



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Carbon Fund Annual Report 2022

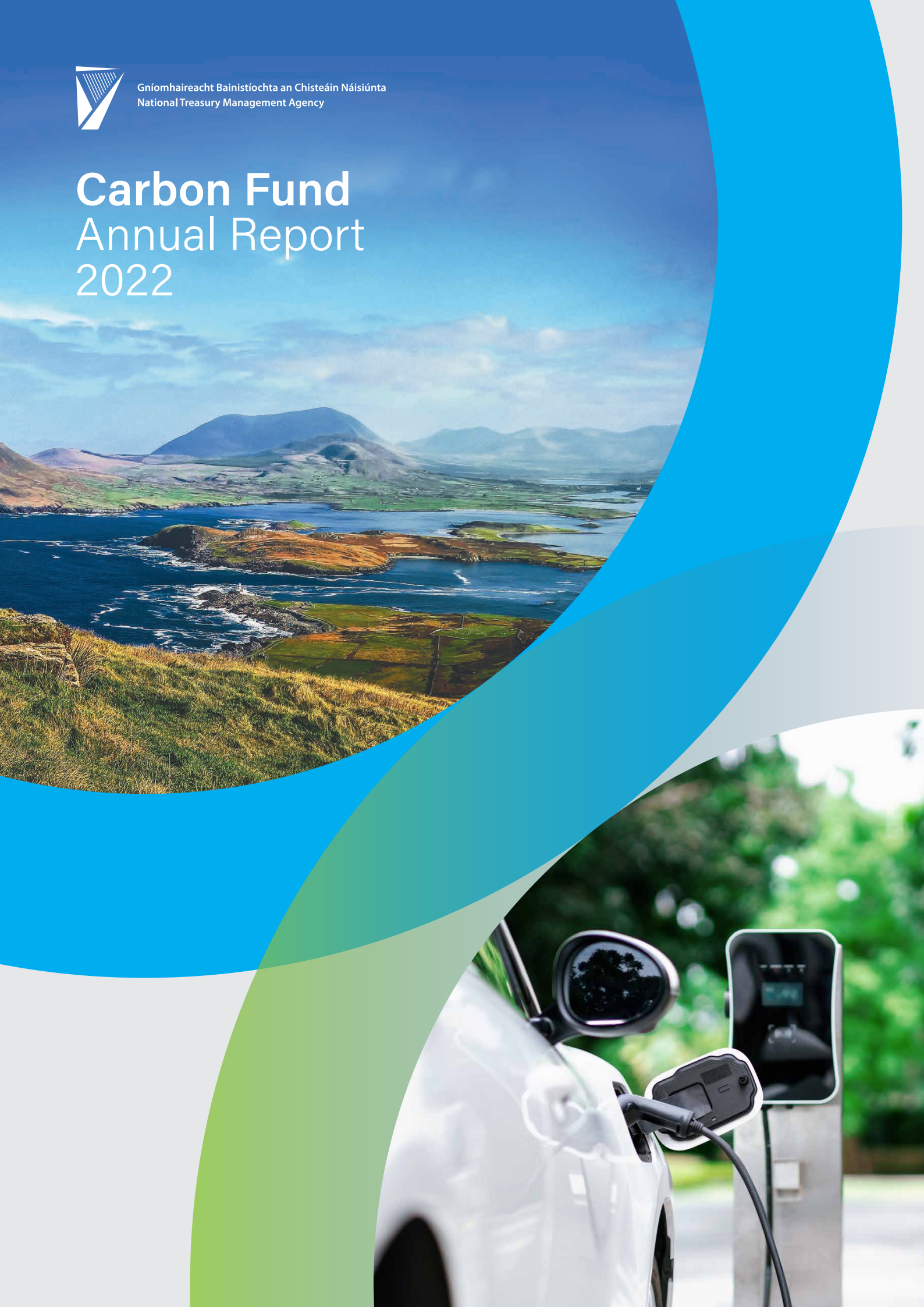




Table of Contents

Summary	2
Background	3
Measuring Greenhouse Gas Emissions	4
Initial Carbon Purchases and Investments	4
Ireland's obligations under the 2020 EU Effort Sharing Decision	5
Europe estimated to meet the overall emissions targets	6
Ireland's progress in meeting its emissions targets	6
Effort Sharing Regulation (2021-2030)	7
2022 Carbon Unit Disposals	7
Financial Statements	8



Summary

The Environmental Protection Agency (EPA) greenhouse gas emissions figures for 2013-2020 show that Ireland faced a gap in relation to its emissions reduction targets under the EU Effort Sharing Decision (ESD). Final estimates indicate that Ireland cumulatively exceeded its target emissions by approximately 12 million tonnes carbon dioxide equivalent (Mt CO₂ eq)¹. The target was to reduce ESD emissions by 20% by 2020, in comparison to 2005 levels. However, only a 7% reduction was achieved.

The reconciliation for the period (2013-2020) has now ended. Ireland surrendered additional carbon units in early 2023 to meet its emissions target. As a result, Ireland is now fully compliant with our obligations under the ESD.

The National Treasury Management Agency (NTMA), on instruction from the Department of the Environment, Climate and Communications, purchased carbon units during the 2013-2020 period. This was part of the strategy to address the compliance gaps for the period.

No additional units were purchased by the NTMA in 2022. However, there was a requirement to surrender units. A total of 2,919,913 units were surrendered by the NTMA to partially meet Ireland's obligations under the EU ESD cycle for the year 2020.

In early 2023, the Department of the Environment, Climate and Communications signed an agreement with Slovakia to purchase 4,149,944 units. This ensured that Ireland was fully compliant with our 2020 obligations under the EU Effort Sharing Decision.

Section 6 of the Carbon Fund Act 2007 states: *"As soon as may be, but not later than 6 months after the end of each financial year of the Agency, the Agency shall make a report to the Minister of its activities in relation to the performance during the year concerned of the functions delegated to it under this Act, and the Minister shall cause copies of the report to be laid before each House of the Oireachtas."*

This report is the sixteenth report to the Minister for the Environment, Climate and Communications under the Carbon Fund Act, and covers the year ended 31 December 2022.

¹ EPA: Ireland's Final Greenhouse Gas Emissions April 2022.
<https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/greenhouse-gas-emissions-final-2020.php>

Background

The Carbon Fund was established under the Carbon Fund Act 2007. The purpose was for the acquisition of Kyoto Units and any other such instruments or assets on behalf of the State. This was intended to meet international climate change obligations under the 1992 United Nations Framework Convention on Climate Change, the 1997 Kyoto Protocol to that Convention, and future agreements to which the state becomes bound. Units purchased in the fund are intended to supplement domestic mitigation action.

Management of the Fund was delegated to the NTMA. The NTMA was also designated as the purchasing agent for the acquisition of the necessary credits. Carbon credits are referred to in the legislation as Kyoto Units.

Statement of Agency's Responsibilities

The National Treasury Management Agency (the "Agency") is required by the Carbon Fund Act 2007 (as amended) (the "Act") to prepare financial statements in respect of the operations of the Carbon Fund for each financial year.

In preparing those statements, the Agency:

- selects suitable accounting policies and then applies them consistently;
- makes judgements and estimates that are reasonable and prudent;

- prepares the financial statements on a going concern basis unless it is inappropriate to do so;
- discloses and explains any material departure from applicable accounting standards.

The Agency is responsible for keeping in such form as prescribed under Section 5 of the Act, all proper and usual accounts in relation to the performance by it of the functions delegated or granted to it under the Act. The Agency shall whenever requested to do so in accordance with the Act, provide such financial statements and such information in relation to such financial statements as is required under legislation.

The Agency is also responsible for safeguarding assets under its control and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Measuring Greenhouse Gas Emissions

Carbon Dioxide (CO₂) is the most common greenhouse gas (GHG) and a tonne of CO₂ is used as the common unit of measure. Carbon Units therefore are each equivalent to a tonne of CO₂. Emissions of other GHGs are measured as equivalents of carbon dioxide (CO₂e) in terms of their Global Warming Potential (GWP) over a 100-year period. By definition, CO₂ has the GWP of 1. See Table 1 for further details.

Table 1²

	GWP-100
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	21
Nitrous Oxide (N ₂ O)	310
Hydrofluorocarbons (HFCs)	140 – 11,700
Perfluorocarbons (PFCs)	6,500 – 9,200
Sulphur Hexafluoride (SF ₆)	23,900

Initial Carbon Purchases and Investments

Ireland's strategy to meet the carbon emission reduction requirements of the Kyoto Protocol First Commitment Period (2008-2012) involved a number of investments to deliver carbon units.

Multilateral Funds

Between 2006 and 2007 the Irish Government undertook investments in three multilateral funds.

These were:

- The Multilateral Carbon Credit Fund (MCCF)³ of the European Bank for Reconstruction and Development
- The World Bank Carbon Fund for Europe (CFE)⁴
- The World Bank BioCarbon Fund⁵

These investments predate the Carbon Fund and the involvement of the NTMA. They were managed directly by the Department of the Environment, Climate and Communications. However, the units received from the investments were held in the Carbon Fund. Units received⁶ from investments in multilateral funds have largely been surrendered to meet Ireland's compliance targets.⁷

As of the end of 2022 there are no further commitments to be paid to the three multilateral funds. All three are now closed, with the World Bank BioCarbon Fund the most recent to close in 2021.

Direct Purchases

As mandated by the Government, the NTMA purchased 5,255,000 carbon units during 2008 and 2009. Following the decline in economic activity during the 2008 economic crisis and consequent reduction in carbon emissions the then Department of the Environment, Community and Local Government (now the Department of the Environment, Climate and Communication) suspended the purchase programme in 2009. The unused credits, including those purchased by the NTMA were carried over. The intention was to use them towards Ireland's commitments in the period 2013-2020 under the ESD which is part of European Union's 2020 Climate and Energy Package⁸ and they have been now used for that purpose.

2 UNFCCC: <https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/greenhouse-gas-data-unfccc/global-warming-potentials>

3 The European Investment Bank partnered with the EBRD in managing the MCCF; Ireland's agreement was only with the EBRD. This fund is now closed.

4 The Carbon Fund for Europe was formally closed in April 2018.

5 The World Bank BioCarbon Fund was closed in 2021

6 The Carbon units received from these funds were ERU, AAU and tCERs. For more information and greater detail of different types of carbon units please see:

"Carbon Fund Report 2007" <https://www.ntma.ie/publications/carbon-fund-annual-report-2007>

7 For further detail see the section on the EU Effort Sharing Decision.

8 For more information about previous commitment period see:

[Chapter 9, Report on the Accounts of the Public Services 2018. Greenhouse gas related financial transaction. Office Of The Comptroller & Auditor General.](https://www.audit.gov.ie/en/Find-Report/Publications/2019/2018-Annual-Report-Chapter-9-Greenhouse-gas-related-financial-transactions.pdf)
<https://www.audit.gov.ie/en/Find-Report/Publications/2019/2018-Annual-Report-Chapter-9-Greenhouse-gas-related-financial-transactions.pdf>

Ireland's obligations under the 2020 EU Effort Sharing Decision

The European Union's 2020 Climate and Energy Package aimed, by binding legislation, to ensure the EU met its climate and energy targets for the year 2020. The package consisted of key EU-wide targets including a 20% cut in greenhouse gas emissions (from 1990 levels) and a 20% share of energy from renewable sources.

There were two key parts to the Climate and Energy package to ensure the EU met these targets:

A. The European Union Emissions Trading System (EU ETS)

The industry emissions were covered by the European-wide "cap and trade" scheme for major polluters – the EU ETS. Under the system, 41% of the EU's GHG emissions were controlled in sectors including commercial aviation, aluminium production and extractive and chemical-intensive industries⁹. These bodies were given direct emissions targets and allowances to manage themselves. Over 100 Irish installations participate in the scheme.

B. The Effort-Sharing Decision (ESD)¹⁰ / National emission reduction targets

The 2009 Effort Sharing Decision established 2020 greenhouse gas emission targets for EU Member States including Ireland. Targets were for sectors not included in the EU ETS, such as transport, buildings, agriculture, and waste.

Ireland's target was a reduction of 20% of non-Emissions Trading System (non-ETS) sector emissions compared to 2005 levels, with annual binding limits set for each year over the period 2013-2020. This compares with an EU average reduction of 10%. Along with Denmark and Luxembourg, Ireland's target was the most demanding 2020 reduction target allocated to EU Member States under the ESD. While the 2020 period has ended, member states were given until early 2023 to submit final figures and surrender units if required.

Table 2 describes the minimum targets for each country.

Table 2

Member State GHG emission limits in 2020 compared to 2005 GHG emissions levels

Denmark	-20%
Ireland	-20%
Luxembourg	-20%
Sweden	-17%
Netherlands	-16%
Austria	-16%
Finland	-16%
United Kingdom	-16%
Belgium	-15%
Germany	-14%
France	-14%
Italy	-13%
Spain	-10%
Cyprus	-5%
Greece	-4%
Portugal	1%
Slovenia	4%
Malta	5%
Czech Republic	9%
Hungary	10%
Estonia	11%
Slovakia	13%
Poland	14%
Lithuania	15%
Latvia	17%
Romania	19%
Bulgaria	20%

⁹ EU Emissions Trading System (EU ETS), European Commission website https://ec.europa.eu/clima/policies/ets_en

¹⁰ Effort sharing: Member States' emission targets, European Commission website https://ec.europa.eu/clima/policies/effort_en

Europe estimated to meet the overall emissions targets

The European Union is estimated to have met the overall targets for 2020. According to the European Environment Agency ('EEA')¹¹ since 1990 greenhouse gas emissions in the EU have been steadily declining. In 2020, emissions in the 27 EU member states were estimated to have fallen by 32% below 1990 levels. This represents a substantial overachievement of the targeted 20% reduction.

These achievements vary by country, with 24 Member States expected to have reached emissions levels below their national target. The remaining countries (Germany, Ireland and Malta) needed to acquire additional allowances to comply with their objectives.¹²

The Covid-19 Pandemic reduced GHG emissions in 2020 but the achievement of the EU target also came from sustained efforts over the previous decade.

Ireland's progress in meeting its emissions targets

Over the period 2013 - 2020, Ireland cumulatively exceeded its emissions reduction target by approximately 12 million tonnes carbon dioxide equivalent (Mt CO₂ eq)¹³. The target was to reduce ESD emissions by 20% by 2020, in comparison to 2005 levels. However, only a 7% reduction was achieved.

Emissions during this eight-year span have been characterised by two different intervals. During the period 2013 to 2015 greenhouse gas emissions were below the ESD targets. However, Ireland exceeded its annual limits for five consecutive years from 2016 to 2020.

The period (2013-2020) has now ended. Ireland surrendered additional carbon units in early 2023 to meet this compliance gap. As a result, Ireland is now fully compliant with our obligations under the ESD.

No additional units were purchased by the NTMA in 2022. However, there was a requirement to surrender units. A total of 2,919,913 units were surrendered by the NTMA to meet Ireland's obligations under the EU ESD cycle for the year 2020. Not all units received from the funds in which Ireland invested fulfilled the criteria for use in the ESD¹⁴. As a result, the number of carbon credits held in the fund as at the end of 2022 was 701,795.

The NTMA awaits instruction from the Department of the Environment, Climate and Communications on the future use of any remaining units which were not useable to fulfil obligation under the 2020 EU Effort Sharing Decision.

Table 3 Ireland ESD greenhouse gas emissions and targets 2013-2020

Emissions and Targets (Mt CO₂ eq)	2013	2014	2015	2016	2017	2018	2019	2020
Total Non-ETS emissions	42.2	41.7	43.0	43.8	43.8	45.4	45.6	44.7
Effort sharing decision targets	46.9	45.8	44.6	43.5	40.9	39.8	38.7	37.7
Distance to target	-4.7	-4.1	-1.6	0.3	2.9	5.6	6.9	7.1
Cumulative Distance to Target (Mt CO₂ eq)	-4.7	-8.8	-10.4	-10.1	-7.2	-1.6	5.3	12.4

Source: EPA

11 European Environment Agency: Trends and Projections in Europe 2022
<https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2022>

12 European Environment Agency: Trends and Projections in Europe 2022
<https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2022>

13 EPA: Ireland's Final Greenhouse Gas Emissions April 2022.
<https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/greenhouse-gas-emissions-final-2020.php>

14 Not all Kyoto Protocol units were eligible. International credits representing investments in projects that have reduced emissions in developing countries (Clean Development Mechanism) or other industrialised countries (Joint Implementation) could be used towards EU compliance under certain quantitative and qualitative conditions. The EU Commission regularly updated the lists of project credits eligible for compliance under the Effort Sharing Decision. The General positive list contains project credits that can be used by all Member States.

In early 2023, the Department of the Environment, Climate and Communications signed an agreement with Slovakia to purchase 4,149,944 Annual Emissions Allocation units. This ensured that Ireland was fully compliant with our 2020 obligations under the EU Effort Sharing Decision.

Effort Sharing Regulation (2021-2030)

The final compliance cycle of the second commitment period (2013-2020), covered by the Effort Sharing Decision (ESD) closed on 17 February 2023. The ESD is succeeded by the Effort Sharing Regulation (ESR) covering emissions for the years 2021 to 2030.

The ESR was adopted in 2018 and set a target for the EU of reducing non-ETS emissions by 30% by 2030 compared to 2005. Each member state has its own individual target. Ireland's initial target for greenhouse gas emissions was for a 30% reduction by 2030, relative to 2005 levels.

On 14 July 2021, the European Commission adopted a series of legislative proposals setting out how it intends to achieve climate neutrality in the EU by 2050, including the intermediate target of an at least 55% net reduction in greenhouse gas emissions by 2030, relative to 1990 levels. The package proposes to revise several pieces of EU climate legislation, including the EU ETS, Effort Sharing Regulation, transport and land use legislation, setting out the ways in which the Commission intends to reach EU climate targets under the European Green Deal.¹⁵ The ESR has been revised as part of the EU Fit for 55 package and will be effective from 16 May 2023¹⁶; this will see the EU's collective 2030 target increase from a 30% to a 40% reduction in emissions relative to 2005 levels and Ireland's target to increase from a 30% to a 42% reduction in non-ETS emissions over the same period.

In the EPA's latest greenhouse gas emissions inventory report¹⁷, Ireland exceeded its 2021 annual limit under the ESR. Without the use of flexibilities Ireland exceeded its target by 3.29 Mt CO₂eq. With the use of the ETS flexibility, which Ireland has signalled its intention to use, the gap to our 2021 target becomes 1.38 Mt CO₂eq. This is the first year of compliance under the ESR.

In terms of 2021 total national greenhouse gas emissions, these have increased by 5.2% on 2020 levels. This increase in total emissions was driven by increased use of coal and oil for electricity generation and increases in both the Agriculture and Transport sectors.

The compliance architecture of the ESR is somewhat different from that of the ESD. For instance, purchasing carbon credits on behalf of the State in the market will no longer be a compliance option. However, purchases made for obtaining surplus annual emission allowances (AEA units) from other Member States will continue to be an option. Such a trade would be carried out by means of bilateral agreement between individual Member States.

2022 Carbon Unit Disposals

There were no further purchases of carbon units by the NTMA in 2022.

There was a requirement to surrender units. A total of 2,919,913 units were surrendered by the NTMA towards meeting Ireland's obligations under the EU ESD cycle for the year 2020. The number of carbon credits held in the fund as at the end of 2022 was 701,795.

¹⁵ European Commission: Effort Sharing 2021-2030
https://ec.europa.eu/clima/eu-action/effort-sharing-member-states-emission-targets/effort-sharing-2021-2030-targets-and-flexibilities_en

¹⁶ <https://eur-lex.europa.eu/eli/reg/2023/857>

¹⁷ EPA: Ireland's Final Greenhouse Gas Emissions 1990 - 2021
<https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/Ireland's-Final-Greenhouse-gas-report-1990-2021-April-2023.pdf>

Financial Statements

of the Carbon Fund
For the year ended 31 December 2022

Statement on Internal Control	10
Report of the Comptroller and Auditor General	13
Statement of Financial Position	15
Fund Account	16
Notes to the Financial Statements	17





Statement on Internal Control

The National Treasury Management Agency (the "Agency") is the manager of the Carbon Fund (the "Fund"). The Agency's Statement on Internal Control is set out below.

Scope of Responsibility

On behalf of the National Treasury Management Agency ("the Agency") we acknowledge the Agency's responsibility for ensuring that an effective system of internal control is maintained and operated. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform¹⁸ has been in place in the Agency for the year ended 31 December 2022 and up to the date of approval of the 2022 financial statements.

Capacity to Handle Risk

The Agency has a formal risk management and governance framework, designed to support the proactive management of risk. The Agency's Risk Management Policy and Framework and Risk Appetite Framework, together set out its risk appetite, its risk management structures and processes and details the roles and responsibilities of staff in relation to risk. The Agency has ultimate oversight and accountability in relation to risk management and provides direction by approving the Risk Management Policy and Framework and the Risk Appetite Framework. Thereafter the Agency assures itself on an on-going basis that executive management is responding appropriately to

risks and it is assisted in this regard by the Audit and Risk Committee (ARC), which monitors adherence to risk governance and risk appetite and ensures risks are properly identified, assessed, managed and reported.

In 2022, the ARC comprised four Agency members, with financial and audit expertise, one of whom is the Chairperson. The Committee met formally seven times in 2022.

An executive-level Enterprise Risk Management Committee ("ERMC") oversees the effective management of risk and compliance by reviewing and / or approving key risk frameworks and policies, monitoring the organisation's risks and controls and monitoring the overall risk profile and strategic risks.

The Risk Management Policy and Framework and Risk Appetite Framework which were updated in 2022 were published and communicated to all staff who are expected to comply with the requirements therein. The embedding of risk management was supported by a programme of risk training and awareness in the reporting period.

Risk and Control Framework

The Agency's Risk Management Policy and Framework, supported by the Risk Appetite Framework, provides the methodology and processes, by which key risks are identified, assessed, managed, monitored and reported and are supported by a suite of risk management policies.

Individual business units and corporate functions maintain risk registers in which their key risks and controls are recorded and responsibility for operation of the controls assigned. These registers are reviewed twice yearly by the respective business units and corporate functions and the controls therein are attested by the control owners. Risk registers were reviewed and challenged by the appropriate risk committees, including the ARC, during the reporting period.

18 From 1 February 2023 the Department of Public Expenditure, National Development Plan Delivery and Reform.

The ARC also conducted a review and challenged the Agency's principal risks in the reporting period, based on a top-down risk assessment exercise conducted by the ERM which was supported by a bottom-up exercise by the business units and corporate functions.

The Agency has an established control environment, as part of which:

- Authority and financial responsibilities are delegated by the Agency Chief Executive to Agency management and staff through the use of delegated authorities which define their authority and financial responsibilities to act on behalf of the Agency.
- It has developed policies and procedures in respect of the management of the key aspects of its activities. These policies and procedures are reviewed by their business owners and updated to align with business processes.
- It has an appropriate financial and budget management system, incorporating accounts payable controls as well as regular reporting of the Agency's costs and monitoring of costs against budget to the Executive Management Team.
- It has an established financial reporting framework to support its external and statutory reporting obligations in respect of its businesses.
- It has established systems, procedures and controls to manage and safeguard its business assets including property, equipment and vehicle assets.
- It takes all reasonable measures considered necessary to protect information and systems including the confidentiality, integrity and authenticity of the information stored on Agency systems and to minimise so far as practicable the risk of unauthorised access to information from both internal and external sources. This protection is achieved through the application of recognised standards, policies and controls.
- It has established third-party risk policy and procedures to assess and manage risks posed by third parties including the monitoring and oversight of critical third party service providers.
- It has established a Cyber Security Framework to facilitate identification, assessment, and management of the cyber risks that the Agency may be exposed to. Regular Staff Awareness Training on cyber risks is also in place for all Agency staff.
- It has a business continuity framework with a view to ensuring the Agency is able to manage disruptive scenarios, provide contingency premises, recover key systems and maintain as far as possible the continuity of critical operations, and resume normal business operations in a timely manner.

On-going Monitoring and Review

The Agency has established processes for the on-going monitoring and review of the effectiveness of controls which are carried out through its three lines of-defence model which includes:

- The first line, comprising the Agency's business units and corporate functions, owns the risks associated with business activities and are primarily responsible for managing those risks on a day-to-day basis. This includes implementing and monitoring adherence to the Agency's risk management policies and risk appetite, conducting risk and control self-assessments, managing operational events and implementing appropriate responses. They provide reports for the Agency's risk governance committees on their risks and controls and operational events.
- The second line comprises the Agency's Risk and Compliance functions and is independent of the first line management and operations. The Risk function oversees compliance with risk management policies across the Agency, provides independent review and challenge to the first line, and provides risk reports and information to the various risk governance committees. The Compliance function and Data Protection Officer promote compliance, and personal data protection, awareness through training, codes of conduct and relevant policies. They provide compliance and personal data protection support, advice and independent challenge to first line management and submit regular reports to the ERM and ARC.

Statement on Internal Control (continued)

- Internal Audit is a third line of defence, providing independent risk-based assurance to key stakeholders on the robustness of the Agency's governance, risk management system and the design and operating effectiveness of the internal control environment under a planned programme of work approved by the ARC. The internal auditor provides regular reporting to the ARC on the status of the internal control environment in the context of reviews undertaken and the status of internal audit issues raised previously.

Procurement

The Agency has an established Procurement Policy (published on its website) and a Procurement Procedure. The Agency's procurement practices are in accordance with the aforementioned documents. A corporate procurement plan, based on the template published in the Office of Government Procurement Policy framework document, is in place and is being implemented. The corporate procurement plan is updated annually.

The Agency's Procurement Policy and Procurement Procedure are reviewed on an on-going basis and are updated as required.

Annual Review of Effectiveness

We confirm that the National Treasury Management Agency has procedures to monitor the effectiveness of its risk management and control procedures. The National Treasury Management Agency's monitoring and review of the effectiveness of the system of internal control is informed by the work of the internal and external auditors, the Audit and Risk Committee which oversees their work, and the senior management within the National Treasury Management Agency responsible for the development and maintenance of the internal financial control framework.

We confirm that the Agency conducted an annual review of the effectiveness of the internal controls for 2022.

No weaknesses in internal control were identified in relation to 2022 that require disclosure in the financial statements.

On behalf of the Agency members



Susan Webb, Chairperson

National Treasury Management Agency



Gerardine Jones, Chairperson

Audit and Risk Committee

National Treasury Management Agency

4 May 2023

Comptroller and Auditor General

Report for presentation to the House of the Oireachtas



Ard Reachtaire Cuntas agus Ciste Comptroller and Auditor General

Report for presentation to the Houses of the Oireachtas

Carbon Fund

Opinion on the financial statements

I have audited the financial statements of the Carbon Fund prepared by the National Treasury Management Agency (the Agency) for the year ended 31 December 2022 as required under the provisions of section 5 of the Carbon Fund Act 2007. The financial statements comprise the statement of financial position, the fund account and the related notes, including a summary of significant accounting policies.

In my opinion, the financial statements properly present

- the balance of the Fund at 31 December 2022, and
- the transactions of the Fund for 2022.

Basis of opinion

I conducted my audit of the financial statements in accordance with the International Standards on Auditing (ISAs) as promulgated by the International Organisation of Supreme Audit Institutions. My responsibilities under those standards are described in the appendix to this report. I am independent of the Agency and have fulfilled my other ethical responsibilities in accordance with the standards.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Report on information other than the financial statements, and on other matters

The Agency has presented certain other information together with the financial statements. This comprises the annual report (including the statement of the Agency's responsibilities) and the statement on internal control. My responsibilities to report in relation to such information, and on certain other matters upon which I report by exception, are described in the appendix to this report.

I have nothing to report in that regard.

Seamus McCarthy
Comptroller and Auditor General

15 May 2023

Comptroller and Auditor General (continued)

Appendix to the report

Responsibilities of the National Treasury Management Agency

As detailed in the statement of the Agency's responsibilities, the Agency members are responsible for

- the preparation of annual financial statements in the form prescribed under section 5 of the Carbon Fund Act 2007
- ensuring that the financial statements properly present the Fund's affairs at year-end and the transactions in the year
- ensuring the regularity of transactions
- assessing whether the use of the going concern basis of accounting is appropriate, and
- such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Responsibilities of the Comptroller and Auditor General

I am required under section 5 of the Carbon Fund Act 2007 to audit the financial statements of the Carbon Fund and to report thereon to the Houses of the Oireachtas.

My objective in carrying out the audit is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement due to fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. In doing so,

- I identify and assess the risks of material misstatement of the financial statements whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- I obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- I evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures.

- I conclude on the appropriateness of the use of the going concern basis of accounting and, based on the audit evidence obtained, on whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Fund's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my report. However, future events or conditions may cause the Fund to cease to continue as a going concern.
- I evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I report by exception if, in my opinion,

- I have not received all the information and explanations I required for my audit, or
- the accounting records were not sufficient to permit the financial statements to be readily and properly audited, or
- the financial statements are not in agreement with the accounting records.

Information other than the financial statements

My opinion on the financial statements does not cover the other information presented with those statements, and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, I am required under the ISAs to read the other information presented and, in doing so, consider whether the other information is materially inconsistent with the financial statements or with knowledge obtained during the audit, or if it otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

Reporting on other matters

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation. I report if I identify material matters relating to the manner in which public business has been conducted.

I seek to obtain evidence about the regularity of financial transactions in the course of audit. I report if I identify any material instance where public money has not been applied for the purposes intended or where transactions did not conform to the authorities governing them.

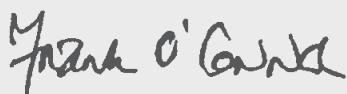
Statement of Financial Position

As at 31 December 2022

	Note	2022 €000	2021 €000
Carbon Fund assets	4	-	2,104
Receivables	5	-	415
Other liabilities	6	-	(415)
Net assets of Fund		-	2,104

The accompanying notes form an integral part of the financial statements.

On behalf of the Agency



Frank O'Connor, Chief Executive
National Treasury Management Agency



Susan Webb, Chairperson
National Treasury Management Agency

4 May 2023

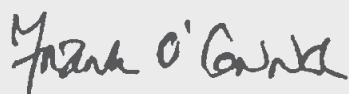
Fund Account

For the year ended 31 December 2022

	Note	2022 €000	2021 €000
Income	7	-	1,528
Disposal and derecognition of fund assets	8	(2,104)	(91,863)
Movement in Fund during the year		(2,104)	(90,335)
Net assets at 1 January		2,104	92,439
Net assets at 31 December		-	2,104

The accompanying notes form an integral part of the financial statements.

On behalf of the Agency



Frank O'Connor, Chief Executive
National Treasury Management Agency



Susan Webb, Chairperson
National Treasury Management Agency

4 May 2023

Notes to the Financial Statements

1. Background

The Carbon Fund was established under the Carbon Fund Act 2007 for the acquisition of Kyoto Units¹⁹ and any other such instruments or assets on behalf of the State to meet international climate change obligations under the 1992 United Nations Framework Convention on Climate Change, the 1997 Kyoto Protocol to that Convention and future agreements to which the State becomes bound. The National Treasury Management Agency (the "Agency") has been designated as the purchasing agent on behalf of the State and administers and manages purchases of Kyoto Units.

The Agency may use the following mechanisms to purchase Kyoto Units:

- direct purchase of Kyoto Units from other Kyoto Protocol parties
- direct investment in Joint Implementation and Clean Development Mechanism projects
- investment in managed funds
- direct market purchases of Kyoto Units
- or a combination of some or all of these.

Any surplus Kyoto Units held by the State at the end of the 2008-2012 commitment period can be used in a subsequent commitment period of the Kyoto Protocol or any successor treaty. The final accounting transactions for the first commitment period of the Kyoto Protocol (2008-2012) were carried out in 2015. The unused credits were carried over with the intention to use them to meet Ireland's 2020 commitments under the EU Effort Sharing Decision ("ESD") which is part of the European Union's 2020 Climate and Energy Package. The State's obligations under the ESD finished in 2020, at which point it was followed up by the Effort Sharing Regulation. This Regulation, which was adopted in May 2018, sets out binding annual greenhouse gas emission targets for Member States for the period 2021-2030 inclusive.

2. Basis of Preparation

The financial statements have been prepared in accordance with section 5(1)(a) of the Carbon Fund Act 2007 in a format that was approved by the Minister of Environment, Climate and Communication, with the consent of the Minister for Public Expenditure, NDP Delivery and Reform. Transactions are recognised using the cash basis of accounting as adjusted for accruals for amounts due to and from Government entities. The reporting currency is the euro which is denoted by the symbol €. Where used, €m denotes million.

¹⁹ A Kyoto Unit is defined in the Carbon Fund Act 2007 as "a unit, equivalent to one metric tonne of carbon dioxide, issued pursuant to the Kyoto Protocol and the decisions adopted pursuant to the Convention and the Kyoto Protocol". Kyoto Units are generally referred to as carbon credits. The legislation allows for the disposal of Kyoto Units only with the consent of the Minister for Environment, Climate and Communications and the Minister for Public Expenditure, NDP Delivery and Reform and on such terms as they may specify.

Notes to the Financial Statements (continued)

3. Accounting Policies

3.1 Carbon Fund Assets

Carbon Fund assets represent investments in the following:

Direct Holdings

Kyoto Units purchased are recorded on delivery at cost of acquisition. The cost of acquisition includes Value Added Tax paid and payable in respect of the purchase of the Kyoto Units.

Indirect Kyoto Units

Investments in indirect units are made in managed funds. Investments in these funds are recorded at investment cost. Such investments relate to carbon-reducing projects that may or may not produce Kyoto Units. The total number of units, if any, will not be known until a future date when the projects are complete.

The Minister for the Environment, Heritage and Local Government invested €20 million in 2006 in a Multilateral Carbon Credit Fund established by the European Bank for Reconstruction and Development. That investment does not form part of the Fund but the units produced by projects undertaken are included herein as explained in Note 4(c).

3.2 Fund Account

The Fund Account records the accumulated income received or receivable from the relevant Department. Investments are funded initially through repayable advances from the Central Fund under section 3 of the Carbon Fund Act 2007 pending receipt of this income.

3.3 Foreign Currencies

All transactions in foreign currencies are translated into euro at the rates of exchange prevailing at the date of such transactions. Unfunded commitments to non-euro investments are translated into euro using the foreign exchange rates prevailing at the year end date.

3.4 Taxation

The income and profits of the Carbon Fund are exempt from Irish corporation tax. The purchases of Kyoto Units by the Carbon Fund are liable to Value Added Tax as such transactions are regarded as a supply of a service, as defined by Section 25(1) of the Value-Added Tax Consolidation Act 2010. VAT incurred is included in the cost of acquisition of the Carbon Fund assets.

3.5 Asset Surrender/Carry Over to Next Commitment Period

Direct holdings of Kyoto units are surrendered using the first-in first-out method (FIFO) in which assets purchased or acquired first are disposed of first at the date of surrender.

The indirect holdings fund was closed in 2021. As the assets holdings received from the fund will be surrendered at zero value, we have recognised this and valued the indirect holding accordingly.

Direct and indirect Kyoto units are carried over at cost from the first commitment period of the Kyoto Protocol (2008 – 2012) to meet Ireland's commitments under the European Union's 2020 Climate and Energy Package.

4. Carbon Fund Assets

(a) Summary of Assets

	2022 €000	2021 €000
Direct Holdings	-	2,104
	-	2,104

(b) Analysis by Currency of Acquisition

	2022 €000	2021 €000
Euro	-	2,104
	-	2,104

During 2022 all direct holdings were surrendered. The remaining indirect holdings have no monetary value.

The Agency administered payments on behalf of the Minister for the Environment, Climate and Communications in respect of the World Bank Bio Carbon Fund which closed in 2021. No further units are expected to issue to Ireland from this fund.

(c) Credits Delivered and Held:

The number of carbon credits delivered and held with the Union Registry of the European Commission at 31 December:

	2022	2021
Purchased Directly	-	2,909,825
Acquired via Indirect Holdings	701,795	711,883
	701,795	3,621,708

At 31 December 2022, 20,707 units (2021: 30,795) of the 701,795 units (2021: 3,621,708) relate to credits acquired through investments made by the Department of the Environment, Climate and Communications prior to the establishment of the Carbon Fund (Note 3.1). Movement in direct holdings represent direct surrender of units in the period. Movement in indirect holdings represent units received/surrendered for investments in funds in prior periods.

5. Receivables

	2022 €000	2021 €000
Receivable from the Department of the Environment, Climate and Communications	-	415

The amounts owed to the Carbon Fund are due under Section 3(4) of the Carbon Fund Act 2007 from the Department of the Environment, Climate and Communications.

Notes to the Financial Statements (continued)

6. Other Liabilities

	2022 €000	2021 €000
Amounts owed to the Central Fund	-	415
	-	415

Other liabilities are repaid to the Central Fund and the NTMA when the Carbon Fund receives funds from the Department of the Environment, Climate and Communications.

7. Income

	2022 €000	2021 €000
Income from Department of the Environment, Climate and Communications	-	1,528

8. Disposal and derecognition of fund assets

	2022 €000	2021 €000
Direct holdings credit surrender	(2,104)	(90,227)
World Bank Bio Carbon fund closure	-	(1,636)
	(2,104)	(91,863)

During 2022 the Carbon Fund surrendered 2,909,825 direct units and 10,088 indirect units to meet Ireland's obligations under the EU Effort Sharing Decision (ESD) cycle for the year 2020 (2021: 5,288,933 units for the year 2019). No monetary proceeds were received for this credit surrender (2021: € nil).

9. Operating Expenses

Operating expenses of the Carbon Fund, where incurred, are charged to the Agency's Administration Account and are paid out of the Central Fund. This charge in 2022 is €nil (2021: €nil).

10. Contingent Liabilities

The Carbon Fund had no contingent liabilities at 31 December 2022.

11. Events after the reporting period

No events requiring adjustment or disclosure occurred after the end of the reporting period.

12. Related Parties

(a) Minister for Public Expenditure, NDP Delivery and Reform

Under Section 3 of the Carbon Fund Act 2007, the Minister for Public Expenditure, NDP Delivery and Reform may advance monies to the Carbon Fund from the Central Fund which are reimbursed by the Carbon Fund out of monies made available by the Minister for Environment, Climate and Communications.

(b) Minister for Environment, Climate and Communications

Under Section 2(3) of the Carbon Fund Act 2007, the Minister for Environment, Climate and Communications manages and controls the Carbon Fund.

(c) National Treasury Management Agency

Under Section 2(4) of the Carbon Fund Act 2007, the management of the Carbon Fund is delegated to the Agency.

Under Section 8 of the Carbon Fund Act 2007, the Minister for Environment, Climate and Communications, following consultation with the Minister for Public Expenditure, NDP Delivery and Reform, may give directions or guidelines to the Agency in relation to the performance by it of the functions delegated or granted to it under the Act.

13. Approval of Financial Statements

The financial statements were approved by the Agency on 4 May 2023.



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Treasury Dock,
North Wall Quay,
Dublin 1, D01 A9T8

T +353 1 238 4000
E info@ntma.ie
www.ntma.ie