

Green Finance Framework

June 2021



Table of Contents

1.	Introduction	. 1
	1.1 About Fintoil	. 1
	1.2 Fintoil and Sustainability	. 2
2.	Green Finance Framework	. 6
	2.1 Introduction	. 6
	2.2 Use of proceeds	. 6
	2.3 Selection and evaluation of Eligible Assets and Projects	. 7
	2.4 Management of proceeds	. 7
	2.5 Reporting	. 7
	2.6 External review	. 8



1. Introduction

1.1 About Fintoil

Established in 2017, Fintoil Ltd (Fintoil) is a refiner of certified Crude Tall Oil (CTO) which is used in the 2nd generation biofuel production and the chemicals, food and pharmaceuticals industries. In further detail, the refining process yields CTO derivatives which is enjoying growing demand as a key component in the production of, inter alia, renewable diesel, adhesives, paints, inks, paper sizing agents, cholesterol-reducing food ingredients and car tires. CTO derivatives such as Crude Fatty Acid (CFA) and Tall Oil Rosin (TOR) enable significant CO₂ reduction by replacing competing fossil alternatives.

The construction of Fintoil's biorefinery commenced in February 2021 and will start operations at the Hamina oil port in South-East Finland in 2022. Once the construction has been completed, we will be the world's fourth largest CTO refiner.

Fintoil's key personnel have decades of commercial and investment experience from the CTO industry. Furthermore Fintoil's founders and management have relevant and deep industry experience from the procurement and refining of CTO as well as greenfield investment and operational experience of a CTO refinery established in Rauma in 2002.



1.1.1 The Hamina Refinery

The construction of the Hamina refinery began in early 2021 in the Port of Hamina-Kotka, a chemicals port in Hamina, Finland. The Fintoil site covers over 50.000 square meters. The chemicals port has a huge container terminal and is already now specialized in the handling and storage of liquids. Special attention has been paid to traffic and transportation connections: Fintoil has access to an electrified rail connection, loading docks and spaces for ships to moor. The motorway also runs right next to the port.

The production process of the refinery is based on fractional distillation in which heat energy and negative pressure are used to distil the raw material to its constituents, separating the wanted fractions. The process was developed already in 1913 by the famous Finnish chemist Alfons Hellström in the

nearby Enso-Gutzeit plants in Kotka, a stone's throw away from Fintoil's refinery. In a sense, Alfons's legacy is now returning home.

The technologically advanced and energy-friendly production process is delivered by Neste Engineering Solutions. This cooperation with Neste gives Fintoil access to NEXPINUS[™] technology which is tailored for the production of 2nd generation renewable biodiesel.

Two thirds of the production will be geared towards renewable fuels and the remaining third towards other sustainable, renewable products. In detail, it is estimated that of the CTO produced, roughly 60% is expected to be distributed to biofuels, 20% to sterols and 20% to other industries.







Our plant will start its operations in the summer of 2022 with a feed capacity of 200,000 tons of CTO. Fintoil will be the fourth largest CTO refiner with a global market share of 10%. In the future, the feed capacity can be increased.

1.2 Fintoil and Sustainability

Global warming has made it necessary for all nations to take joint steps in order to decrease the harmful human effects on the environment. Producing biofuels from a by-product from the pulp industry, which has previously been classified as waste, is responsible use of natural resources at its best. Fintoil refines raw materials for fuels, adhesives and binders, health and wellness products, as well as for the aromatic chemical industry – all this with a minimal carbon footprint. All this from a by-product previously classified as waste.

Our clients who create products like biofuels can cut their greenhouse gas emissions up to 90% compared to comparable fossil fuels. Furthermore, demand for renewable diesel is expected to grow strongly as it replaces the use of fossil diesel.

Our products are contributing to significant emission reductions while at the same time contributing to the Finnish Government's carbon neutrality targets once the expected production starts in the summer of 2022. As part of our commitment to sustainability, Fintoil commissioned the Finnish sustainable business consulting firm Gaia Consulting in 2020, to analyse the CO₂ profile of Fintoil's projected output. Gaia expects that the total annual CO₂ emissions from the projected annual production amounts to 20 000 tonnes annually. In regards to our carbon footprint, 60% is due to the use of natural gas in Fintoil's production process while the remaining 40% arises from transport emissions.

Fintoil is actively studying the technologies to replace natural gas in the production process. That said, Fintoil aims to be the first CTO refinery in the world having a carbon free production process in place by 2027.

1.2.1 Sustainability in raw materials

CTO, a by-product of wood pulp manufacturing, is a natural and sustainable raw material used in the production of numerous everyday products. Our raw material is considered as waste in the European Renewable Energy Directive (RED II) and thus as zero CO₂. Our CTO suppliers are pulp mills which have certified supply chains (such as FSC, PEFC or SFI). The full transparency of our supply chain ensures that our raw materials can be traced to their original sources. Fintoil's new production plant is a model example of modern circular economy and resource-wise thinking towards fossil-free transportation.

The EU Renewable Energy Directive

The revised European Union directive on renewable energy took effect on 24 December 2018 setting new targets for renewable energy, energy efficiency and 2nd generation biofuels by 2030. The EU countries have 18 months to implement the directive in their legislation.

Based on the binding target, the renewable energy share of the EU's total primary energy consumption will be at least 32% by 2030. The share of renewable energy will be evaluated, and the target possibly increased, in 2023.

The revised renewable energy directive favours 2nd generation biofuel feedstocks including algae, biomass from industrial and municipal waste, straw, manure and sludge, other biomass and forest residues, lignin, tall oil pitch and tall oil. As part of the target setting, the share of the 2nd generation biofuels are to represent at least 14% of all transportation fuels by 2030. The 1st generation biofuels will no longer be classified as renewable energy after 2030 which will result in the discontinuation of the use of palm oil as a biofuel feedstock in the EU.



1.2.2 Sustainability in logistics

Location close to CTO suppliers

Up to 75% of Fintoil's CTO feedstock is expected to be sourced from Finland and Sweden or elsewhere from Northern Europe. Fintoil's proximity to its prospective raw material suppliers is a logistical competitive advantage as the average distance from a pulp mill to Fintoil is smaller compared to competitors in the Nordic region. Gaia has estimated that this enables annual CO₂ reduction of 400 tonnes annually in Nordic CTO procurement logistics relative to competitors.

Gaia's calculations were based on an assumption that 50% of CTO procurement was from Northern Europe by truck and 50% from North America by marine transport. North American imports were deemed to be the source of more than 70% of the transport emissions. Currently, Fintoil's sourcing plan projects more than 70% of CTO from Northern European suppliers which is estimated to further reduce transport-derived CO_2 emissions by 3,000 tonnes annually.

Inbound logistics

Fintoil's CTO storage tanks are located in the immediate vicinity of its refinery at the Hamina-Kotka port which eliminates the need for road or rail transport in overseas transactions. This, yet again, is an advantage particularly compared to refineries located inland and saves an estimated 40 tonnes of CO₂ emissions annually.

Outbound logistics

CTO and CTO derivatives tanks require heating. Fintoil uses excess process energy to heat the storage tanks.

1.2.3 Sustainability in process

Improved efficiency of refining process compared to traditional CTO distillation processes

The projected energy consumption at Fintoil's CTO refinery is 0.24 MWh per tonne of CTO feedstock. Compared to well-run CTO refineries, using the traditional cascading distillation process, the energy consumption is around 0.42 MWh per tonne of CTO feedstock, indicating that Fintoil's distillation process requires less energy. That said, compared to a traditional CTO distillery Fintoil's process is estimated to enable 40% less CO₂ emissions annually.





Lower CO_2 emissions due to the choice of process energy compared to traditional CTO distillation processes

Fintoil uses natural gas as process energy whereas comparable refineries traditionally use Heavy Fuel Oil (HFO). Fintoil is evaluating biogas as a potential source of process energy to replace natural gas as its availability and economic feasibility improves. Choosing natural gas as a process energy enables 25% of annual reductions of CO₂ emissions compared to HFO. In case biogas becomes a viable alternative, the CO₂ emissions reduction further increases to 90% annually.

Wind power cuts carbon footprint of electricity used in process

Fintoil intends to procure the electricity it needs as wind power. The CO₂ emission reduction of wind power is over 90% annually compared to the general electricity mix available in Finland.

Fintoil's process enables higher share of further refining and results in less CTO directed to combustion Due to the advanced design of Fintoil's distillation process only about 10% of CTO derivatives produced will be combusted as biofuel without further processing. At traditional CTO refineries this share is up to about 40%, mainly due to the higher share of Tall Oil Pitch (TOP) generated in the process. Therefore, Fintoil's process enables redirecting up to 30% of TOP combusted to biochemicals production annually.

1.2.4 Sustainability in products

CTO is a versatile mixture of compounds that can be refined to different fractions. The main end products of tall oil distillation are fatty acids and rosin. In addition to these, the process creates turpentine and pine pitch. Further processing of the Fintoil products create raw materials for various products and uses, such as biofuels, adhesives and binders, car tires, inks, health and wellness products, and fragrances.

Pine diesel

Fintoil produces Crude Fatty Acid (CFA), or Fintoil Pine Diesel, which covers approximately half of our total production. With further processing, our customers can turn the CFA into renewable diesel and Hydrotreated Vegetable Oil (HVO). HVO's chemical composition is better than the one of fossil diesels', making it safe to use in all kinds of diesel motors.

The use of 2nd generation biofuels is expected to increase more than 10% annually. Finland is a global pioneer and forerunner in manufacturing renewable diesel.

CFA is projected to be used as feedstock in the production of 2^{nd} generation renewable biodiesel which is estimated to reduce 80-90% of CO₂ emissions compared to fossil diesel. Furthermore, CFA feedstock is expected to be the key enabler of emission reductions enabled by 2^{nd} generation renewable biodiesel using CFA as feedstock compared to fossil diesel. Based on Gaia's analysis, Fintoil's CFA as feedstock enables CO₂ reduction of 210,000-240,000 tonnes in biodiesel production annually.

Tall Oil Rosin

A third of Fintoil's production consists of Tall Oil Rosin. It is used especially in the production of glues, binders, printing inks, paints and coatings.

The market for Tall Oil Rosin is expected to grow annually, driven by industries such as car manufacturing, building, packing, furniture and shoe manufacturing.

Sterol-rich pitch

Tall oil pitch with high sterol content is presently the only feasible new source of sterols. This is due to the food industry moving away from the high-pressure steam distillation of plant-based sterols because of the trans-fats generated in the process.



Sterols are used in functional foods, dietary supplements, cosmetics and in the pharmaceutical industry. In pharmaceuticals the sterols are a versatile raw material. Tall oil pitch contains a multitude of valuable and useful chemicals.

The market for sterols is estimated to grow rapidly in the coming years, with tall oil sterols leading the growth.

Pitch

Approximately 100,000 tons of Tall Oil Pitch is annually produced in Finland as a by-product of the tall oil industry. It is a great alternative to fossil energy, and it is widely used as an energy source in different industries.

Pitch is also used to produce 2nd generation renewable biodiesel. Finland has a long history of manufacturing and distributing tall oil-based road fuels.

Turpentine

The most important end users of raw pine turpentine (Crude Sulphate Turpentine, CST) are cosmetics, food and beverage industries. It is used in the production of aromatic chemicals which are used to create the desired aroma or taste for a product.

Turpentine can also be used as a raw material for aromatic compounds. For example, many of the everyday cleaning products in your house carry an aroma originating from pine turpentine.

FINTOIL

2. Green Finance Framework

2.1 Introduction

This Green Finance Framework is aligned with the Green Bond Principles published by the International Capital Markets Association ("ICMA") in 2018 and the Green Loan Principles published by the Loan Market Association ("LMA") Asia Pacific Loan Market Association ("APLMA") and the Loan Syndications and Trading Association ("LSTA") respectively in 2021. This Framework allows Fintoil to issue Green Financing Instruments including not only Green Bonds but also Green Loans and other types of debt instruments which are used to finance Green Eligible Projects.

2.2 Use of proceeds

An amount equal to the net proceeds of the Green Debt issued by Fintoil will be used to finance or refinance Eligible Assets and Projects that have been evaluated and selected by Fintoil in accordance with this Green Finance Framework. Refinancing of eligible operating expenditures will have a look-back period of no longer than 3 years from the time of issuance, to the extent relevant. Green assets shall qualify without a specific look-back period provided that at the time of issuance they follow the eligibility criteria listed below.

Fintoil is fully committed to transparency and best market practices. Green Debt will not be used to (re-)finance investments that utilise fossil-based raw materials or that are associated with environmentally negative resource extraction.

Fintoil has a clear stand against any actions that would cause deforestation. We are committed to preventing deforestation in our own supply chains and require the same from all our raw material suppliers. Fintoil will only purchase CTO raw material from pulp producers who have either an FSC or PEFC certificate for their supply chain.

2.2.1 Eligible Assets and Projects

Eligible Assets and Projects include assets and expenditures with the objective to contribute to a transition towards a low-carbon economy. Furthermore, Green Eligible Assets and Projects include expenditures for the following eligible categories which have the objective to mitigate climate change globally with our sustainable solutions in place.

Eco-efficient and circular economy adapted products

Fintoil's products are contributing to significant emission reductions while at the same time contributing to the Finnish Government's carbon neutrality targets. Fintoil aims to reduce its customer bases greenhouse gas emissions by at least 220,000 tons CO₂ annually in its CFA production alone. Proceeds will be used to finance the development, operations, maintenance and expansion of renewable and circular solutions to reduce greenhouse gas emissions. The environmental objectives targeted with proceeds allocated relate to the reduction of the carbon emissions by the expansion and development of Fintoil's sustainable product line which provide an alternative to conventional fossil fuels based alternatives.

Investments in Renewable and Circular solutions

Eligible Assets and Projects include, but are not limited to, investments in the Hamina refinery specialised in the production of CTO and derivatives which may be further processed as raw materials for the 2nd generation biofuel production alongside the chemicals, food and pharmaceuticals industries.

Fintoil strives for a good dialogue with the local community and other stakeholders. The company refrains from projects that could be questionable from a social or governance point of view. For example,



possible opposition from the local community will be taken into account in the investment decision and attention will be paid to the contractual counterparties' (including raw material suppliers) good reputation and commitment to ESG practises.

2.3 Selection and evaluation of Eligible Assets and Projects

Fintoil has designed and implemented a process to ensure that only projects aligned with the criteria set out above will be selected as Eligible Assets and Projects for its Green Debt issuance. To oversee this, a Green Finance Committee ("GFC") has been established with the CEO, CFO and EHQS manager. The GFC makes decisions in consensus and the decisions made by the GFC will be documented and filed.

The GFC will meet at least on an annual basis.

The Green Finance Committee follows the below process when selecting and evaluating projects for the Eligible Assets and Projects.

- 1. Fintoil evaluates eligibility of proposals according to the eligibility criteria specified in the above table and removes assets and projects that do not meet the criteria.
- 2. Fintoil's Treasury verifies eligibility and presents the potential Green Assets and Projects to the Green Finance Committee for final approval.
- 3. Final investment decisions are always made by the board of directors.

2.4 Management of proceeds

Fintoil will establish a Green Debt Register in relation to Green Debt issued by Fintoil for the purpose of monitoring the Eligible Assets and Projects and the allocation of the net proceeds from Green Debt to Eligible Assets and Projects.

Fintoil will over the duration of the outstanding Green Debt build up and maintain an aggregate amount of Asset and Projects in the Green Debt Register that is at least equal to the aggregate net proceeds of all outstanding Fintoil Green Debt.

There may be periods when the total outstanding net proceeds of Green Debt exceed the value of the Eligible Assets and Projects in the Green Debt Register. Any such portion will be held in accordance with Fintoil's normal liquidity management policy.

The Green Debt Register will form the basis for the impact and allocation reporting.

2.5 Reporting

Fintoil will annually publish a publicly available report on the allocation and impact of Green Bonds issued under this Green Finance Framework. Where relevant, Fintoil will seek to align the reporting with the latest standards and practices as identified by ICMA and the guidelines in the Nordic Public Sector Issuer's Position Paper on Green Bond Impact Reporting. The impact report will, to the extent feasible, also include a section methodology, baselines and assumptions used in impact calculations.

2.5.1 Allocation Report

The allocation report will, to the extent feasible, include the following components:

- A list of all Eligible Assets and Projects funded including amounts allocated
- Descriptions of selected Eligible Assets and Projects financed
- Amounts invested in each category as defined in the Use of Proceeds section and the relative share of new financing versus refinancing



2.5.2 Impact Report

Fintoil will strive to report on the actual environmental impact of the investments financed by its Green Bonds. If/when actual impact for some reason is not observable, or unreasonably difficult to source, estimated impact will be reported.

The impact indicators may vary with investment categories, as defined in this Green Finance Framework. The impact metrics selected may include the following:

- Eco-efficient and circular economy adapted products
 - \bigcirc Annual CO₂ emissions avoided due to the investment in the Hamina Refinery
 - O Amount of fossil-based raw materials avoided/replaced

Fintoil will make the report on the impact and allocation of other Green Debt Instruments publicly available on Fintoil's website. For the avoidance of doubt Fintoil will clarify, and specifically outline, if an Eligible Asset or Project has been financed by several Green Debt Instruments. The reports will be subject to statutory annual audit of governance by Fintoil's external auditors.

2.6 External review

Fintoil has engaged CICERO Shades of Green to act as an external verifier of this Green Finance Framework and the Eligible Assets and Projects. The Second Party Opinion as well as the Green Finance Framework will be made publicly on Fintoil's website.