



# **Pillar 3 Disclosure for the financial year ending 30 September 2018**

## **Vertis Environmental Finance Ltd**



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## INTRODUCTION

This document provides detailed disclosure in accordance with Part 8 of the Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (herein referred to as "Capital Requirements Regulation" or "CRR") – the so-called Pillar 3 - for Vertis Environmental Finance Ltd (herein referred to as "Vertis" or "the Company") as of 30 September 2018. This report should be read and understood in connection with the Company's Annual Report for the fiscal year ended 30 September 2018.

## Background

Basel III was introduced by The Basel Committee on Banking Supervision as a global, voluntary regulatory framework. The objectives of this framework are:

- Pillar 1: minimum capital requirements which firms must meet in areas of credit, market and operational risk;
- Pillar 2: firms and their supervisors consider whether an additional capital against risks not covered in Pillar 1 should be held. This is implemented through the Internal Capital Adequacy Assessment Process ("ICAAP") and through the subsequent Supervisory Review and Evaluation Process ("SREP"). This is undertaken by the National Bank of Hungary in the case of Vertis.
- Pillar 3: public disclosure about certain details of risks, capital and risk management. The Pillar 3 disclosure requirements can be found in Articles 431- 455 of the CRR.

**Disclosure policy:** During the preparation of this disclosure we have taken into account the suggestions of recommendations (MNB) 8/2017 on general requirements, 9/2017 on liquidity and 13/2017 on the specific requirements of disclosure practices of credit institutions and investment firms.

**Frequency:** This report provides comprehensive disclosure on risks, risk and capital management of the Company. It is published once a year subject to provisions on materiality, proprietary or confidential information and frequency of disclosure under articles 431, 432 or 433 of the CRR.

**Means of disclosure:** The Company publishes this report on its website <https://vertis.com/en/page/disclosures> together with the Annual Report. This report should be read and understood in connection with the Company's Annual Report for the fiscal year ended 30 September 2018.

**Materiality:** The Company considers any information material if its omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.

**Proprietary Information:** The Company considers any information proprietary if disclosing it publicly would undermine its competitive position.

**Confidential Information:** The Company considers any information confidential if there are obligations to customers or other counterparty relationships binding an institution to confidentiality.



Vertis does not publish proprietary or confidential information, however it publishes general information related to these categories. In spite of this limitation, this document retains its ability to fully present the risk profile of the Company.

## **SECTION A: BASIC INFORMATION REGARDING RISK MANAGEMENT, OBJECTIVES AND POLICIES**

Articles 435. 1. a), b), c) d), f) of the CRR

### **Introduction of the Organization**

Vertis Environmental Finance Ltd. is a company independent from banks and investor groups. The main objective of the Company is to provide financial services related to environmental products, and to participate in the EU Emissions Trading System (EU ETS), which is regulated by the 2003/87/EU Directive, and be the market leader in this activity.

The company with a professional experience of two decades provides its clients with unique services and expertise.

Vertis is an investment service provider licence according to Act CXXXVIII of 2007 on Investment Firms and Commodity Dealers, and on the Regulations Governing their Activities (Bszt.) for the following activities:

- Dealing on own account;
- Investment advice;
- Foreign exchange services where these are connected to the provision of investment services;
- Investment research and financial analysis.

Related for the following products:

The greenhouse gas emission allowances and the rights on emission of air pollutants that consists of units that complies with the Act CCXVII of 2012 on Participation in the execution of the decree on the emissions trading system of the greenhouse gases and on the resource sharing.

### **Business model**

The goal of the Company is to be market leader in the market of financial services related to environmental products, finding the right balance among risks, opportunities and rewards, as well as to protect the economic interests of the Company, its owners and clients and to assure the Company's smooth and efficient operations within the acceptable amount of risk exposure taking into account the expected return yield and to ensure, secure and maintain the optimal capital structure.

The below listed activity based on Bszt. is relevant to the capital requirement of CRR:

- spot dealing on own account,
- future contracts dealing on own account,



- forward contracts dealing on own account,
- futures options dealing on own account,
- forward options dealing on own account,
- transactions to hedge position and foreign exchange risk related to trades defined in the points above.

## **Clients**

The clients of Vertis are typically companies that have to comply with the Directive 2003/87/EC; usually big industrial installations, energy producers or distributors, or aircraft operators (Compliance Clients).

On the top of the Compliance Clients, the Company has several clients that executed projects in developing countries that reduces the emissions of greenhouse gases (via the Clean Development Mechanism, CDM), and for the achieved reductions those developers received carbon units (Certified Emission Reduction, CER) that can be traded in the EU Emissions Trading System (EU ETS).

Vertis does not do business with private individuals.

Before entering into any transactions, the clients are classified with procedures listed below in order to capture risks and to determine the clients' creditworthiness, possibilities and threats of business:

For the clients against whom Vertis has or plans to take credit risk exposure, it is necessary to perform the client rating based on their solvency and payment ability / settlement conditions. For each client Vertis performs its procedures according to the anti-money laundering as well as the Know Your Customer (KYC) policies.

For those clients to whom Vertis provides or plans to provide investment services or ancillary services it performs the MiFID II client categorisation, and appropriateness and suitability test if required.

## **Risk culture**

Measurement, monitoring and management of risks within the Company is done according to the existing laws and regulations. The Company's organizational structure, policies, internal audit and managerial controls are developed in a way that the segregation of the front office, the back office, the risk management and the compliance is assured. Risk management is fundamentally built into the work processes and form an integral part of the staff's daily work.

## ***Roles and responsibilities***

This section includes relevant information about risk management by outlining the key responsibilities of and the connections between the Company's units. Roles and responsibilities are recorded in the Risk Management Regulation of the Company and described as having been effective from 3rd January 2018. No changes were made since or are being planned regarding the organizational structure of risk management. No personal changes were made in the following fields: internal control, risk management, compliance and internal audit.



## **Board of Directors**

The Board of Directors is responsible for the investment firm's risk management. The Board of Directors devotes sufficient time to learn about risks and to consideration of risk issues, and ensures that adequate resources are allocated to the management of all material risks as well as in the valuation of assets to ensure that the relevant strategic decisions are fully prepared and properly substantiated.

Vertis sets up and operates an appropriate information system so as to establish reporting lines to the Board of Directors that cover all material risks the investment firm is or might be exposed to, and to supply up-to-date information through the management information system.

It is the duty of the Board of Directors to review the Risk Management Regulation and the related internal regulations every year. It receives quarterly reports of the Company's risk exposure from the Risk and Liquidity Manager. The review can be done more often if the Risk and Liquidity Manager considers it is necessary.

The Board of Directors considers the risk management system put in place to be adequate with regard to the Company's profile and strategy (Article 435 point 1.e) of CRR).

## **Supervisory Board**

The Supervisory Board reviews the Company's risk exposure and capital adequacy quarterly based on report of the Risk and Liquidity Manager.

## **Risk and Liquidity Manager**

The Company's Risk and Liquidity Manager is independent from all other departments. The Risk and Liquidity Manager is responsible for the implementation and application of the risk management processes taking into account the full range of applicable law. This includes monitoring credit exposure, trading exposure, collateral and margin sufficiency, market, operational and systemic risks and other risk factors.

The Risk and Liquidity Manager reports to the CEO, to the Board of Directors and submits the risk reports to the Supervisory Board. Risk management closely cooperates with the Compliance Officer and with the Internal Auditor.

## **Risk Committee**

A Risk Committee (Committee) is formed to set Risk Strategy and Risk Management Regulation and decide on high risk related matters. The Risk Committee members are appointed by the Board of Directors for an undefined period. The members of the Risk Committee:

- James Atkins,



- Bostjan Bandelj,
- Krzysztof Piątek,
- Marc Falguera von Niessen

The decision of the Committee is based on majority decisions, these Committee decisions are valid if at least two third of the Committee Members have expressed their opinion on the topic.

The following topics are within the scope of the Risk Committee:

- counterparty credit limits,
- market risk limits,
- review of client open positions and limits,
- liquidation levels,
- improvements on communications – both internal and towards clients,
- any other topic under the competence of the Committee.

### **Compliance Officer**

The Compliance Officer is responsible for the Company's compliance with the provisions of law, the legal provisions contained in the regulations, and with the internal policies.

### **Internal Auditor**

The Internal Auditor controls and assesses the followings:

- if the operations of Vertis complies with the laws and regulations,
- management of resources,
- operations of internal control lines.

### ***Methods of risk taking***

In order to manage risks and keep them within strict limits, Vertis has detailed procedures to manage risk takings which are applied during the daily workflow:

- the Board of Directors or the Risk Committee annually revises the List of Approved (trading) products,
- the List of Approved Products and Transaction Types is regularly updated in the risk procedures and the Risk and Liquidity Manager communicates it to all relevant staff members,
- the List of regulated Approved Products has to be in line with the content of the Investment Firm License of the Company,
- the employees of Vertis are not allowed to trade with any product or do any transaction that is not on the List of Approved Products and Transaction Types (products and transactions that can be selected in mv2 system),



- Risk and Liquidity Manager continuously monitors whether the rules are kept. At least quarterly reports are prepared and presented to the Board of Directors and to the Supervisory Board; the reports can be done more often if the Risk and Liquidity Manager considers it is necessary,
- the Risk and Liquidity Manager is involved in the standard legal documentation of products and transaction types to assure that daily practice is in line with approved List,
- if there is a change of significant elements in individual contracts the Risk and Liquidity Manager is involved.

## **Risk appetite**

### ***General principles of risk taking***

The risk appetite statement is the articulation in written form of the aggregate level and types of risk that Vertis is willing to accept in order to achieve its strategic and business objectives. It includes qualitative statements as well as quantitative measures expressed relative to, inter alia, earnings, capital, risk measures, liquidity and other relevant measures as appropriate. The objective is not only the measurement of the traditional qualitative and quantitative risks, but it should also address less quantifiable risks such as reputation and money laundering and financing of terrorism risks, as well as business ethics and conduct.

The risks arising from the movement of the market prices, volatility and liquidity of emission allowances are considered as commodity risk related to legislative requirements and capital requirement is calculated for commodity risk pursuant to CRR.

The Company is an own account trader, trading on both regulated and OTC markets. The trading is done within the EU Emission Trading System (EU ETS), which is a cornerstone of the EU's policy to combat climate change and its key tool for reducing greenhouse gas emissions cost-effectively.

The Company's risk taking principles are as follows:

- the objective of risk management is to adequately manage the risks, which allows that those risks remain within the limits necessary to achieve Company's business objectives,
- the Company at all times develops risk-taking, risk management and internal capital adequacy assessment process (ICAAP) so as not to endanger the safe operation and avoid restriction of its activities by the supervisory Authority (the principle of safe operation),
- the Company develops a risk management process to avoid conflicts of interest,
- the Company identifies and measures all material risks, sets up monitoring system for them and reports about those risks. For the quantifiable risks, the necessary limits are set up internally and managed by internal controls and for the non-quantifiable risks, regular reports are developed and used in order to control those risks. (Principle of risk management is essential),





- the Company uses methods of measuring risk exposures, which correspond to the Company's business characteristics, goals and policies,
- risk management and control methods, as well as the costs of risk management should be adequate to the risks involved their complexity and proportion. (Cost-benefit principle),
- operation of the Company is based on the compliance with the legal requirements, therefore the Company does not take risks in connection with illegal or unlawful activities or persons. (Prohibited activities principle),
- the Company takes risks in the context and to the extent described in its internal rules,
- risk management is essential part in the Company's business and strategic decision-making processes,
- introduction of any new business activity, new product or service is preceded by a full mapping of the potential risks involved.

### **Factors determining risk appetite**

General principles of risk appetite are set by the Company taking into account:

- prudent risk-taking with comprehensive risk assessment and control environment,
- actual capital position of the Company,
- current risk profile of Vertis and limits set by the Risk Committee,
- current economic condition, future expectations and forecasts regarding the state of the sector,
- shareholders expectation,
- requirements set by regulations of National Bank of Hungary (MNB) regarding capital adequacy.

**Risk tolerance** is the specific maximum risk that the Company is willing to take regarding each relevant risk type.

**Risk target** is the optimal level of risk that the Company wants to take in pursuit of a specific business goal.

**Risk capacity** is the amount and type of risk an organization is able to support in pursuit of its business objectives.

**Risk limits** are the thresholds to monitor that the actual risk exposure does not deviate too much from the risk target and stays within the Company's risk tolerance/risk appetite. Exceeding risk limits will typically act as a trigger for risk management action.

The Company's risk appetite, tolerance towards certain significant risk types (risk tolerance) could be characterized by one of the following qualitative measures:

- low
- moderate



- medium
- significant
- great

### *The Company's risk appetite*

The risk tolerance with regard to certain significant risk types is presented in the following table:

Risk Type	Risk appetite/Risk tolerance	Justification
Foreign exchange risk	Low	<p>FX transactions are not the base activity but an auxiliary activity performed towards specific needs of customers and form extremely low part of Company's total turnover.</p> <p>The Company's books are in EUR, the emission allowances are denominated in EUR and most transactions and contracts are executed in EUR.</p> <p>FX transactions do not aim at revenue generation but enable to serve client needs better.</p>
Operational risk	Low	<p>Tight product range with simple transactions and settlement processes.</p> <p>Strong internal controls, transparent processes with clear responsibility areas and reporting lines aimed at stable operations.</p>
Strategic risk	Low	<p>Strong political will to keep EU ETS as a main EU tool to fight climate change. Growing customer's exposure towards emission market generates steady demand for high quality services.</p>
Profitability risk	Medium	<p>The Company aims at building and maintaining steady and sustainable revenue stream based on steady demand, which combined with an adequate risk management and optimal risk-return trades, assures a predictable business environment. Moreover the goal of the Company is to widen the portfolio of clients and reduce dependency on high revenues from limited number of clients; however with limited number of potential customers the diversification is limited.</p>



Market risk	Medium	Due to own account trading activity the risks are more concentrated and higher than the other risk types. The risk tolerance is medium because the Company hedges most of its open positions, and is allowed to use only a limited amount of capital for speculation.
Counterparty credit risk	Low	The Company creates measures to assure proper management and mitigation of counterparty credit risk in respect of all counterparties it anticipates to transact, and transacts, including counterparty categorization, the evaluation of counterparties, that is supported with both, external and internal information. Vertis has a counterparty limit system in order to manage counterparty credit risk.
Concentration risk	Medium	The Company plans to trade with just one financial instrument and the number of market participants is limited, but the market (EU market) is considered to be big and liquid. Therefore the extent of concentration is medium.
Liquidity Risk	Low	<p>Vertis is financed from internal sources, doesn't use external credits. The Company invests only in liquid assets / investments and trades on a liquid markets.</p> <p>Liquidity is crucial for the Company's core business and to assure the transactions and other liabilities are settled in timely manner without any extra pressure being put on liquidity.</p> <p>The Company developed reports to forecast possible bottlenecks in liquidity and has put in place measures and processes to assure required liquidity and liquidity buffers are provided.</p>
Risk of non investment activity	Low	<p>Pursuant to Section 8 point (6) c) of Bszt Vertis is entitled to have non-investment activity as well.</p> <p>The only reason the Company has such an activity related to EUAs is the liquidity management of EUA.</p>

## Limits



To maintain the risk tolerance of Vertis, the Company has set up a comprehensive limit system, in order to limit the total size of open positions, and the exposure towards the counterparties. Also to maintain the Company's risk appetite within the desired levels, quantifiable risks are identified and limits are set in the following areas:

- client credit risk;
- settlement risk;
- country risk;
- position risk (market risk);
- liquidity risk;
- product and asset classes.

## **SECTION B – RISK MANAGEMENT, OBJECTIVES AND POLICIES BY RISK CATEGORIES**

Articles 435. 1. a), b), c), d), f) of the CRR

### **Risk Valuation**

This section of the disclosure encompasses those types of risks, which are approved by Vertis taking into account its risk appetite and considered as relevant based on the operation of the Company. The risk map resulted from the assessment process is reviewed annually by the Risk Committee.

The Company classifies the following risk types:

<b>Risk Type</b>	<b>Classification</b>	<b>Pillar 1 capital calculation method</b>
Market risk	Material	Standardized method
Credit risk	Material	Standardized method
Counterparty credit risk	Material	Mark-to-Market Method
Operational risk	Material	Basic Indicator Approach
Foreign exchange risk	Material	Standardized method
Liquidity risk	Material	-
Reputation risk	Not material	-

### **Credit risk**

Credit risk is defined as the risk that a contractual partner will not fully or partially repay its liabilities when they become due and it will negatively affect Vertis's profitability. The credit risk of Vertis in its



strict sense derives only from cash and unit settlement related to the provision of investment services (free delivery).

By default, the Company doesn't pre-pay or pre-deliver to clients. If the client has to pre-deliver or pre-pay, risk can only arise from the (negative) replacement cost of the product or the money spent on the product.

Vertis trading partners that are considered to be market makers, liquidity providers or clearing service providers are usually granted predelivery or prepayment limit, in order for Vertis to be able to continue its operations and provide services to base clients. Those market makers are usually large banks or trading institutions as well as well-established reputable traders.

The risk for the value of free deliveries is calculated per customer and is aggregated daily by Vertis. Vertis, in accordance with the first pillar, constitutes a minimum capital requirement for credit risk and the risk of open delivery in accordance with the methods described in CRRs articles 111 and 379.

### **Market risk**

Market risk is the risk of loss originating from the change of the market prices or the rates, which has several categories; for example interest rate risk, security or commodity prices risk.

Market risk of Vertis arises from two factors:

- Value of positions held in the trading book,
- Foreign exchange risk arising from assets and liabilities in foreign currencies.

The trading book contains all positions in financial instruments and in commodities, held by the Company, either with trading intent, or in order to hedge a positions held with trading intent. According to CRR financial institutions have to report all open position held in the trading book, so Vertis continuously measures, monitors and reports on a daily basis all open positions which was made on own account.

Dealing on own account is strictly controlled by Vertis and kept within the limits set by the Company to be in line with the earlier defined risk appetite. In order to manage open positions the Risk Management Regulation has set up the following limits:

- Duration limit, - length of position being kept, maximum expiry that is allowed to be traded (part of the product limit)
- Product limit, - products that are allowed to be traded
- Margin limit, - list of acceptable collaterals
- Currency limit, - we can only trade in EUR, possible deviations are PLNs, HUFs, CZK, USDs.

Due to the trading with spot, futures/forward emission allowances and options for such emission allowances Vertis is exposed to three risk classes:

- interest rate risk,



- commodity risk and
- risks arising from the nonlinearity of options (gamma and vega risk)

In case of interest rate risk we can distinguish between general and specific risk, from which only the general risk arises from Vertis's positions and daily operation.

To calculate capital requirement for interest rate risk Vertis applies the duration-based method introduced in article 340 of CRR. For commodity risk Vertis uses the maturity ladder approach pursuant to article 359 of CRR. Moreover the additional risks of options are defined by calculating gamma and vega risks.

### **Operational risk**

By definition, operational risk is a risk of losses due to inadequate internal processes, people and systems errors and external events. Operational risk involves legal risks, but no reputational or strategic risks.

Operational risks are managed by Vertis by identifying the sources of potential risks and reducing their probability of occurrence by setting up appropriate procedures and control systems.

Vertis continuously and systematically identifies and manages the risks arising from its operation. This procedure includes the perception of risks, the place of risk, the estimated severity of the risk, the likelihood of the risk and the duration of the risk.

Operational risk also includes legal risks. Vertis only deals with transactions where there is no doubt about them in legal terms. Vertis' Compliance Officer is responsible for managing legal risk, which may in some cases use external legal advisors.

Vertis handles operational risks in accordance with the following points:

- Identification and analysis of events and audit of processes that cause operational risks and create a loss for Vertis.
- Continuous monitoring of signaling systems related to operational risks.
- Reducing operational risk through the establishment of effective control procedures.
- Limits and procedures for detecting and avoiding fraudulent activities, negligence or deliberate omissions.
- Before conducting a complex, structured transaction, Vertis may involve external experts, who will identify and mitigate the risks involved in emerging potential operations.

Pursuant to articles 315 and 316 of CRR, Vertis calculates its capital requirement for operational risk with the "Basic Indicator Approach".



### Foreign exchange risk

Foreign exchange risk rises from open or imperfectly hedged positions in a particular currency (different than EUR) as a result of unexpected movements in the level of exchange rates (that may lead to losses in the reporting currency (EUR) of the Company).

Foreign exchange positions are not held with the intention to trade, only in order to pay to clients in a currency that is different from the EUR or because the Company accepted such a payment from its client, but trading book have to contain these positions, and also the FX positions hedging the above described deals.

Vertis only have foreign exchange positions with the following conditions:

- The Company may hold currencies different than the EUR or liquid assets denominated in multiple different currencies other than the EUR within the limits set by the Risk Committee or Board of Directors.
- The Company may hold its liquid assets in different currencies as long as it doesn't jeopardise its liquidity.
- The Company sets up and monitors limits on positions in different currencies.

The Company's exposure towards foreign exchange risk is managed with limits, and capital requirement for foreign exchange risk is calculated pursuant to article 351 of CRR.

### Counterparty credit risk

Counterparty credit risk means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. Counterparty credit risk in case of Vertis only arises from its trading book activity, more precisely from the OTC positions held in the trading book.

The objective of counterparty credit risk management of Vertis are the following:

- The Company sets up, communicates, maintains and monitors manageable counterparty credit risk limits,
- The Company creates guidance for Risk Manager(s) to enable counterparty credit risk evaluation and a decision making process granting credit limit approvals within the approved limits.
- The Company creates measures to assure proper management and mitigation of counterparty credit risk.

In order to mitigate counterparty credit risk Vertis has set up limits to each counterparties. These limits are at least annually reviewed by the Risk Committee to minimize counterparty credit risk the Company's clients are required to pay a specified amount of margin.

The Company calculates capital requirement for counterparty credit risk in trading book with the Mark-to-market method pursuant to article 274 of CRR. Additionally Vertis calculates capital requirement for



credit valuation adjustment (CVA) according to article 384 of CRR. The detailed calculation is contained in the Trading Book Regulation of Vertis.

### **Settlement risk**

Settlement risk is the risk that a transaction executed is not settled as expected through a settlement system. Settlement risk comprises credit risk and liquidity risk elements.

The two types of settlement risk:

- The risk of the value of the contract, if one party to the transaction doesn't receive its receivable from its debtor, while it has already performed its obligations to pay or deliver under the terms of the transaction.
- The replacement cost, which is usually less significant than the risk of the value of the contract, but it is more relevant in practice in case of the currently used settlement systems. The non-performance of the counterparty means loss arising from missing the exchange gains. So the difference between the contractual price and the market price on the date of non-performance is added to the replacement cost as an "opportunity cost"- if the deal doesn't get re-executed, or it is re-executed but on a worse rate.

The risk of contractual value is considered as the "traditional" type of counterparty credit risk; the methodologies presented above are used to measure the related risk. The risk of contractual value can be eliminated or decreased by using the DVP (delivery versus payment) or RVP (receive versus payment) settlement techniques and settlement with help of central counterparty.

The Company considers transactions exposed to settlement risk, where the contractual settlement date is within 5 days of the transaction date. To mitigate such risks Vertis monitors the affected transactions on a daily basis.

For settlement risk separated capital requirement is not calculated, it is considered as counterparty credit risk according to Pillar 1 so capital requirement is calculated pursuant to the related CRR articles.

### **Liquidity risk**

Liquidity risk is defined as the risk of inability of the Company to satisfy / fulfil its daily, short-term (1-3 months) and long-term (3-12 months) financial obligations, or due to the related market liquidity risks, it can only sell its balancing capacity / liquidate assets or positions at a significant loss.

Liquidity risk comprises both funding liquidity and market liquidity risk:

- Funding liquidity risk appears when the Company cannot fulfil its long term obligations because of an inability to obtain new funding (e.g. cannot meet the cash, margin and collateral requirement of counterparties). Funding liquidity risk can be managed by holding cash and cash equivalents, setting credit lines in place.





- Market liquidity risk appears when the Company is not able to sell its assets easily at the market price without avoiding losses because of illiquid market.

Liquidity is the ability of the Company to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses.

Main objectives of Vertis with regards to liquidity management and the steps used to mitigate liquidity risk take into account, that:

- The Company is always be liquid and solvent in order to satisfy its due liabilities towards its customers.
- The Company monitors liquidity risk and mitigates such risk via efficient controlling process and necessary interaction with market to create required liquidity (repo) or dispose of excess liquidity.
- The Risk and Liquidity Manager designs liquidity position and liquidity forecast reports to the Risk Committee, to the Heads of the Corporate Trading Departments and to the Head of Trading of the Market Operations department in order to take necessary actions to secure the required level of liquidity.
- The Company maintains such size and activity, which can be funded always without external funds (from internal sources).

Liquidity management framework consists of the following:

- Continuous measurement and forecast: The Company measures its assets (cash and emissions allowances) inflow and outflow based on the settlement details recorded for each executed transaction.
- Liquidity buffer: the Risk and Liquidity Manager decides on minimum liquidity buffer that needs to be maintained in the form of cash funds or emission allowances immediately available to support potential intra-day settlement obligations towards its partners as the case may be. With this, the company is able to defend itself from the risks arising from liquidity issues even in stressed circumstances.
- Reporting: Current cash flow and forecasted cash flow report is produced and analysed by the Risk and Liquidity Manager to identify liquidity gaps that need to be filled.
- Proactive Liquidity Risk management: on a daily basis, the Risk and Liquidity Manager, the Head of Trading of the Market Operations department, and the Heads of the Corporate Trading departments are consulting in order to identify and fill liquidity gaps; Risk and Liquidity Manager may also require the Head of Trading of the Market Operation department to enter into transactions in order to secure the required liquidity level.
- In order to manage liquidity risk the Company applies scenario testing. The tests are based on the following assumptions:



- a swift deterioration of the economic environment, which influences the cash flows negatively,
- limited availability of the funding market, scarcity of liquid funding,
- adverse change in foreign exchange rates.

Liquidity risk is managed by strict policies and limit system set by the Risk Committee. Limits have a crucial significance in the management of liquidity. The types of limits are the following:

- Minimum liquidity levels, (cash and cash equivalents level),
- Liquidity buffers,
- Minimum or maximum transaction settlement durations.

### **Reputational risk**

Reputational risk is a risk affecting the capital or profitability that arises from unfavourable consumer, business partner, shareholder, investor or public opinion reflected in the Company's external judgment being worse than the desirable level. Reputation risk may be due to the fact that Vertis does not meet industry standards, does not comply with fair market behaviour rules or provides low-quality services. Reputable risk characteristics may be the recurring voices of negative opinions about Vertis, about its performance.

Reputational risk can be handled with well-developed processes.

- Vertis is managed by stable owners and management with good reputation who are committed to high level of industry standards and expectations.
- Vertis promotes the business opportunities that enhance the fight against climate change and the environment protection.
- Vertis works with the most prominent and most experienced external audit firms in preparing the annual report.
- Vertis provides regular training for its employees to be able to coordinate and serve customers and Vertis needs at the highest possible level.

## **SECTION C – INFORMATION REGARDING CORPORATE MANAGEMENT**

Article 435. 2) of CRR

The main activity of the Company is the organization of trade in carbon-dioxide emission rights regulated in international conventions. Vertis has been active in this market since 2006, and its governance body and management have been stable since then. As a result of the stable governance structure, the management has outstanding professional experience in the trade of carbon dioxide emission rights. In addition, some members of the Board of Directors have investment banking background as well.



By 2018 according to the Bszt. the derived trading in carbon dioxide emission rights became investment service activity. In 2018, the Company received its investment service license from the MNB to continue its activity. Because of the new requirements of the Bszt. (MiFID2) the Company organised various trainings for its professionals and leadership. Meantime the Supervisory Board of the Company has been enlarged with members who have significant professional knowledge and experience in the field of investment services.

The above also defines the selection policy of the Company's governing bodies. The main purpose is to ensure the stability of Vertis's governance structure and to ensure that the members of management bodies have well-balanced professional knowledge or in trading of the emission rights or in investment services. Vertis supports gender equality in its policy, but the Company is small institution and that's why no proportion can be applied in this manner.

The main governing body of the Company is the Board of Directors.

The members of the Board of Directors are, (together with the number of directorships outside Vertis business):

- Barna Baráth - 5,
- James Atkins - 5,
- Jernej Kozlevcar - 3

The Vertis' main overseeing body is the Supervisory Board.

The members of the Supervisory Board are:

- Róbert Cselovszki,
- Zsolt Grebicsaj,
- Róbert Huszár.

Vertis operates a Risk Committee. The role and duties, reporting lines in risk management between the Risk Committee, the Board of Directors, the Supervisory Board and the Risk and Liquidity Manager presented in Section A of this disclosure report.

## **OWN FUNDS**

### **Article 437 CRR**

The Company's Tier 1 capital consists of ordinary shares - some of which have been issued at a premium - a general reserve and retained earnings.

Deductions are made only for the value of intangible assets (Intellectual property rights, Software products, Other intangible assets, Activated value of foundation reorganization).



The Company's Tier 1 capital is set out in the table below.

<b>Capital item</b>	<b>EUR 2018/09/30</b>	<b>HUF 2018/09/30</b>	<b>CRR Article</b>
Share capital	1,685,106	545,604,000	26
Retained earnings	767,694	248,564,000	26
General reserve	67,634	21,899,000	26
Share premium capital	564,893	182,901,000	26
<b>Total</b>	<b>3,085,327</b>	<b>998,968,000</b>	

<b>Deductions</b>	<b>EUR 2018/09/30</b>	<b>HUF 2018/09/30</b>	<b>CRR Article</b>
Intangible assets	- 119,592	- 38,721,000	36, 37
<b>Total</b>	<b>- 119,592</b>	<b>- 38,721,000</b>	

<b>Eligible Own Funds</b>	<b>2,965,735</b>	<b>960,247,000</b>	
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## CAPITAL REQUIREMENTS

Article 438 of CRR

At 30 September 2018, Vertis uses its Pillar 1 requirement as the regulatory capital requirement to monitor capital levels against risk exposures.

Pillar 1 requirements are calculated by summing up requirements for credit risk, counterparty credit risk, operational risk and market risk.

*Pillar 1 requirements for 30 September 2018*

Requirements	Method	EUR	HUF
for Credit Risk in non - Trading Book	CRR Title II	223,555	72,383,000
for Operational Risk	CRR, 315	451,010	146,028,000
for Counterparty Credit Risk	CRR, 274	112,185	36,323,000
for CVA	CRR, 384	10,330	3,345,000
for Large Exposure	CRR, 397	28,257	9,149,000
for Free Delivery	CRR, 379	179,814	58,220,000
for Settlement Risk	CRR, 378	-	-
for Market Risk		377,644	122,274,000
for Commodities - Maturity Ladder	CRR, 359	105,818	34,262,000
for Options - Gamma	delta plus method	33,341	10,795,000
for Options - Vega	delta plus method	121,557	39,358,000
for Traded Debt Instrument (TDI)	CRR, 340	9,680	3,134,000
for FX	CRR, 351	107,248	34,725,000
<b>Total requirements</b>		<b>1,382,795</b>	<b>447,722,000</b>

As per CRR Article 92, the Company must satisfy the following requirements:

- Common Equity Tier 1 capital ratio of 4.5%;
- Tier 1 capital ratio of 6%; and
- Total capital ratio of 8% + capital maintenance buffer of 3x 0.625%, total of 9.875%

The Company capital ratio was at 17.1579% for 30 September 2018.

Item	EUR	HUF
Eligible Own Funds	2,965,735	960,246,000
Pillar 1 requirement	1,382,795	447,722,000
Risk weighted exposure	17,284,929	5,596,521,000
Capital ratio	17.1579%	17.1579%



## Capital requirement for credit risk

The Company's credit risk exposure as well as capital requirements for each exposure class are shown below.

	Gross Exposure	Risk weighted exposure	Capital requirement	Gross Exposure	Risk weighted exposure	Capital requirement
Exposure class, CRR 112	EUR	EUR	EUR	HUF	HUF	HUF
(f) exposures to institutions;	10,888,831	1,035,413	82,833	3,525,586,000	335,246,000	26,820,000
(g) exposures to corporates;	3,551,547	3,551,547	284,124	1,149,920,000	1,149,920,000	91,994,000
(p) equity exposures;	471,172	471,172	37,694	152,556,103	152,556,103	12,204,489
(q) other items.	77,179	77,179	6,174	24,989,000	24,989,000	1,999,000

### *Exposure to Institutions*

This risk refers to the default of a banking or other investment firm counterparty. The Company has a view that the risk of failure of its principal bank is very low. If a problem should have developed, it would not occur immediately but over a period, during which there would be enough time and the Company would be in a position to take appropriate mitigating actions, such as transfer of funds to its secondary bank. With this view, the day-to-day operational benefits of using one bank outweigh the credit or concentration risk concerns. The Company does not hold clients' money.

### *Exposure to Corporates*

This risk refers to the default of a corporate type counterparty to a transaction where Vertis performed its part of payment or delivery, but the counterparty is yet to perform theirs. As general rules, Vertis does not engage in transactions which requires the Company to prepay or predeliver, but in certain cases, based on analysis of the counterparty creditworthiness and subject to approval by a Risk Committee, exemptions are granted on a case-by-case basis. The exposure shown above is towards large reputable industrial counterparties, as well as public and state-owned utilities for transactions with settlement conditions not longer than 5 days. The Vertis does not have non-performing items or bad debts.

### *Big exposure*

Vertis constitutes additional requirements for concentration risk, where

- the aggregated exposure towards one counterparty or a group of connected counterparties exceeds 25% of the Company's eligible own funds, (Pillar 1, Large Exposure)



- the aggregated exposure towards an industry exceeds certain thresholds set using, so called Herfindahl-Hirschman Index measure, (Concentration risk capital requirements as defined in the Company's ICAAP)
- the aggregated exposure towards a country exceeds certain thresholds set using, so called Herfindahl-Hirschman Index measure, (Concentration risk capital requirements as defined in the Company's ICAAP)
- the aggregated exposure towards a country based on their ratings exceeds certain thresholds set using, so called Herfindahl-Hirschman Index measure, (Concentration risk capital requirements as defined in the Company's ICAAP)

The Company gave a working capital financing loan to two of its subsidiaries in the total amount of 202,297.57 EUR (65,500,000 HUF) with different maturity dates.

#### *Equity exposures*

Vertis does not hold any investments available for sale. It does not hold investments for speculative purposes. It is not exposed to equity market risk.

The equity exposure is in the non-trading book as, the Company is a major or sole shareholder in several (four) of its subsidiaries, which total value in its books is at 471,172.10 EUR (152,556.103 HUF). These investments are not for sale, three of the subsidiaries are considered long-term strategic investments, helping to deliver on Vertis business objectives. One of the subsidiaries is under voluntary liquidation, as it no longer fits into the long term strategic business objectives.

#### *Exposure to other assets (items)*

Other assets do not have "counterparty" as such, however there is a risk associated with them that the value of these assets would have to be written down (for example obsolescence or depreciation at faster pace of fixed assets), which may impact Profit and Loss account and reduce regulatory capital.

These assets are real estate (immovable assets), equipment and work-in-progress. This risk is covered by the Pillar 1 credit risk capital requirements.

### **Collateral evaluation**

The Company has defined methods of managing, evaluating and monitoring of collaterals, which are applied during the risk takings of Vertis:

- definition of applicable and acceptable collaterals,
  - Vertis accepts cash in EUR,
- introduction of procedures in case of a change in the value and enforceability of collaterals and setting the frequency of ex-post evaluation,



- Vertis applies the following concepts:
  - Continuously monitors difference between the market value of the position and its liquidation level.
  - Margin call range: expressed in EUR/unit, this is the distance from Collateral Stop Price, which determines margin call level.
  - Margin call level (Threshold): this is the price at which a margin call is made on a given client. It is determined by Collateral Stop Price and margin call range (for long positions margin call level is above Collateral Stop Price, for short positions margin call level is below Collateral Stop Price).
  - Liquidation range: expressed in EUR/unit, this is the distance from Collateral Stop Price, which determines the liquidation level.
  - Liquidation level: this is the price at which Vertis may automatically stop out a client's position.

The Company's counterparty credit risk exposure as well as capital requirements are shown below.

	Gross Exposure	Risk weighted exposure	Capital requirement	Gross Exposure	Risk weighted exposure	Capital requirement
Exposure class, CRR 112	EUR	EUR	EUR	HUF	HUF	HUF
(g) exposures to corporates;	1,402,308	1,402,308	112,185	454,039,000	454,039,000	36,323,000

The Company's capital requirements for Credit Valuation Adjustment is shown below.

Requirements	EUR	HUF
for CVA	10,330	3,345,000

### Capital requirement for market risk

Under Pillar 1 to calculate capital requirement for interest rate risk Vertis applies the duration-based method introduced in article 340 of CRR. For commodity risk, Vertis uses the maturity ladder approach pursuant to article 359 of CRR. Moreover, the additional risks of options are defined by calculating gamma and vega risks.

The Company's market risk capital requirements are shown below.

Requirements	EUR	HUF
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for Commodities - Maturity Ladder Approach	105,818	34,262,000
for Options – Gamma	33,341	10,795,000
for Options – Vega	121,557	39,358,000
for Traded Debt Instrument	9,680	3,134,000

The capital requirement for foreign exchange risk is calculated pursuant to article 351 of CRR.

Requirements	EUR	HUF
for Foreign exchange	107,248	34,725,000

### Capital requirement for settlement risk

For transactions where the settlement – in case of a financial instrument that is regulated by the trading book - do not happen on/until the contractual settlement date, price difference is calculated as the difference between the agreed settlement price for financial instrument in question and its current market value. If the price difference involves losses for Vertis, in order to calculate capital requirement for settlement risk Vertis multiplies the price difference by the weights pursuant to article 378 of CRR.

For the 30 September 2018, Vertis was not exposed to settlement risk.

### Capital requirement for operational risk

Pursuant to articles 315 and 316 of CRR, Vertis calculates its capital requirement for operational risk with the “Basic Indicator Approach”.

The Company’s operational risk capital requirements are shown below.

Item	EUR	HUF
Relevant indicator value	3,006,730	973,519,091
Operational risk capital requirement	451,010	146,027,864

### Other, relevant information

Vertis does not prepare consolidated financial statements, therefore own funds are not adjusted due to accounting or prudential reasons.

Vertis does not conduct lending activities in the classical sense and does not have non-performing exposures. Thus the Company does not form impairment on its credit risk exposures and it is not necessary to form a countercyclical capital buffer.

Vertis does not employ external credit ratings to determine capital requirements on credit risk and does not use IRB models.



The Company encumbered assets are shown below.

Item	Asset	Amount	Market Price	EUR Value
Collateral at Macquarie (exchange)	EUR	6,498,468.70	1.00	6,498,468.70
Collateral received from Clients	EUR	2,696,450.00	1.00	2,696,450.00
Collateral received from Clients	EUA	413,847.00	21.16	8,757,002.52

Leverage ratio:

The leverage ratio at the end of September

Item	Ratio
Leverage ratio based on full amount of Tier 1 capital	15.03%

## REMUNERATION POLICY

In execution, monitoring and reviewing the remuneration policy, Vertis, in accordance with the Company's size, nature of activity, scope and complexity, the internal organizational structure along with its independence, takes into account the circumstances based on which it determines which employees and office-holders fall under the scope of the remuneration policy and what regulations are to be developed regarding their remuneration based on the provisions of the Investment Act.

The principles of the remuneration policy are accepted by the Supervisory Board of Vertis based on Paragraph 5 of Appendix 4 of the Investment Act (Bsz.) and is revised as necessary. The Company's Board of Directors is responsible for the implementation of the Policy.

### *Remuneration Committee*

Based on the provisions of Point 6 of Appendix 4 of the Investment Act, no remuneration committee will be set up at the Company.

### *Personal scope*

The Remuneration Disclosure provides aggregated information on all staff that have a material impact on the Company's risk profile. For these purposes, Material Risk Takers ("MRTs") include:

- the chief executive of the Company
- members of the Company's Board of Directors and the Supervisory Board,
- the Company's employees and managers responsible for risk management, internal audit and for the management of compliance functions,
- managing directors of important business units, therefore the managing director responsible for sales and the managing director responsible for operations,
- those employees not mentioned above who belong to the same remuneration category and whose activity has a significant impact on the risk taking of the investment firm. If determining



such a person is justified, based on the proposal of the Board of Directors the Supervisory Board adopts a decision on it.

### Quantitative information

The table below presents remuneration data for persons who are relevant from the risk perspective, based on their functions (aggregated by functions).

Functions	Payout (HUF)	Payout (other)
Management, corporate governance and supervision	55,618,885	27,021 shares of Vertis Zrt.
Units responsible for internal audit and control functions	34,888,831	0
Business managers	1,764,000	0
Administrative and operative leaders	1,764,000	0
<b>Total</b>	<b>94,035,716</b>	<b>27,021 shares of Vertis Zrt.</b>

The table below presents the proportion of fixed and variable remuneration data for persons who are relevant from risk perspective.

### Payout (HUF)

Remuneration	Executives (gross HUF)	Number of executives	Employees / outsourced functions (gross HUF)	Number of employees / outsourced functions
Fixed remuneration	57,642,948	8	6,655,000	3
Variable remuneration	29,737,768	2		0
<b>Grand Total</b>	<b>87,380,716</b>		<b>6,655,000</b>	

### Payout (other)

Remuneration	Executives (other)	Number of executives
Fixed remuneration		
Variable remuneration	27,021 shares of Vertis Zrt	1



<b>Grand Total</b>	<b>27,021 shares of Vertis Zrt</b>	
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All cash based variable remuneration has been paid, none of the part has been deferred.

Variable remuneration paid in shares has been deferred for a period of 1-2 years.

Budapest, 2018. December 19

Vertis Environmental Finance Ltd