected SDGs are: 6. Clean water and sanitation; 8. Decent work and economic growth; 13. Climate action; 15. Life on land; 16. Peace, justice and strong institutions; 17. Partnerships for the goals.

Tornator has a set of environmental principles and a code of conduct which all employees must follow. All of Tornator's sub-contractors and suppliers also have to comply with these, as well as with the company's forest certification criteria. Contractors are trained and monitored through work-visits and audits.



Use of proceeds:

An amount equal to the net proceeds of the instruments issued under this green finance framework will be used to finance or refinance eligible assets – i.e. assets that are funded, in whole or in part, by Tornator and that promote the transition to low carbon and climate resilient growth as determined by Tornator and in line with Tornator’s Sustainability policy and strategy.

The eligible project categories are i) New or existing investment in sustainable forestry and ii) Environmental preservation of nature.

The company has confirmed that proceeds will not be spent on fossil fuel generation projects (including energy peat production).

The division of the allocation of Green Finance proceeds between new projects and refinancing will be included in an annual Green Finance Investor Letter.

Selection:

Eligible Assets will be evaluated and selected by Tornator’s Green Finance Committee. The Green Finance Committee consists of the Chief Financial Officer, the Environmental Manager and the Head of Corporate and Social Responsibility. The Green Finance Committee approves Eligible Assets in consensus (i.e. all members have a veto). The Green Finance Committee will keep record of meetings held and decision made.

Management of proceeds:

An amount equal to the net proceeds of the issue of Green Financing will be credited to a Special Account that will support Tornator’s Eligible Assets. As long as Green Financing remains outstanding and the Special Account has a positive balance, at the end of every fiscal quarter, funds will be deducted from the Special Account and added to Tornator’s lending pool in an amount equal to all disbursements from that pool made during such quarter in respect of Eligible Assets. Until disbursement to Eligible Assets, the Special Account balance will be placed in liquidity reserves and managed accordingly.

If, for any reason, a financed Eligible Asset no longer meets the eligibility criteria, it will be removed from the pool of projects financed with proceeds from Tornator’s Green Finance sources.

Reporting:

Tornator will provide an annual Green Finance Investor Letter to investors which will include:

- a) a list of the all projects financed including allocated amount, a brief description and expected impact (see below for further discussion);
- b) information about the division of the allocation of Green Finance proceeds between new projects and refinancing;

Impact: the ambition is to include information in the Green Finance Investor Letter about the land area certified by FSC and PEFC, established conservation areas, forest growth, as well as other environmental benefits when available.



The internal tracking method, the allocation of funds from the Green Finance proceeds and the Green Finance Investor Letter will be reviewed annually by Tornator's external auditor. The Investor Letter and the opinion of the external auditor will be made publicly available on Tornator's web page, as will the Green Finance Framework and Second Party Opinion.



3 Assessment of Tornator’s green finance framework and policies

The framework and procedures for Tornator green funding 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 issuers 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 Tornator’s green funding framework, we rate the framework **Dark Green**.

Eligible projects under the Tornator green funding 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 fundings aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bond Principles (GBP) and Green Loan Principles both require that projects should have a clear environmental benefits, and that project selection should be well defined.

Category	Eligible project types	Green Shading and some concerns
New or existing investments in sustainable forestry 	<ul style="list-style-type: none"> • FSC or PEFC certified sustainable forests • Investments in infrastructure needed for sustainable silviculture (e.g. forest roads, ICT related tools and applications) • Research and development projects with a positive environmental impact (e.g. collaborations with universities and research institutes, and early development phase work related to wind farms) 	Dark Green <ul style="list-style-type: none"> ✓ The company’s main sources of CO₂ emissions are activities related to soil preparation, employee travel, office use and tending of seedling stands. Although low in comparison to the CO₂ sequestration of its forests, Tornator should take care to minimize any impact it has and to consider room for improvement – for instance by requiring vehicles used in its operation to be electric or based on biofuels. ✓ Forest roads provide access to monitor and manage the forests



but can also be used by the general public (as required by law). And although maintenance and access are vital to a well-managed forest, investors should be aware that proceeds may be used to expand road networks. This may be a concern to some, especially since the company currently does not have a requirement on the type of vehicles to be used by employees or sub-contractors.

Environmental preservation of nature



- Biodiversity, e.g. convert drained mire restoration back to carbon storage
- Investments in processes that improve resource efficiency (typically digital, e.g. development related to the use of drones)
- Reforestation (e.g. in disused peat production areas, agricultural lands or under power lines)

Dark Green

Table 1. Eligible project categories

Green Bonds and Forestry

According to the IPCC, forests and land use represent important opportunities for controlling climate change. However, for forests to be a positive contribution to the environment and climate they have to be managed sustainably. Generally speaking, this means that if trees are harvested new ones should be replanted, that species should be suitable for the climate in which they grow (native) and that the rights of the people who live in or near forests should be respected. International standards such as the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) are often used as guidelines to ensure this.

Investors should be aware that the environmental and social impact of forestry operations is highly location – specific. The commercial harvesting of forests in Nordic climates (boreal) is different from temperate or tropical forests in terms of climate impacts as well as the vulnerability of native species and issues related to the rights of indigenous peoples. The national regulatory framework and enforcement levels also vary, with important implications for how sustainably forest companies operate. Finland, as well Estonia and Romania can be considered low-risk countries from a sustainability perspective.

Both use-of- proceeds categories of Tornator’s Green Finance Framework correspond to the Green Bond Principles Category *Environmentally sustainable management of living natural resources and land use*. The Climate Bonds Standard Category *Sustainable Forest Management* and the EU Taxonomy Category *Existing Forest Management* are also relevant reference points. The maintenance of high carbon stocks and overall improvement in the forest carbon sink are important principles of all three frameworks.



Certification is one way to demonstrate the sustainable use of forests. Certification is voluntary, but in Finland, the market practice is to have PEFC certification (roughly 85 % of Finnish forests are PEFC certified). FSC certification is harder to achieve and less than 10 % of Finnish forests are FSC certified. In Finland and Estonia, Tornator's forests are both FSC and PEFC certified, while in Romania Tornator's forests are FSC certified.

Governance Assessment

Four aspects are studied when assessing Tornator's governance procedures: 1) the policies and goals of relevance to the Green funding 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.

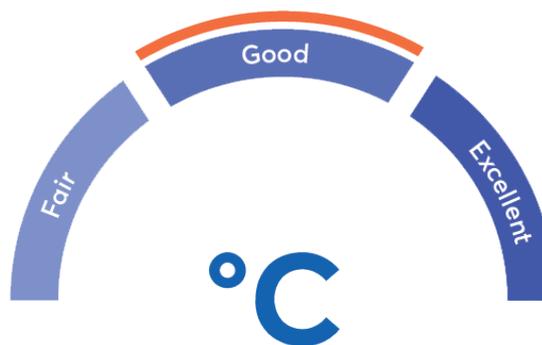


Figure 1: Tornator's Green Funding governance score

The overall assessment of Tornator's governance structure and processes gives it a rating of Good. Tornator lists its environmental principles and objectives in its annual report, and they are updated annually, but they do not currently include what might be considered numerical 'stretch goals'. Their operations are in large part driven by FSC and PEFC certification, in addition to Finnish regulation on forestry. These can all be considered sound and focused on sustainable operations, but the company could consider making more extensive efforts to use scenarios or other resilience tools to climate-proof its planning.

Strengths

Tornator's operations are a net CO₂ sink: that is, they absorb more CO₂ than they emit. This is to be expected for a forestry company, especially one that follows the principles of *sustainable forestry*. According to the company, the carbon sequestration capacity of their forests is about 4 million tonnes of CO₂ per year (based on the estimate that the carbon sequestration capacity of one hectare of forest is about 6 tonnes of CO₂ per year).

In addition to harvesting forests sustainably (growth rate > felling rate), Tornator has committed to reforest treeless areas such as old peatlands, land below electricity lines, and non-productive fields.

Beyond their growing phase, where trees act as CO₂ sinks, trees play an important role as a sustainable resource in many industrial processes once harvested: these purposes include pulp, paper, long-lived wood products, building materials and even textiles. As a result, wood replaces many inputs with high CO₂ products, such as cement and plastic. This is an area with potential for further growth and one which Tornator aims to increase. The company is also developing CO₂ impact methodologies which can fully capture these positive effects.

The company's Green Finance Framework describes a process for selecting projects, managing proceeds and reporting on green bond activities which is clear and in line with good practice (in the case of reporting, it can be considered best practice as Tornator plans to have the reporting externally verified and aims to update its CO₂ impact methodology with the assistance of external expertise).



Weaknesses

We find no overall weaknesses in Tornator's Green Finance Framework

Pitfalls

CO₂ emission reduction calculations can be complicated in the land-use and forestry sector. In order to provide transparency to investors and for these to be able to compare like-for-like with other companies and assets, we encourage Tornator to publish the methodology used alongside any results in its annual report and investor letter.

Tornator is currently undertaking some climate scenario modelling related to climate change and harvesting rates, but this is an area it could consider strengthening. The company believes that well-managed, mixed forests are the most damage resistant also in future circumstances and we would tend to agree, however we encourage Tornator to consider more extensive use of scenario planning to understand more specifically what impacts different weather patterns may have on the choice of species and maintenance techniques in the future. We believe such resilience measures are all the more pertinent since the company already undertakes business planning generally speaking on a long-term basis (its business plan currently looks 100 years ahead).

Finland has not suffered from forest fires to the same extent as e.g. neighbouring Sweden in recent years. Sustainable forest operations, as performed by Tornator using mixed species and regular monitoring and maintenance, can be an effective technique for preventing fires. However, we encourage the company to consider expanding its research activities to include additional options for lowering the risk of forest fires in the future.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Tornator Green Finance Framework, 29 August 2019	Tornator's Green finance framework
2	Tornator Annual Report 2018	Tornator's Annual Report
3	Tornator Code of Conduct	Tornator's Code of Conduct
4	Tornator_Yrittäjäpolitiikka	Tornator's Corporate Governance Policy
5	Tornator_Environmental principles	Tornator's Environmental Policy
6	PEFC Finland Standard	Criteria for PEFC Forest Certification (issued 27.10.2014)
7	FSC-Metsäsuunnitelman yhteenveto Liite 10_11062019	Forestry Management Document: Annex 10, FSC Standard
8	FSC Standard for Finland V1-1 APPROVED 210111	FSC National Standard (Finland)
9	Hiihijalanjäljen laskenta pääpiirteittäin dokumentti Simosol 20171030	Description of Tornator's carbon impact methodology
10	Toimittaja-arviointi_Tornator	Supplier Evaluation Methodology
11	Tornator Climate Change Scenarios	Presentation of the company's scenario thinking on climate change



Appendix 2: About CICERO Shades of Green

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 funding 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).

