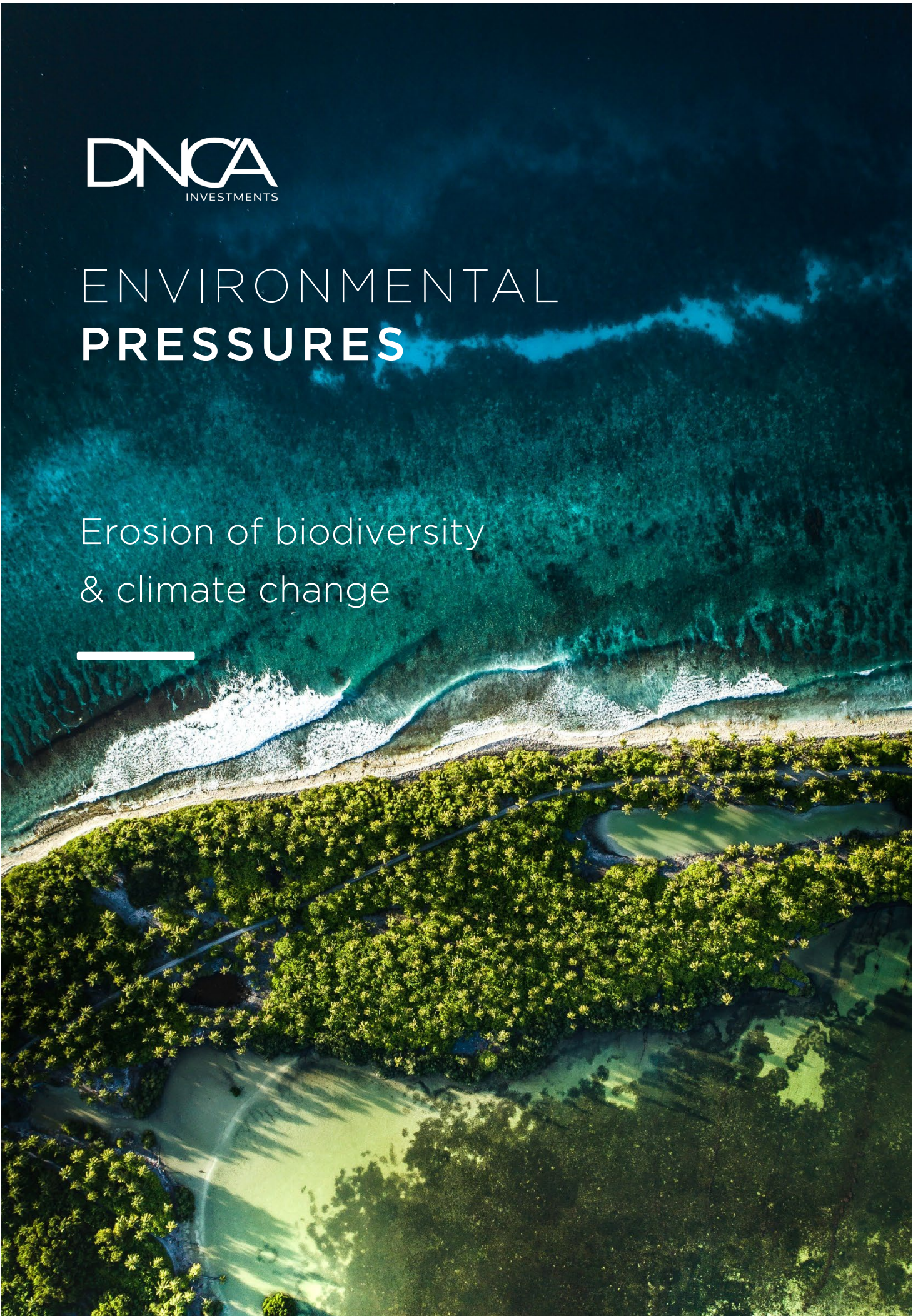**DNCA**
INVESTMENTS

# ENVIRONMENTAL
# PRESSURES

## Erosion of biodiversity
## & climate change

# IN SUMMARY

Since the 1992 Earth Summit in Rio de Janeiro and the signing of the Convention on Biological Diversity (CBD) by 168 parties, biodiversity conservation has been recognised in international law as a major common concern.

The utilitarian issue linked to the erosion of biodiversity is that of the sustainability of ecosystem services. Biodiversity provides numerous services to human societies and businesses. The degradation of biodiversity therefore affects its ability to provide these services.

Biodiversity conservation programmes have been in place since 1992. The one put in place for the period 2011-2020 is said to have produced no satisfactory results. After various postponements, the programme for the period 2020-2030 was adopted in December 2022. This Kunming-Montreal agreement proposes 23 objectives to be achieved by 2030.

In these biodiversity preservation programmes, the agenda of the financial sector, and more particularly of asset managers, is mainly one of mobilising adequate financial resources. For these players, it is a question of identifying the projects and companies to be financed as a matter of priority with a view to adapting and transitioning the economy.

Against this backdrop, in 2021 DNCA Finance decided for the first time to calculate the climate trajectory of its investments in order to monitor this major factor in the erosion of biodiversity. In this document, you will find the 2023 update of the climate trajectory, as well as an analysis of the water and soil use footprint of DNCA Finance's investments in 2022.

At the end of 2022, the DNCA Finance scope analysed includes 905 private issuers of bonds, equities or convertible bonds. This represents €17.5 billion, or around 63% of assets under management at the end of 2022. The various environmental pressures are assessed using data from the Carbon Disclosure Project, derived from questionnaires sent to companies to collect their information without estimation (CDP).

The coverage of our scope by the CDP is imperfect. For the temperature analysis, the CDP provides a methodology for replacing missing data, so we estimate three different temperatures reflecting the different replacement methodologies. We use the ECOTS (Enterprise value + Cash Owned emissions weighted Temperature Score) weighting method, one of the weighting methodologies recommended by the CDP. A major change compared with the previous year is that we now use enterprise value including cash. This change is based on the SFDR regulations and the formulas for calculating the main negative effects of investments. We supplement this method with a weighted portfolio temperature (WATS).

In conclusion, depending on the methodological choices made, the temperature of DNCA Finance's portfolio is between +1.71°c and +2.06°c, an improvement on last year. As last year, this improvement is explained by the increase in the number of companies with a temperature score (+140%), as well as by the increase in the number of companies whose targets are validated by the Science Based Target Initiative (SBTi, +117%).

| ECOTS | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,85 | 1,91 | 1,91 |
| MSCI Europe | 1,77 | 1,86 | 1,86 |
| MSCI World | 1,90 | 2,21 | 2,14 |

| WATS | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,71 | 2,06 | 2,02 |
| MSCI Europe | 1,66 | 1,90 | 1,85 |
| MSCI World | 1,77 | 2,11 | 2,05 |

Source: DNCA Finance, Factset, CDP.

Following our analysis, and based on our short-term objectives, the companies with which we wish to engage, or continue, a dialogue in 2023 on the issue of climate change are :

| The 5 main detractors to DNCA's t°C score | % AUM | Temperature score | Contribution to the DNCA temperature score |
|---|---|---|---|
| ArcelorMittal SA | 0,3% | 2,56 | 0,36 |
| Anonymous issuer | 0,1% | 2,65 | 0,03 |
| Anonymous issuer | 0,1% | 2,10 | 0,03 |
| International Consolidated Airlines Group SA | 0,2% | 2,31 | 0,02 |
| Anonymous issuer | 0,1% | 2,56 | 0,01 |

| The 5 main positions without a temperature score | % AUM |
|---|---|
| BNP Paribas SA | 1,4% |
| Dassault Aviation SA | 0,9% |
| Anonymous issuer | 0,7% |
| D'ieteren Group | 0,7% |
| Amadeus IT Group SA | 0,6% |

Source: DNCA Finance, Factset, CDP.

The results of the 2022 commitment campaign are as follows. We obtained a response rate of 37% for the alignment campaign (3 companies - Derichebourg, Elis and CIE Automotive - out of the 8 contacted). The success rate was also 37%, with all 3 companies responding favourably. We obtained a response rate of 67% for the transparency campaign (4 companies - Adyen, BNP Paribas, D'Ieteren Group and Société Générale - out of the 6 contacted). The success rate was 33%, with 2 companies responding favourably. These rates are down on the previous year.

Regarding water and soil use and greenhouse gas emissions, the CDP does not propose a methodology for replacing missing values and, once again, we have chosen not to propose one. We also note that the CDP's environmental data collection process requires consistency checks. We have put such checks in place. However, they are only partial, and we would like to look at ways of strengthening them for next year.

The methodology used to aggregate the footprints at the level of the areas analyzed is an allocation of the environmental pressures of each company according to the share of enterprise value held (PEVE) by all the portfolios managed by DNCA Finance. Finally, as was the case last year, the footprint levels for land and water use are a priori impacted by coverage rates of assets under management of around 31% and virtually zero for land use.

Below, the environmental footprints linked to the use of water are standardized by the amounts outstanding within the scope studied (m3/year/million euros invested).

| PEVE | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 13 564 | 13 387 | 177 |
| MSCI Europe | 19 957 | 19 813 | 143 |
| MSCI World | 6 788 | 6 687 | 102 |

Source: DNCA Finance, Factset, CDP.

For comparison (approximation in m3)

| Paris monthly withdrawals | 14 100 000 |
|---|---|

For example, with regard to water use, DNCA Finance has an environmental footprint standardized between that of the MSCI Europe and the MSCI World, up on the previous assessment.

Below, the environmental footprints linked to land use are standardized by the amounts outstanding in the scope studied (ha/million euros invested).

| PEVE | Production Usage | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 0,13 | 0 | 0,04 |
| MSCI Europe | 0,82 | 0,01 | 0,16 |
| MSCI World | 0,47 | <0,01 | 0,20 |

Source: DNCA Finance, Factset, CDP.

For comparison (approximations in ha)

| Football pitch | 0,7 |
|---|---|

For example, with regard to land use, the figures are biased downwards by the low coverage rate. DNCA Finance has a lower standardised environmental footprint than the MSCI Europe and MSCI World.

Below, the environmental footprints of Scope 1 and 2 $CO_2eq$ emissions are standardised by the AUMs within the scope studied (tCO2eq/year/million euros invested).

| PEVE | Scope 1+2 |
|---|---|
| DNCA Finance | 82 |
| MSCI Europe | 94 |
| MSCI World | 53 |

Source: DNCA Finance, Factset, CDP.

In terms of greenhouse gas emissions, DNCA Finance's standardized footprint is lower than that of the MSCI Europe.

# I.  THE CHALLENGE OF BIODIVERSITY EROSION

Since the 1992 Earth Summit in Rio de Janeiro and the signing of the Convention on Biological Diversity (CBD) by 168 parties[1] , biodiversity conservation has been recognized in international law as a major common concern.

In 2010, the Conference of the Parties (COP) ratified a strategic plan for biodiversity for the period 2011-2020, including the 20 Aichi targets and the mobilization of financial resources to achieve these targets. Very recently, in December 2022, the Kunming-Montreal agreement proposed 23 targets for 2030. The objective of mobilizing financial resources has been renewed and set at 200 billion US dollars per year.

In addition, in 2021, the Intergovernmental Panel on Climate Change (IPCC) has drawn up a joint report with the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES - the IPCC's equivalent for biodiversity) on the interrelationship between climate change and biodiversity loss.

In this context and through regulation[2] , the challenge of biodiversity loss is beginning to be taken on board by the financial sector.

In this section, we briefly review the definition of biodiversity, the problems it creates and the obligations for the financial sector.

## A.  What is biodiversity and why is it being eroded?

The United Nations Convention on Biological Diversity gives the following definition[3] :

"Variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

This definition highlights the notion of diversity in space and time of ecosystems, genes and species, as well as the interactions that link them. It is a very broad definition, encompassing living organisms and the physico-chemical relationships between them.

In their latest publication, the IPBES[4] reports that this biodiversity is deteriorating rapidly. For example, 75% of the land surface and 66% of marine environments have been significantly altered, and 85% of marshes and wetlands have disappeared. Finally, although the rate of deterioration of forest ecosystems has slowed since 2000, the situation varies from one area to another (e.g. the Amazon rainforest). With regard to living organisms, among other findings, the size of wild vertebrate populations has tended to decline over the last 50 years, both on land and in aquatic environments (freshwater and marine). Similarly, rapid declines in insect populations have been documented in some parts of the world.

Again according to the IPBES, through 5 pressures, human activity is the main factor explaining the erosion of biodiversity. The IPBES identifies changes in land and sea use, the direct exploitation of living organisms, climate change, pollution and the invasion of exotic species as the main pressures at global level.

In addition, IPBES stresses that these direct pressures result from societal values and behaviors that include production and consumption patterns, human population dynamics and trends, trade, technological innovations and global governance.

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[1] It should be noted that the United States of America is not a signatory to this convention.
[2] European taxonomy and Article 29 of the French energy-climate law.
[3] https://www.cbd.int/doc/legal/cbd-fr.pdf
[4] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental

## B. Why is the erosion of biodiversity a problem?

"We depend on oxygen to live, water to drink and good food to survive. Yet these precious treasures are often underestimated in economic assessments. Most of the time they are not even included!"

Christine Lagarde at the opening of the IUCN World Conservation Congress (2020)[5]

The utilitarian issue linked to the erosion of biodiversity is that of the sustainability of ecosystem services. Biodiversity provides numerous services to human societies and businesses[6][7] including water purification, pollination, soil fertility, the degradation and recycling of organic matter, air purification, the prevention and regulation of pathogens and crop pests, etc. The degradation of biodiversity affects its ability to provide these services.

In addition, as previously introduced, the Intergovernmental Panel on Climate Change (IPCC) has drawn up a joint report in 2021 with the Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES - the IPCC's equivalent for the subject of biodiversity) on the entanglement of climate change and the erosion of biodiversity. This is illustrated by the importance of healthy ocean phytoplankton, which capture large quantities of greenhouse gases (GHGs). In terms of mitigating the effects of climate change, one possible example is mangroves, which protect coastlines from erosion (nature-based solutions and carbon sinks)[8].

## C. What is the biodiversity preservation program?

Since the Earth Summit in Rio de Janeiro in 1992, the conservation of biodiversity has been recognized in international law as a major common concern. The other two objectives of the CBD are the sustainable use of biodiversity and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources of biodiversity.

In 2010, for the period 2011-2020, the 10ème COP ratified a strategic plan for biodiversity consisting of 5 strategic objectives and including the 20 Aichi Targets. The mission of this plan was to take urgent and effective measures to halt the loss of biodiversity and ensure that ecosystems are resilient and continue to provide their essential services to human life and well-being by 2020.

The results of this strategic plan are disappointing: according to the 5th Global Biodiversity Outlook (2020), none of the 20 Aichi Targets have been achieved. However, we note that the first of the strategic objectives can be considered to have been achieved, as the issue of biodiversity erosion is now taken into account in the drafting of major international regulations.

On 19 December 2022, COP15 ended in Montreal, Canada, with the adoption of the Kunming-Montreal Global Biodiversity Framework. This framework comprises 4 global objectives for the protection of nature:

- To halt the extinction of endangered species caused by humans and to reduce the extinction rate of all species by a factor of ten by 2050.

- Sustainable use and management of biodiversity to ensure that nature's contributions to humanity are valued, maintained and enhanced

- Sharing equitably the benefits arising from the use of genetic resources and information on the digital sequences of genetic resources

- To ensure that adequate means of implementing the Global Framework for Biodiversity are accessible to all parties, in particular the least developed countries and small island developing states.

The framework also includes 23 targets to be achieved by 2030, including :

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[5] Finance & Biodiversity: The French Ecosystem - Finance For Tomorrow
[6] Indicators and measurement tools Assessing the impact of human activities on biodiversity? - French Biodiversity Office
[7] McVittie A., Hussain S. S. (2013) The Economics of Ecosystems and Biodiversity - Valuation Database Manual
[8] IPBES-IPCC co-sponsored Workshop: Biodiversity and Climate Change Workshop Report

- The effective conservation and management of at least 30% of the world's land, coastal areas and oceans. Currently, 17% of land and 8% of marine areas are under protection.

- Restoring 30% of terrestrial and marine ecosystems

- Reduce the loss of areas of high biodiversity value and ecological integrity to close to zero

- Halve global food waste

- Phase out or reform subsidies that harm biodiversity to the tune of at least $500 billion a year, while strengthening positive incentives for the conservation and sustainable use of biodiversity.

- Mobilize at least 200 billion dollars a year from public and private sources to finance biodiversity.

- Increase international financial flows from developed to developing countries to at least 30 billion dollars a year

- Require transnational corporations and financial institutions to transparently monitor, assess and disclose the biodiversity risks and impacts of their operations, portfolios, supply and value chains.

Finally, this international context is reflected in various regulations at European and French level[9] .

## D. What is the financial sector's agenda for preserving biodiversity?

The agenda of the financial sector, and of asset managers in particular, for the preservation of biodiversity is primarily one of mobilizing adequate financial resources.

As introduced earlier, the international context is reflected in regulations at European and French level that provide frameworks for the mobilization of financial resources. These include the taxonomy of sustainable activities, the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD) at European level, which are partially reflected in article 29 of the Energy-Climate Law at French level.

In this context, asset managers can influence the direction of funding contributing to the protection of biodiversity:

- Or by directing the funds towards projects or companies offering solutions that have a positive impact on biodiversity.

- Or by including biodiversity criteria in the selection process for their general investments in order to identify projects or companies in transition.

These approaches require the use of new quantitative or qualitative tools to monitor the impact on biodiversity of investment portfolios[10] .

For example, in terms of biodiversity and climate change, this means investing in :

- Companies and projects with a GHG emissions reduction plan (companies and projects in transition).

- Companies and projects offering solutions to mitigate and adapt to climate change ("solutions" companies and projects)

Regarding the first point, the Carbon Disclosure Project (CDP) offers a tool for translating a GHG emissions reduction target into a change in temperature in 2100 compared with the pre-industrial level. Using this tool, investors can compare companies' targets and check that they are consistent with the objectives of the Paris Agreement to combat climate change.

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[9] Finance & Biodiversity: The French Ecosystem - Finance For Tomorrow

[10] Finance & Biodiversity: The French Ecosystem - Finance For Tomorrow.
Link: https://financefortomorrow.com/app/uploads/2022/03/F4T-Finance-Biodiversite-lEcosysteme-francais.pdf

## E. What is DNCA Finance's agenda?

Against this backdrop, DNCA Finance has set itself ambitions and objectives in the areas of climate change and biodiversity conservation.

On the subject of climate change, among other short-term objectives, DNCA Finance wishes to enter into dialogue with at least 5 of the "worst contributors" in terms of assessment of the temperature induced, as well as with at least 5 companies without a climate objective and representing the largest exposure in terms of assets under management.

Details of all of DNCA Finance's ambitions and objectives can be found in the environmental policy available on the DNCA Finance website.

# II.   BIODIVERSITY ANALYSIS TOOLS

Given the complexity of biodiversity, it is easy to understand the difficulty of analyzing and measuring the effect of human activities on it. Nevertheless, spurred on by widespread demand for biodiversity indicators, various players have been developing a large number of indicators for many years.

In this section, we briefly present the biodiversity impact assessment tools developed in recent years. We refer the reader to the study by the Fondation pour la Recherche sur la Biodiversité and the Office Français de la Biodiversité for more details[11] .

## A. Pressure-State-Response and Life Cycle Analysis

The Pressure-State-Response (PSR) and Life Cycle Assessment (LCA) frameworks are the two main conceptual frameworks for assessing the impact of human activities on biodiversity.

The PER model is explained in a report[12] from the Organization for Economic Co-operation and Development (OECD). The aim of this model is to develop and organize indicators. In this model, an indicator is defined as "a parameter, or a value calculated from parameters, giving indications on or describing the state of a phenomenon, the environment or a geographical area, and having a scope greater than the information directly linked to the value of a parameter". Three indicators have been identified:

- Pressure indicators that describe the influence of human activity on the environment

- Status indicators that describe the current state of the environment (biodiversity, state of natural resources: water, soil, forests, etc.).

- Response indicators that describe the company's responses.

Again in this model, indicators are constructed to document current problems on the state of the environment, these are the environmental themes. The OECD reference report identifies 13 environmental themes.
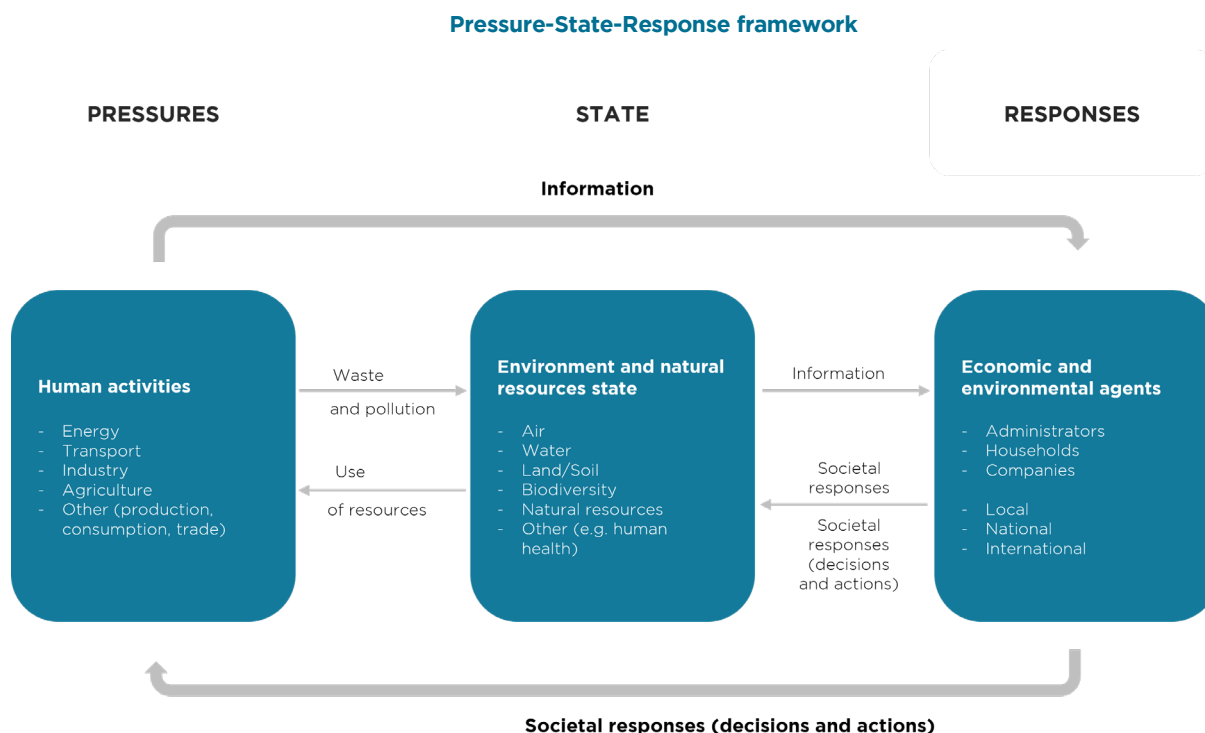
**Pressure-State-Response framework**



Source: Indicators and measurement tools Assessing the impact of human activities on biodiversity (OFB)

Biodiversity is only one theme among others in the model proposed by the OECD (theme 7). Nevertheless, it is a cross-cutting theme because of the many pressures that can affect its state. This is well described in

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[11]  For more details: https://www.fondationbiodiversite.fr/wp-content/uploads/2021/04/Publi-JFRB-Indicateurs-outils-mesure-Impact-biodiversite-1.pdf
[12] Synthesis Report of the State of the Environment Group, OECD/GD(93)179

the report, since, on the one hand, it is associated with theme 8 and, on the other, "the main chemical pressures are dealt with under themes 3, 4 and 5. Certain biological pressures are dealt with under themes 10 and 11, and certain physical pressures appear, for example, under theme 13".

Finally, this report describes an initial "activities - pressures - state - responses" correspondence matrix.

The life cycle assessment of products and services is the second major framework for assessing the impact of human activities on biodiversity.

Life cycle assessment is a structured method standardized under International Standards Organization (ISO) 14040. The aim of this method is to estimate the impact of a product or service throughout its value chain. This estimate is made in four stages: definition of the scope, inventory of incoming and outgoing material and energy flows, assessment of the impacts and, finally, interpretation of the results. The third stage is carried out using models that define characterization factors. These are used to translate flows and activities into pressures ("midpoints"), and pressures into final environmental impacts ("endpoints"). The characterization factors give the environmental impacts in a single metric for a unit of pressure.

Here again, biodiversity is just one element among many. In addition, there are many characterization models. Nevertheless, in the context of impacts on biodiversity, three approaches seem to be more commonly used in the biodiversity analysis tools available on the market. These are the ReCiPe method, which expresses a potential loss of species (Potentially Disappeared Fraction of species - PDF), the GLOBIO3 model, which expresses a mean species abundance (MSA) in relation to a reference, and the LC-IMPACT methodology, which is spatialized and assesses the impact on ecosystems expressed as a potential loss of species (Potentially Disappeared Fraction of species - PDF).

Below we define these two biodiversity measures PDF and MSA.

**Life Cycle Assessment framework**
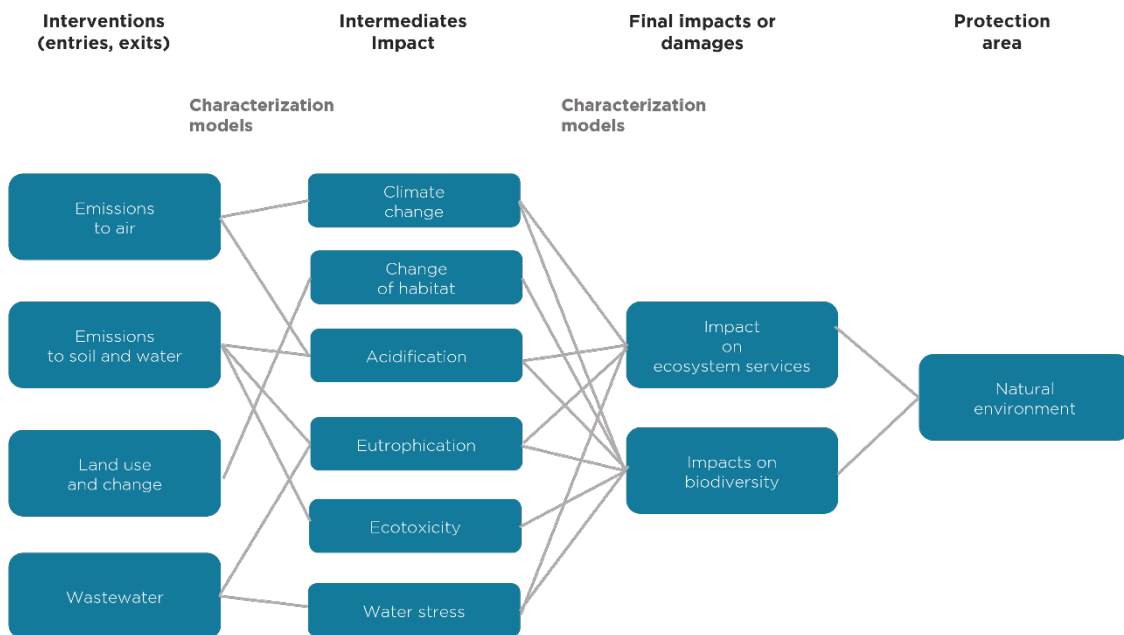


Source: Indicators and measurement tools Assessing the impact of human activities on biodiversity (OFB)

## B. Biodiversity measures

As introduced earlier, there are two possible measures of biodiversity:

- Potential Disappeared Fraction of species (PDF).

- The Potential Disappeared Fraction of species (PDF) within one year is defined as the percentage of species potentially lost over 1 $m^2$ or in 1 $m^3$ (aquatic environment) in one year as a result of environmental disturbance. Using the average density of species on land and in water, this measure can also be aggregated into a species per year measure. The PDF quantifies the potential for species extinction, not the actual number of species lost.

- Mean Species Abundance (MSA).

- The MSA refers to the average abundance of species in an undisturbed situation. It is an indicator of the natural character or integrity of biodiversity. It is defined as the average abundance of the original species present in the undisturbed situation compared with their abundance in the ecosystems in the disturbed situation. The reference state corresponds to "natural" types of land cover not dedicated to any particular human activity (natural forests, natural grasslands, glaciers, etc.). It does not take into account possible increases in abundance compared with the undisturbed ecosystem: the MSA cannot be greater than 100%. An area with an MSA of 100% means biodiversity similar to or greater than the undisturbed reference situation. An MSA of 0% means an ecosystem with no original species left, i.e. an ecosystem that has been completely destroyed. The MSA reflects a possible state of biodiversity, not the actual state.

## C. Pressures and themes

In LCA, once the inventory of flows and activities has been drawn up, the characterization factors are used to translate the inventory into pressures ("midpoints") and the pressures into final environmental impacts ("endpoints"). The analysis is therefore specified by the inventory, then the characterization model, which links the flows and activities to the midpoints and endpoints.

In the RECIPE2016 model, the 18 pressures include global warming, water use and land use. It can thus be seen that the LCA pressures are the environmental themes of the PER framework.

The PER framework is first built around these themes and the major human activities identified as key. Then, for each theme, indicators of pressures, states and responses are identified. The analysis is therefore specified by the theme addressed.

In this way, the two frameworks can be combined, starting with the LCA in order to completely break down the human activities analyzed. Then, for each pressure and/or theme identified, it is possible to continue the analysis with the PER framework in order to organize and develop the indicators for analyzing biodiversity.

# III. METHOD FOR ANALYSING DNCA FINANCE PORTFOLIOS

In our analysis of DNCA Finance portfolios, we use the concepts introduced above. We also need methods for aggregating information at portfolio and management company level. In this section we present these two points.

We also point out that the methodological choices made in this analysis are based on the current state of data available to DNCA Finance. In the future, we do not rule out any methodological changes made possible by the acquisition of new data.

## A. Environmental pressures

With regard to our analysis of biodiversity in DNCA Finance portfolios at the end of December 2022, as in the previous year we have decided to focus on certain environmental pressures caused by the activities of portfolio companies.

DNCA Finance has access to data from the Carbon Disclosure Project (CDP), which provides company-level information on the use of water, soil and climate change. We note that, whatever the framework of our LCA analysis / characterization model or PER framework, these three pressures or themes are present. After consulting the ReCiPe2016 characterization model and the OECD publication on environmental indicators (PER framework), the indicators linked to these different pressures are :

- For climate change: greenhouse gas emissions and the increase in global average temperature. The ReCiPe2016 model provides precise characterization factors between the final environmental impacts and the rise in temperature. As indicated in our objectives, we are supplementing these pressures with a calculation of carbon intensity and its evolution between 2021 and 2022.

- For water use: water consumption and its intensity in relation to the renewal of the resource. The ReCiPe2016 model provides precise characterization factors between the final environmental impacts and water consumption.

- For land use: land use and land use conversion. The ReCiPe2016 model provides precise characterization factors between final environmental impacts and land use in $m^2$ of crop equivalent.

The CDP provides the following pressure indicators:

- Data on greenhouse gas emissions and implicit temperature.

- Data on water withdrawals and discharges, together with details of the associated sources and destinations.

- Land use and conversion data for the production of forestry and agricultural products.

## Climate change

| Identifier | Indicator | Unit |
|---|---|---|
| 1 | Scope 1+2 score temperature | °c (delta vs pre-industrial era) |
| 2 | Scope 1+2+3 score temperature | °c (delta vs pre-industrial era) |
| 3 | Total GHG emissions | tCO2e / year |
| 4 | Scope 1&2 GHG emissions | tCO2e / year |
| 5 | Scope 1+2 type score temperature | categories |
| 6 | Scope 3 score temperature | categories |

Source: CDP.

## Use of water

| Identifier | Indicator | Unit |
|---|---|---|
| 1 =2+3 =4+5+6+7+8+9 | W1.2b Total withdrawals | megaliters/year |
| 2 =10+11+12+13 =14+15+16+17 | W1.2b Total discharges | megaliters/year |
| 3 =1-2 | W1.2b Total consumption | megaliters/year |
| 4 | W1.2h Fresh surface water, including rainwater, water from wetlands, rivers, and lakes | megaliters/year |
| 5 | W1.2h Brackish surface water/Seawater | megaliters/year |
| 6 | W1.2h Groundwater - renewable | megaliters/year |
| 7 | W1.2h Groundwater - non-renewable | megaliters/year |
| 8 | W1.2h Produced/Entrained water | megaliters/year |
| 9 | W1.2h Third party sources | megaliters/year |
| 10 | W1.2i Fresh surface water | megaliters/year |
| 11 | W1.2i Brackish surface water/seawater | megaliters/year |
| 12 | W1.2i Groundwater | megaliters/year |
| 13 | W1.2i Third-party destinations | megaliters/year |
| 14 | W1.2j Tertiary treatment | megaliters/year |
| 15 | W1.2j Secondary treatment | megaliters/year |
| 16 | W1.2j Primary treatment only | megaliters/year |
| 17 | W1.2j Discharge to the natural environment without treatment | megaliters/year |
| 18 | W1.2j Discharge to a third party without treatment | megaliters/year |
| 19 | W1.2j Other | megaliters/year |

Source: CDP.

## Land use

| Identifier | Indicator | Unit |
|---|---|---|
| 1 | F1.3_C5 land area you control and/or manage that is used for the production of your disclosed commodity(ies) - Area | hectares |
| 2 | F1.3_C9 land area you control and/or manage that is used for the production of your disclosed commodity(ies) - Area converted during the reporting year | hectares |
| 3 | F1.4_C5 land area you control and/or manage that was not used for the production of your disclosed commodity(ies) - Area | hectares |

Source: CDP.

Once the pressure indicators have been selected, they are aggregated over the various analysis areas using different aggregation methodologies. These are presented in the following subsections.

## B. Methods common to environmental pressures

The methodological elements common to the various environmental pressures (water use, land use and greenhouse gas emissions) relate to the aggregation of pressures at the level of the selected perimeters.

Environmental pressures are allocated according to the share of enterprise value held (SEVH). In other words, environmental pressures are weighted by the share of enterprise value held in the portfolio.

A major change compared with the previous year is that we now use enterprise value including cash in all formulas involving enterprise value. This change is based on the SFDR regulations and the formulas for calculating the main negative effects of investments.

**Environmental pressures weighted by share of enterprise value held**

| Environmental pressures weighted according to share of enterprise value held (SEVB) | Environmental pressures are weighted according to the share of enterprise value held in the portfolio | $\sum_{i=1}^{n}\left(\dfrac{Weight_i \times AUM}{EVi} \times Pressures_i\right)$ |
|---|---|---|

The PEVE method requires additional financial data on the company in order to be calculated. In addition, the calculation of enterprise value requires assumptions to be made when handling large scopes of analysis (for example, checking whether the EV is negative or the EV share is greater than 100%). Nevertheless, this method enables us to analyze the environmental pressure attributable to investments within the scope. One limitation of this method is that, for a given scope, when companies without information are not restated, this is equivalent to attributing zero environmental pressure to them. In addition, standardization by portfolio assets enables us to compare different perimeters by giving an intensity per million euros invested.

## C. Methods specific to water use indicators

The methodological elements specific to water use relate to verifying the consistency of the CDP data. For example, we check that the sum of the details on the sources of abstraction is less than the quantities of abstraction communicated (to within 5%), and the same applies to discharges. We also check that the sum of total discharges and water consumption is equal to withdrawals (to within +/- 5%).

## D. Methods specific to climate change indicators

The methodological elements specific to climate change relate to the processing of CDP data, the scope of greenhouse gas (GHG) emissions and the aggregation of pressures at the selected scope level.

On the subject of data processing, the CDP provides a set of data for which the missing values have been processed, either by using a default temperature (3.1°c for this year compared with 3.2°c previously), or by using a temperature calculated by the CDP on the basis of the evolution trajectory of past GHG emissions.

In our analyses, we calculate portfolio temperatures by reconstructing three temperature databases:

- The first contains only the available temperatures.

- The second contains the available temperatures and the default temperature for all the missing values.

- The third contains temperatures calculated from past emissions trajectories, in addition to available temperatures and default temperatures.

The GHG Protocol classifies a company's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the production of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the reporting company's value chain, including upstream and downstream emissions. Level 3 is currently characterized by differences in calculation methods, which probably bias the accounting of emissions at

this level. For these reasons, we do not include tier 3 in our calculation, but will do so as soon as the calculation methodology is satisfactory.

Regarding the aggregation of environmental pressures at the level of the perimeters selected, we present here the aggregation methods used for the indicators of the climate change theme.

For greenhouse gas emissions, environmental pressures are attributed according to the share of enterprise value held (SEV). It should be remembered that a limitation of this method is that, for a given scope, companies with no information are assigned an environmental pressure of zero. In addition, standardization by portfolio assets makes it possible to compare different perimeters by giving an intensity per million euros invested.

For implied temperature, we use the Enterprise Value + Cash emissions weighted temperature score (ECOTS) and the Weighted Average Temperature Score (WATS).

The temperature score weighted by portfolio weights is a simple method. The temperature scores are weighted by the portfolio weights. In other words, the aggregate portfolio score is the weighted average of the individual temperature scores. Its limitation is that it does not take GHG emissions into account. Exposure to high-impact companies is therefore not visible using this approach.

**Weighted temperature score for portfolio weights**

| Weighted portfolio temperature score (WATS) | Temperature scores are weighted by portfolio weights | $\sum_{i=1}^{n}(Weight_i \times T_i)$ |
|---|---|---|

With the emissions-weighted temperature score for owned companies, the individual temperature scores are weighted by the share of owned emissions in total owned emissions. This means that the aggregate score is the emissions-weighted average of the individual temperature scores. The emissions held are calculated in relation to the share held of the value of the company without adjusting for liquid assets (EV).

**Temperature score weighted by emissions held**

| Temperature score weighted by emissions held (EOTS) | Temperature scores are weighted by the share of emissions held in total emissions held. | $\sum_{i=1}^{n}\left( \dfrac{\left(\frac{Weight_i \times AUM}{EV_i} \times Emissions_i\right)}{\sum_{j=1}^{n}\left(\frac{Weight_j \times AUM}{EV_j} \times Emissions_j\right)} \times T_i \right)$ |
|---|---|---|

The ECOTS method requires additional financial data on the company in order to be calculated. In addition, calculating the enterprise value requires assumptions to be made when manipulating large scopes of analysis (for example, checking whether the EV is negative or the EV share is greater than 100%). However, this method does include GHG emissions in the calculation, and provides a more accurate reflection of exposure to high-impact companies. The ECOTS method is one of the methods recommended by the CDP for use in assessing the temperature of portfolios.

Finally, as indicated, we have supplemented these pressure indicators with a calculation of carbon intensity and its evolution between 2021 and 2022. Both indicators are aggregated by portfolio weight. To calculate variations in intensity, we apply a floor and a ceiling of +/- 50% in order to deal with variations that are a priori abnormal.

**Carbon intensity and weighted variation of portfolio weights**

| Carbon intensity weighted by portfolio weight | Carbon intensities are weighted by portfolio weights, rebased according to intensity availability. | $\sum_{i=1}^{n}\left(Weight_i \times \dfrac{Emissions_i}{CA_i}\right)$ |
|---|---|---|
| Change in carbon intensity weighted by portfolio weights | Variations in carbon intensity are weighted by portfolio weights, rebased according to the availability of the intensity variation. | $\sum_{i=1}^{n}\left( Weight_i \times \left( \left( \dfrac{\frac{Emissions_{i,t}}{Revenue_{i,t}}}{\frac{Emissions_{i,t-1}}{Revenue_{i,t-1}}} \right) - 1 \right) \right)$ |

# IV. ENVIRONMENTAL PRESSURES OF DNCA FINANCE PORTFOLIOS

We analyze the environmental pressures of a large proportion of DNCA Finance's investments at the end of 2022 using environmental pressure indicators collected by the CDP. At that date, we have extracted from DNCA Finance's portfolio more than 900 different issuers of corporate bonds, equities or convertible bonds for a total amount of almost €17.5 billion, representing almost 62% of DNCA Finance's assets under management.

In this section, we first present some descriptive statistics on the coverage rates[13] of the DNCA Finance perimeter for the selected environmental pressures. We then present the different environmental pressures at DNCA Finance level, as well as details for the Beyond range and the main DNCA Finance funds. The environmental pressures for all the funds analyzed are available in the appendices.

## A. Coverage rate of selected environmental pressures

The DNCA Finance perimeter analyzed contains 905 private issuers of bonds, equities or convertible bonds. The total represents €17.5 billion, or around 63% of assets under management at the end of 2022. We show the equivalent statistics for the two benchmark indices that we have reconstructed at the end of 2022. The coverage rates of climate change indicators are significantly higher than those for water use or land use. For land use, the coverage rates are very low.

| Perimeter | Number of components | AUM (€bn) |
|---|---|---|
| DNCA Finance analysed perimeter | 905 | 17,5 |
| MSCI Europe | 413 | 8 614,8 |
| MSCI World | 1490 | 46 683,8 |

Source: DNCA Finance, Factset

### 1. Climate change

Below are the t°c coverage rates calculated on the basis of published ambitions. Compared with 2022, these rates have improved. In addition, as previously indicated, the CDP has now systematized the management of missing t°c in their database. This implies a theoretical coverage rate of 100%.

| | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| **Indicators** | DNCA scope analysed | MSCI Europe | MSCI World | DNCA scope analysed | MSCI Europe | MSCI World |
| Scope 1+2 score temperature | 46% | 78% | 63% | 74% | 84% | 75% |
| Scope 1&2 GHG emissions | 75% | 96% | 96% | 90% | 97% | 98% |

Source: DNCA Finance, Factset, CDP.

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[13] It should be noted that some companies are identified in the database but do not provide any information, so our coverage rates exclude them. Coverage rates are calculated on the basis of the assets analyzed, which do not correspond to all DNCA Finance assets under management at the end of 2022.

| | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| Indicators | DNCA scope analysed | MSCI Europe | MSCI World | DNCA scope analysed | MSCI Europe | MSCI World |
| Scope 1+2 score temperature | 37% | 68% | 52% | 61% | 78% | 64% |
| Scope 1&2 GHG emissions | 72% | 98% | 96% | 89% | 99% | 98% |

Source: DNCA Finance, Factset, CDP.

## 2. Use of water

Below we present CDP's coverage in % of assets under management (% AUM) and in % of issuers (% components) of the DNCA Finance scope analyzed and of benchmark indices (MSCI Europe and World).

There are differences in coverage depending on the type of indicator. For example, detailed indicators have less information than aggregated indicators. This is particularly true of indicators for waste treatment. Lastly, coverage rates were stable compared with the previous year.

For the main indicators, Total withdrawals, Total discharges and Total consumption, the company rates available in the CDP database are facially limited. However, assessing the significance of these coverage rates for water use depends on the basis for which we are entitled to expect information in the very short term. For example, a coverage rate could be calculated on the basis of sectors identified by CDP as having, by construction, significant water use. In line with our policy of only using published data, we will not use an estimation method such as average sector intensity.

| Indicators | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| | DNCA analysed perimeter | MSCI Europe | MSCI World | DNCA analysed perimeter | MSCI Europe | MSCI World |
| Total withdrawals | 13% | 26% | 25% | 31% | 40% | 31% |
| Total discharges | 13% | 26% | 25% | 31% | 40% | 31% |
| Total consumption | 13% | 26% | 25% | 31% | 40% | 31% |
| Fresh surface water | 9% | 21% | 16% | 27% | 36% | 23% |
| Brackish surface water/Seawater | 3% | 8% | 6% | 8% | 8% | 4% |
| Groundwater - renewable | 10% | 21% | 19% | 28% | 37% | 25% |
| Groundwater - non-renewable | 2% | 3% | 3% | 2% | 4% | 3% |
| Produced/Entrained water | 1% | 3% | 2% | 5% | 7% | 2% |
| Third party sources | 12% | 25% | 23% | 30% | 39% | 29% |
| Fresh surface water | 10% | 20% | 18% | 26% | 34% | 19% |
| Brackish surface water/seawater | 4% | 12% | 9% | 12% | 14% | 9% |
| Groundwater | 4% | 11% | 8% | 20% | 22% | 11% |
| Third-party destinations | 11% | 24% | 22% | 29% | 39% | 28% |
| Tertiary treatment | 6% | 12% | 11% | 15% | 28% | 15% |
| Secondary treatment | 6% | 11% | 11% | 15% | 26% | 15% |
| Primary treatment only | 5% | 10% | 10% | 10% | 17% | 12% |
| Discharge to the natural environment without treatment | 4% | 9% | 7% | 14% | 21% | 10% |
| Discharge to a third party without treatment | 6% | 14% | 13% | 17% | 29% | 21% |
| Other | 2% | 5% | 4% | 6% | 9% | 5% |

| Indicators | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| | DNCA analysed perimeter | MSCI Europe | MSCI World | DNCA analysed perimeter | MSCI Europe | MSCI World |
| Total withdrawals | 13% | 25% | 23% | 28% | 37% | 30% |
| Total discharges | 13% | 25% | 23% | 28% | 37% | 30% |
| Total consumption | 13% | 25% | 23% | 28% | 37% | 30% |
| Fresh surface water | 9% | 19% | 15% | 24% | 32% | 22% |
| Brackish surface water/Seawater | 3% | 6% | 5% | 7% | 6% | 4% |
| Groundwater - renewable | 10% | 20% | 18% | 25% | 33% | 25% |
| Groundwater - non-renewable | 1% | 3% | 3% | 3% | 2% | 2% |
| Produced/Entrained water | 2% | 3% | 2% | 4% | 7% | 6% |
| Third party sources | 12% | 24% | 22% | 26% | 37% | 29% |
| Fresh surface water | 9% | 18% | 17% | 22% | 30% | 17% |
| Brackish surface water/seawater | 5% | 11% | 8% | 11% | 13% | 8% |
| Groundwater | 4% | 10% | 7% | 18% | 19% | 10% |
| Third-party destinations | 11% | 21% | 20% | 24% | 35% | 27% |
| Tertiary treatment | 6% | 12% | 11% | 15% | 25% | 13% |
| Secondary treatment | 6% | 10% | 10% | 14% | 23% | 14% |
| Primary treatment only | 5% | 9% | 9% | 9% | 15% | 10% |
| Discharge to the natural environment without treatment | 4% | 9% | 7% | 12% | 18% | 8% |
| Discharge to a third party without treatment | 7% | 13% | 13% | 16% | 26% | 21% |
| Other | 2% | 4% | 3% | 5% | 8% | 4% |

Source: DNCA Finance, Factset, CDP.

### 3.  Land use

For the 3 indicators analyzed, the coverage rates available in the CDP database are very limited. Nevertheless, assessing the significance of these coverage rates for water use depends on the basis for which we are entitled to expect information in the very short term. For example, a coverage rate could be calculated on the basis of sectors identified by CDP as having, by construction, significant water use. In line with our desire to use only published data, we will not use an estimation method such as average sectoral intensity. Finally, we note that coverage rates as a % of issuers are improving slightly, while coverage rates as a % of assets under management are falling for DNCA Finance and stable for the benchmark indices.

| Indicators | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| | DNCA analysed perimeter | MSCI Europe | MSCI World | DNCA analysed perimeter | MSCI Europe | MSCI World |
| Land area you control and/or manage that is used for the production of your disclosed commodity(ies) | 0,8% | 1,7% | 1,2% | 0,3% | 0,8% | 0,5% |
| Land area you control and/or manage that is used for the production of your disclosed commodity(ies) - Area converted during the reporting year | 0,2% | 0,7% | 0,6% | 0,2% | 0,3% | 0,2% |
| Land area you control and/or manage that was not used for the production of your disclosed commodity(ies) - Area | 0,8% | 1,7% | 1,2% | 0,3% | 0,8% | 0,5% |

| Indicators | ISSUER COVERAGE | | | AUM % COVERAGE | | |
|---|---|---|---|---|---|---|
| | DNCA analysed perimeter | MSCI Europe | MSCI World | DNCA analysed perimeter | MSCI Europe | MSCI World |
| Land area you control and/or manage that is used for the production of your disclosed commodity(ies) | 0,7% | 1,4% | 1,2% | 1,5% | 0,8% | 0,6% |
| Land area you control and/or manage that is used for the production of your disclosed commodity(ies) - Area converted during the reporting year | 0,1% | 0,2% | 0,1% | 0,0% | 0,1% | 0,0% |
| Land area you control and/or manage that was not used for the production of your disclosed commodity(ies) - Area | 0,6% | 1,2% | 1,1% | 1,5% | 0,7% | 0,6% |

Source: DNCA Finance, Factset, CDP.

## 4. Fundamental elements

Below are statistics on enterprise value and sales obtained from Factset. The change in the method of calculating enterprise value means that situations in which the enterprise value is lower than the market value of the shares are less frequent than previously.

| | Issuer coverage | | | AUM coverage | | |
|---|---|---|---|---|---|---|
| Indicators | DNCA scope analysed | MSCI Europe | MSCI World | DNCA scope analysed | MSCI Europe | MSCI World |
| Missing EVs | 8,8% | 0,2% | 0,2% | 1,4% | 2,2% | 0,2% |
| EV Allocation > 100% | 0% | 2% | 2% | 0% | 6% | 3% |
| Negative EVs | 0,6% | 1,0% | 1,1% | 0,4% | 0,5% | 1,0% |
| Missing sales | 9,4% | 2,4% | 0,9% | 4,9% | 0,9% | 0,7% |

| | Issuer coverage | | | AUM coverage | | |
|---|---|---|---|---|---|---|
| Indicators | DNCA scope analysed | MSCI Europe | MSCI World | DNCA scope analysed | MSCI Europe | MSCI World |
| Missing EVs | 6,7% | 0,5% | 0,1% | 0,4% | 1,5% | 0,3% |
| EV Allocation > 100% | 0% | 15% | 23% | 0% | 30,8% | 45% |
| Negative EVs | 0,3% | 0,7% | 1,5% | 0,5% | 0,6% | 0,6% |
| Missing sales | 8,6% | 2,9% | 1,1% | 4,0% | 1,6% | 0,6% |

Source: DNCA Finance, Factset, CDP.

### 5. Environmental pressures at DNCA Finance

In this section, we present the environmental pressures for the assets selected and aggregated at management company level according to the new method using enterprise value without restatement of cash. We also present the values using the old calculation methodology in order to compare last year's environmental pressures.

### 6. Use of water

Although levies and releases attributed to DNCA Finance investments are up, the level of consumption is down 4.3%. We see a similar decline in consumption attributable to MSCI Europe companies and a 14.5% decline in consumption attributable to MSCI World companies.

Below are the absolute environmental footprints for 2022 (ML/year).

| PEVE - 2022 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 238 035 | 234 926 | 3 102 |
| MSCI Europe | 176 048 461 | 174 778 743 | 1 257 377 |
| MSCI World | 315 686 163 | 310 981 585 | 4 720 859 |

Below are the absolute environmental footprints for 2022 using the old calculation methodology (ML/year).

| PEVE net cash - 2022 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 281 465 | 277 654 | 3 804 |
| MSCI Europe | 197 104 625 | 195 735 921 | 1 355 079 |
| MSCI World | 348 259 708 | 343 303 232 | 4 966 343 |

Below are the absolute environmental footprints for 2021 (ML/year). The figures shown include changes to CDP data.

| PEVE net cash - 2021 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 232 604 | 228 609 | 3 975 |
| MSCI Europe | 197 620 410 | 196 354 383 | 1 413 319 |
| MSCI World | 342 068 798 | 336 396 482 | 5 809 756 |

Source: DNCA Finance, Factset, CDP.

All intensities are up. In particular, consumption intensity is up 22.6% for DNCA Finance. We note an increase of 12.4% for consumption attributable to MSCI Europe companies and a decrease of 0.9% for consumption attributable to MSCI World companies. Using the new aggregation method, the consumption intensity attributable to DNCA Finance investments is above that of the MSCI Europe and the MSCI World.

Below, the environmental footprints are standardised by the amounts outstanding in the areas studied in 2022 (m3/year/million euros invested).

| PEVE - 2022 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 13 564 | 13 387 | 177 |
| MSCI Europe | 19 957 | 19 813 | 143 |
| MSCI World | 6 788 | 6 687 | 102 |

Below, the environmental footprints are standardized by the amounts outstanding in the areas studied in 2022 using the old methodology (m3/year/million euros invested).

| PEVE net cash - 2022 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 16 039 | 15 822 | 217 |
| MSCI Europe | 22 344 | 22 189 | 154 |
| MSCI World | 7 488 | 7 382 | 107 |

Below, the environmental footprints are standardized by the amounts outstanding in the areas studied in 2021 (m3/year/million euros invested). The figures presented include changes in CDP data.

| PEVE net cash - 2021 | Withdrawals | Discharges | Consumption |
|---|---|---|---|
| DNCA Finance | 10 367 | 10 189 | 177 |
| MSCI Europe | 19 098 | 18 975 | 137 |
| MSCI World | 6 375 | 6 269 | 108 |

Source: DNCA Finance, Factset, CDP.

For comparison (approximation in ML).

| | |
|---|---:|
| Geneva Lake | 89 000 000 |
| Monthly flow Seine river (Paris) | 1 296 000 |
| Paris monthly withdrawals | 14 100 |

Source: DNCA Finance.

The data provided by the CDP allows us to analyze in some detail the sources of extraction and the destinations of discharges, whether per million euros invested or in absolute terms.

With a water withdrawal footprint of 13,564 m3 per million euros invested for 2022, DCNA Finance's portfolio has an attributable withdrawal greater than the monthly withdrawal of a city like Paris. 67% of the withdrawal is fresh surface water, the second main source being surface salt water or seawater. With a water discharge of 13,387 m3 per million euros invested by 2022, attributable water consumption is 177 m3 per million euros invested by 2022, which is the equivalent of 71 Olympic swimming pools. The main destinations are discharges as fresh surface water and salt water or seawater.

**Analysis of water use in DNCA and MSCI Europe**

**PEVE method (m3/year/M€ invested)**



| | sources | withdrawals | discharges and consumption | destination |
|---|---|---|---|---|
| ■Unspecified | 173 | | | 157 |
| ■Third party sources | 333 | | | 271 |
| ■Produced/Entrained water | 22 | | | |
| ■Groundwater | 50 | | | 30 |
| ■Brackish surface water/Seawater | 1 090 | | | 1 090 |
| ■Fresh surface water | 11 896 | | | 11 839 |
| ■Consumption | | | 177 | |
| ■Discharges | | | 13 387 | |
| ■Withdrawals | | 13 564 | | |



| | sources | withdrawals | discharges and consumption | destination |
|---|---|---|---|---|
| ■Unspecified | 410 | | | 23 |
| ■Third party sources | 163 | | | 144 |
| ■Produced/Entrained water | 15 | | | |
| ■Groundwater | 68 | | | 23 |
| ■Brackish surface water/Seawater | 900 | | | 989 |
| ■Fresh surface water | 18 400 | | | 18 635 |
| ■Consumption | | | 143 | |
| ■Discharges | | | 19 813 | |
| ■Withdrawals | | 19 957 | | |

Source: DNCA Finance, Factset, CDP.

Information on waste treatment is patchy. It should be noted that the portion of water discharged that is not specified in the CDP database represents almost 90% of water discharges. The main item indicates that the water discharged is not treated before being returned to the natural environment. This could be worrying if we did not bear in mind certain industrial processes such as energy production (hydroelectricity, water as a means of cooling thermal power stations) or agriculture (irrigation).

**Analysis of water treatment in DNCA Finance and MSCI Europe - PEVE method ($m3/year/M€$ invested)**



| | discharges | treatment |
|---|---|---|
| ■Unspecified | | 11 534 |
| ■Other | | 44 |
| ■Discharge to a third party without treatment | | 219 |
| ■Discharge to the natural environment without treatment | | 1 339 |
| ■Primary treatment only | | 86 |
| ■Secondary treatment | | 114 |
| ■Tertiary treatment | | 52 |
| ■Discharges | 13 387 | |

Source: DNCA Finance, Factset, CDP.



| | discharges | treatment |
|---|---|---|
| ■Unspecified | | 16 014 |
| ■Other | | 40 |
| ■Discharge to a third party without treatment | | 96 |
| ■Discharge to the natural environment without treatment | | 3 094 |
| ■Primary treatment only | | 99 |
| ■Secondary treatment | | 159 |
| ■Tertiary treatment | | 310 |
| ■Discharges | 19 813 | |

## 7.  Land use and transformation

All the pressures attributed to DNCA Finance's investments are up, with the level of usage for production up 50.6%. We note a decrease of -11.2% for usage attributable to MSCI Europe companies and an increase of 7.2% for usage attributable to MSCI World companies. The increase in DNCA's scope is mainly due to the inclusion of Vallourec in DNCA Finance's investments. Vallourec owns eucalyptus forests that enable it to supply blast furnaces with fuel[14] .

Below are the absolute environmental footprints in 2022 (ha).

| PEVE - 2022 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 2 207 | 0 | 710 |
| MSCI Europe | 7 336 025 | 109 036 | 1 445 942 |
| MSCI World | 21 685 977 | 109 036 | 9 144 610 |

Below are the absolute environmental footprints for 2022 using the old calculation methodology (ha).

| PEVE net cash - 2022 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 2 292 | 0 | 814 |
| MSCI Europe | 7 095 186 | 94 783 | 1 327 092 |
| MSCI World | 20 409 115 | 94 784 | 8 568 100 |

Below are the absolute environmental footprints for 2021 (ha).

| PEVE net cash - 2021 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 1 522 | <0,1 | 200 |
| MSCI Europe | 7 988 969 | 57 | 894 501 |
| MSCI World | 19 043 599 | 57 | 1 680 483 |

Source: DNCA Finance, Factset, CDP.

Production use intensities are up overall. The increase is strongest in the DNCA Finance perimeter. The main reason is the addition of Vallourec, which publishes land use data. Using the new aggregation method, the production use intensity of DNCA Finance's investments is lower than those of the benchmark indices.

Below, the environmental footprints are standardized by the amounts outstanding in the areas studied in 2022 (ha/million euros invested).

| PEVE - 2022 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 0,13 | 0 | 0,04 |
| MSCI Europe | 0,82 | 0,01 | 0,16 |
| MSCI World | 0,47 | <0,01 | 0,20 |

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[14] More information about eucalyptus forests on the Vallourec website: https://www.vallourec.com/fr/Components/News/News_CORP/2019/20191212-ForetBresil

Below, the environmental footprints are standardized by the perimeter outstandings studied in 2022 using the old methodology (ha/million euros invested).

| PEVE net cash - 2022 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 0,13 | 0 | 0,05 |
| MSCI Europe | 0,80 | 0,01 | 0,15 |
| MSCI World | 0,44 | <0,01 | 0,18 |

Below, the environmental footprints are standardized by the amounts outstanding in the areas studied in 2021 (ha/million euros invested).

| PEVE net cash - 2021 | Usage Production | Conversion | Other uses |
|---|---|---|---|
| DNCA Finance | 0,07 | <0,01 | <0,01 |
| MSCI Europe | 0,77 | <0,01 | 0,09 |
| MSCI World | 0,35 | <0,01 | 0,03 |

Source: DNCA Finance, Factset, CDP.

For comparison (approximation in ha).

| | |
|---|---|
| Football pitch | 0,7 |
| Forest of Fontainebleau | 25 000 |
| Mainland France | 54 394 000 |

Source: DNCA Finance.

## 8. Climate change

The temperature scores calculated using the ECOTS method are below 2°c, regardless of the score used (Available, Default or Complete). The climate trajectory of DNCA Finance's investments is between that of the MSCI Europe and the MSCI World. In addition, the temperature scores calculated using last year's EOTS method are down on all the perimeters analyzed. For DNCA Finance, depending on the score used, the decline varies from -9.1% to 7.1%. Using the WATS method, the results are more mixed. For DNCA Finance, the 2°c alignment depends on the temperature score used.

Temperature on the perimeters studied in 2022 using the ECOTS method

| ECOTS - 2022 | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,85 | 1,91 | 1,91 |
| MSCI Europe | 1,77 | 1,86 | 1,86 |
| MSCI World | 1,90 | 2,21 | 2,14 |

Temperature on the perimeters studied in 2022 using the old EOTS method

| EOTS - 2022 | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,84 | 1,89 | 1,89 |
| MSCI Europe | 1,78 | 1,87 | 1,87 |
| MSCI World | 1,90 | 2,21 | 2,14 |

Temperature on the perimeters studied in 2021 using the old EOTS method

| EOTS - 2021 | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,98 | 2,08 | 2,06 |
| MSCI Europe | 2,00 | 2,06 | 2,05 |
| MSCI World | 2,01 | 2,32 | 2,27 |

Temperature on the perimeters studied in 2022 using the WATS method

| WATS - 2022 | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,71 | 2,06 | 2,02 |
| MSCI Europe | 1,66 | 1,90 | 1,85 |
| MSCI World | 1,77 | 2,11 | 2,05 |

Temperature on the perimeters studied in 2021 using the WATS method

| WATS - 2021 | T°c - Available | T°c - Fault | T°c - Complete |
|---|---|---|---|
| DNCA Finance | 1,71 | 2,28 | 2,21 |
| MSCI Europe | 1,65 | 1,99 | 1,90 |
| MSCI World | 1,70 | 2,25 | 2,14 |

Source: DNCA Finance, Factset, CDP.

Absolute environmental footprints, using the old aggregation methodology, are all up. Within the DNCA Finance perimeter, the increase is limited to 1.3% between that of the MSCI World (1.1%) and that of the MSCI Europe (3.2%).

Absolute environmental footprints in 2022 ($tCO_{2eq}$ /year).

| PEVE - 2022 | Scope 1+2 |
|---|---|
| DNCA Finance | 1 440 215 |
| MSCI Europe | 808 454 644 |
| MSCI World | 2 465 922 328 |

Absolute environmental footprints according to the old methodology (tCO$_{2eq}$ /year).

| PEVE net cash - 2022 | Scope 1+2 |
|---|---|
| DNCA Finance | 2 069 922 |
| MSCI Europe | 874 090 175 |
| MSCI World | 2 593 515 838 |

Absolute environmental footprints in 2021 (tCO$_{2eq}$ /year).

| PEVE net cash - 2021 | Scope 1+2 |
|---|---|
| DNCA Finance | 2 042 690 |
| MSCI Europe | 847 255 540 |
| MSCI World | 2 565 208 647 |

For DNCA Finance, still using the old aggregation methodology, the top 10 "bad" contributors in 2022 remain similar to those in 2021. We calculate a 70% overlap between the two lists. The top 10 is identical using the new aggregation methodology. This year, for the first time, these companies will be the subject of an engagement campaign as part of the publication of our carbon footprint in DNCA Finance's CSR report.

| Company | Contribution % - 2022 | Contribution % - 2021 |
|---|---|---|
| Thyssenkrupp AG | 28,5% | 21,6% |
| ArcelorMittal SA | 11,0% | 11,0% |
| TotalEnergies SE | 5,9% | 6,2% |
| Holcim AG | 5,8% | 0,8% |
| Cie de Saint-Gobain | 5,5% | 5,7% |
| Air Liquide SA | 5,4% | 5,1% |
| Veolia Environnement SA | 5,3% | 8,0% |
| Enel SpA | 1,6% | 2,0% |
| CRH PLC | 1,5% | 1,3% |
| Eni SpA | 1,4% | 1,0% |

Source: DNCA Finance, Factset, CDP.

For comparison (approximations in tCO$_{2eq}$ /year).

| | |
|---|---|
| France 2018 | 444 800 000 |
| RWE (CDP 2022) | 89 600 000 |
| RWE (CDP 2021) | 80 900 000 |

Regarding the environmental footprints standardized by the AUMs, DNCA Finance's footprint is between those of the MSCI Europe and the MSCI World. Furthermore, using the old aggregation methodology, we note an increase in the three perimeters studied. In particular, on the DNCA Finance perimeter, the increase is 31%, above that of the MSCI Europe (24.4%) and the MSCI World (16.7%).

The environmental footprints below are standardized by the AUMs within the scope studied (tCO$_{2eq}$ /year /million euros invested).

| PEVE - 2022 | Scope 1+2 |
|---|---|
| DNCA Finance | 82 |
| MSCI Europe | 94 |
| MSCI World | 53 |

The environmental footprints below are standardized by the AUMs within the scope studied using the old methodology (tCO$_{2eq}$ /year /million euros invested).

| PEVE net cash - 2022 | Scope 1+2 |
|---|---|
| DNCA Finance | 118 |
| MSCI Europe | 102 |
| MSCI World | 56 |

The environmental footprints below are standardized by the AUMs within the scope studied (tCO$_{2eq}$ /year /million euros invested).

| PEVE net cash - 2021 | Scope 1+2 |
|---|---|
| DNCA Finance | 90 |
| MSCI Europe | 82 |
| MSCI World | 48 |

Source: DNCA Finance, Factset, CDP.

DNCA Finance's carbon intensity is between that of the MSCI Europe and the MSCI World. In addition, we note a decline in two of the three perimeters studied. In particular, on the DNCA Finance perimeter, the decline is -21.2%, while that of the MSCI Europe is -1.3% and that of the MSCI World is stable.

DNCA Finance has the highest variation in carbon intensity. In addition, we note a strengthening of the decreases on the three perimeters studied. We remind you that the variation in intensity presented is the weighted average of the variations in intensity of the investments in the scope at the date of calculation.

Carbon intensity (tCO$_{2eq}$ /year/million euros of sales) and variations in intensity in 2022.

| WA | Carbon intensity | Variations in intensity |
|---|---|---|
| DNCA Finance | 141 | -14,3% |
| MSCI Europe | 147 | -13,8% |
| MSCI World | 126 | -11,7% |

Carbon intensity (tCO$_{2eq}$ /year/million euros of sales) and variations in intensity in 2021.

| WA | Carbon intensity | Variations in intensity |
|---|---|---|
| DNCA Finance | 179 | -4,2% |
| MSCI Europe | 149 | -4,9% |
| MSCI World | 126 | -10,0% |

Source: DNCA Finance, Factset, CDP.

Below is a list of companies with whom we would like to engage, or continue, a dialogue on the subject of climate change:

| Top 10 "bad" contributors to DNCA's t°C score | % AUM | Temperature score | Contribution to the DNCA temperature score |
|---|---|---|---|
| ArcelorMittal SA | 0,3% | 2,56 | 0,36 |
| Anonymous issuer | 0,1% | 2,65 | 0,03 |
| Anonymous issuer | 0,1% | 2,10 | 0,03 |
| International Consolidated Airlines Group SA | 0,2% | 2,31 | 0,02 |
| Anonymous issuer | 0,1% | 2,56 | 0,01 |

| The top 10 positions without a temperature score | % AUM |
|---|---|
| BNP Paribas SA | 1,4% |
| Dassault Aviation SA | 0,9% |
| Anonymous issuer | 0,7% |
| D'ieteren Group | 0,7% |
| Amadeus IT Group SA | 0,6% |

Source: DNCA Finance, Factset, CDP.

## 9. DNCA Finance Portfolios - Details for a selection of funds

The funds selected for a detailed presentation of their environmental pressures are funds with more than €500 million in assets under management at the end of 2022 and article 9 funds from the Beyond range. DNCA Invest Alpha Bonds and the INKA DN mandate are portfolios of government bonds. In this report, we do not calculate environmental pressures for these issuers.

| Funds | Total outstanding at 30/12/2022 (€m) | Outstandings analysed (€m) | % analysed |
|---|---|---|---|
| DNCA Invest Alpha Bonds | 6 373,99 | - | 0% |
| Eurose | 2 610,06 | 2 034,65 | 78% |
| DNCA Invest Eurose | 2 069,26 | 1 600,56 | 77% |
| DNCA SRI Euro Quality | 1 996,45 | 1 814,83 | 91% |
| DNCA Invest SRI Europe Growth | 1 108,62 | 1 097,74 | 99% |
| Centifolia | 955,41 | 892,27 | 93% |
| DNCA Opportunités Zone Euro | 857,99 | 844,36 | 98% |
| DNCA Invest Value Europe | 644,85 | 611,34 | 95% |
| Ecureuil Profil 90 (Act Euro) | 629,65 | 605,95 | 96% |
| DNCA Sérénité Plus | 569,12 | 490,80 | 86% |
| DNCA Invest SRI Norden Europe | 546,70 | 544,36 | 100% |
| INKA BN | 526,63 | - | 0% |
| DNCA Invest Beyond Global Leaders | 482,23 | 376,82 | 78% |
| DNCA Invest Beyond Semperosa | 328,71 | 263,76 | 80% |
| DNCA Invest Beyond Alterosa | 177,89 | 167,61 | 94% |
| DNCA Invest Beyond Climate | 91,68 | 82,20 | 90% |
| Alba Value | 56,95 | 48,60 | 85% |

Source: DNCA Finance.

Below are the main environmental pressures for the funds selected (excluding the two portfolios of public issuers). When calculating the statistics using the PEVE method, companies with no information are not restated, as this is equivalent to assigning them zero environmental pressure. For climate trajectories, we present the results according to two weighting methods.

| | AUM (€M) | Consumption (m3/year/M€ - PEVE) | Use Production (ha/M€ - PEVE) | Scope 1&2 GHG emissions (tCO2eq/year/M€ - PEVE) | T°c - Available (°c - ECOTS) | T°c - Available (°c - WATS) |
|---|---|---|---|---|---|---|
| Eurose | 2 034,7 | 227 | <0,01 | 139 | 1,92 | 1,70 |
| DNCA Invest Eurose | 1 600,6 | 163 | 0,01 | 137 | 1,92 | 1,69 |
| DNCA SRI Euro Quality | 1 814,8 | 99 | - | 52 | 1,71 | 1,65 |
| DNCA Invest SRI Europe Growth | 1 097,7 | 42 | - | 21 | 1,85 | 1,83 |
| Centifolia | 892,3 | 89 | - | 70 | 1,77 | 1,64 |
| DNCA Opportunités Zone Euro | 844,4 | 113 | 0,46 | 60 | 1,77 | 1,72 |
| DNCA Invest Value Europe | 611,3 | 915 | - | 88 | 1,72 | 1,68 |
| Ecureuil Profil 90 (Act Euro) | 606,0 | 99 | - | 53 | 1,70 | 1,65 |
| DNCA Sérénité Plus | 490,8 | 382 | - | 284 | 2,06 | 1,76 |
| DNCA Invest SRI Norden Europe | 544,4 | 5 | - | 5 | 1,66 | 1,68 |
| DNCA Invest Beyond Global Leaders | 376,8 | 59 | - | 21 | 2,07 | 2,01 |
| DNCA Invest Beyond Semperosa | 263,8 | 62 | - | 47 | 1,62 | 1,62 |
| DNCA Invest Beyond Alterosa | 167,6 | 130 | 3,45 | 62 | 1,65 | 1,67 |
| DNCA Invest Beyond Climate | 82,2 | 171 | 9,03 | 83 | 1,61 | 1,59 |
| Alba Value | 48,6 | 72 | - | 58 | 1,66 | 1,61 |

Source: DNCA Finance, Factset, CDP.

## 10. Use of water

Absolute environmental footprints in 2022 (ML/year). The DNCA Invest Value Europe portfolio has the highest consumption, while the DNCA Invest SRI Norden Europe portfolio has the lowest.

| 2022 | Number of transmitters | AUM (€M) | Withdrawals | Discharges | Consumption | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| Eurose | 183 | 2 035 | 39 559 | 39 098 | **462** | 21% | 29% |
| DNCA Invest Eurose | 183 | 1 601 | 20 150 | 19 889 | **261** | 21% | 27% |
| DNCA SRI Euro Quality | 37 | 1 815 | 21 537 | 21 358 | **179** | 41% | 44% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 543 | 498 | **46** | 24% | 37% |
| Centifolia | 42 | 892 | 892 | 812 | **80** | 24% | 34% |
| DNCA Opportunités Zone Euro | 46 | 844 | 693 | 598 | **95** | 24% | 30% |
| DNCA Invest Value Europe | 42 | 611 | 1 215 | 654 | **559** | 31% | 30% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 7 268 | 7 208 | **60** | 41% | 44% |
| DNCA Sérénité Plus | 97 | 491 | 16 445 | 16 258 | **187** | 31% | 28% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 45 | 42 | **3** | 14% | 28% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | 161 | 139 | **22** | 28% | 35% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 22 221 | 22 205 | **16** | 34% | 36% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 21 221 | 21 198 | **22** | 29% | 35% |
| DNCA Invest Beyond Climate | 39 | 82 | 6 718 | 6 703 | **14** | 28% | 36% |
| Alba Value | 34 | 49 | 3 328 | 3 324 | **4** | 32% | 34% |

Source: DNCA Finance, Factset, CDP.

Absolute environmental footprints in 2022 according to the old methodology (ML/year). Of the 15 funds selected, 9 saw their attributable water consumption increase between 2021 and 2022. One explanation could be an increase in the coverage rate, either through greater transparency on the part of issuers or through an allocation effect.

| 2022 - net cash | Number of transmitters | AUM (€M) | Withdrawals | Discharges | **Consumption** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| Eurose | 183 | 2 035 | 52 287 | 51 606 | **681** | 21% | 29% |
| DNCA Invest Eurose | 183 | 1 601 | 25 470 | 25 084 | **386** | 21% | 27% |
| DNCA SRI Euro Quality | 37 | 1 815 | 23 984 | 23 794 | **190** | 41% | 44% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 537 | 492 | **46** | 24% | 37% |
| Centifolia | 42 | 892 | 1 141 | 1 048 | **93** | 24% | 34% |
| DNCA Opportunités Zone Euro | 46 | 844 | 786 | 674 | **112** | 24% | 30% |
| DNCA Invest Value Europe | 42 | 611 | 1 346 | 736 | **607** | 31% | 30% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 8 094 | 8 031 | **64** | 41% | 44% |
| DNCA Sérénité Plus | 97 | 491 | 21 105 | 20 805 | **300** | 31% | 28% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 41 | 38 | **3** | 14% | 28% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | 172 | 147 | **24** | 28% | 35% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 24 866 | 24 849 | **17** | 34% | 36% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 23 834 | 23 810 | **22** | 29% | 35% |
| DNCA Invest Beyond Climate | 39 | 82 | 7 506 | 7 490 | **15** | 28% | 36% |
| Alba Value | 34 | 49 | 3 723 | 3 719 | **4** | 32% | 34% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Absolute environmental footprints in 2021 (ML/year). The figures presented include changes to CDP data.

| 2021 - net cash | Number of transmitters | AUM (€M) | Withdrawals | Discharges | **Consumption** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| Eurose | 174 | 2 277 | 15 032 | 14 683 | **348** | 18% | 22% |
| DNCA Invest Eurose | 174 | 1 947 | 13 263 | 12 931 | **331** | 18% | 23% |
| DNCA SRI Euro Quality | 39 | 2 271 | 1 295 | 1 173 | **122** | 31% | 34% |
| DNCA Invest SRI Europe Growth | 35 | 2 130 | 298 | 285 | **13** | 17% | 23% |
| Centifolia | 40 | 1 007 | 1 533 | 1 398 | **136** | 23% | 30% |
| DNCA Opportunités Zone Euro | 51 | 951 | 764 | 710 | **54** | 22% | 24% |
| DNCA Invest Value Europe | 44 | 802 | 2 011 | 1 017 | **986** | 36% | 34% |
| Ecureuil Profil 90 (Act Euro) | 39 | 738 | 433 | 395 | **39** | 31% | 33% |
| DNCA Sérénité Plus | 89 | 379 | 6 092 | 5 938 | **153** | 25% | 25% |
| DNCA Invest SRI Norden Europe | 52 | 812 | 80 | 76 | **4** | 10% | 16% |
| DNCA Invest Beyond Global Leaders | 45 | 666 | 49 | 42 | **7** | 22% | 25% |
| DNCA Invest Beyond Semperosa | 35 | 345 | 25 490 | 25 470 | **20** | 29% | 32% |
| DNCA Invest Beyond Alterosa | 111 | 187 | 28 041 | 28 014 | **24** | 24% | 29% |
| DNCA Invest Beyond Climate | 39 | 98 | 8 361 | 8 348 | **12** | 26% | 32% |
| Alba Value | 33 | 62 | 2 638 | 2 634 | **4** | 33% | 32% |

Source: DNCA Finance, Factset, CDP.

Below, the environmental footprints are normalized by the outstandings of the perimeters studied in 2022 (m3/year/million euros invested). The consumption intensity is highest for the DNCA Invest Value Europe portfolio, while the DNCA Invest SRI Norden Europe portfolio has the lowest consumption intensity.

| 2022 | Number of transmitters | AUM (€M) | Withdrawals | Discharges | **Consumption** | Issuer coverage | AUM coverage |
|------|------------------------|----------|-------------|------------|-----------------|-----------------|--------------|
| Eurose | 183 | 2 035 | 19443 | 19216 | **227** | 21% | 29% |
| DNCA Invest Eurose | 183 | 1 601 | 12589 | 12427 | **163** | 21% | 27% |
| DNCA SRI Euro Quality | 37 | 1 815 | 11867 | 11768 | **99** | 41% | 44% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 495 | 453 | **42** | 24% | 37% |
| Centifolia | 42 | 892 | 999 | 910 | **89** | 24% | 34% |
| DNCA Opportunités Zone Euro | 46 | 844 | 821 | 708 | **113** | 24% | 30% |
| DNCA Invest Value Europe | 42 | 611 | 1988 | 1070 | **915** | 31% | 30% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 11994 | 11895 | **99** | 41% | 44% |
| DNCA Sérénité Plus | 97 | 491 | 33507 | 33125 | **382** | 31% | 28% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 82 | 77 | **5** | 14% | 28% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | 428 | 369 | **59** | 28% | 35% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 84248 | 84186 | **62** | 34% | 36% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 126614 | 126475 | **130** | 29% | 35% |
| DNCA Invest Beyond Climate | 39 | 82 | 81734 | 81551 | **171** | 28% | 36% |
| Alba Value | 34 | 49 | 68469 | 68396 | **72** | 32% | 34% |

Source: DNCA Finance, Factset, CDP.

Environmental footprints for 2022, using the old methodology, normalized (m3/year/million euros invested). Of the 15 funds selected, 12 saw their attributable water consumption intensity increase between 2021 and 2022.

| 2022 - net cash | Number of transmitters | AUM (€M) | Withdrawals | Discharges | **Consumption** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| Eurose | 183 | 2 035 | 25 698 | 25 364 | **335** | 21% | 29% |
| DNCA Invest Eurose | 183 | 1 601 | 15 913 | 15 672 | **241** | 21% | 27% |
| DNCA SRI Euro Quality | 37 | 1 815 | 13 216 | 13 111 | **105** | 41% | 44% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 490 | 448 | **42** | 24% | 37% |
| Centifolia | 42 | 892 | 1 279 | 1 175 | **104** | 24% | 34% |
| DNCA Opportunités Zone Euro | 46 | 844 | 930 | 798 | **132** | 24% | 30% |
| DNCA Invest Value Europe | 42 | 611 | 2 201 | 1 204 | **994** | 31% | 30% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 13 358 | 13 253 | **105** | 41% | 44% |
| DNCA Sérénité Plus | 97 | 491 | 43 002 | 42 390 | **611** | 31% | 28% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 74 | 70 | **5** | 14% | 28% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | 456 | 391 | **65** | 28% | 35% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 94 275 | 94 210 | **65** | 34% | 36% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 142 202 | 142 061 | **132** | 29% | 35% |
| DNCA Invest Beyond Climate | 39 | 82 | 91 314 | 91 119 | **183** | 28% | 36% |
| Alba Value | 34 | 49 | 76 602 | 76 526 | **77** | 32% | 34% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Standardized environmental footprints for 2021 (m3/year/million euros invested). The figures presented include changes to CDP data.

| 2021 - net cash | Number of transmitters | AUM (€M) | Withdrawals | Discharges | **Consumption** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| Eurose | 174 | 2 277 | 6 828 | 6 670 | **158** | 18% | 22% |
| DNCA Invest Eurose | 174 | 1 947 | 6 942 | 6 769 | **173** | 18% | 23% |
| DNCA SRI Euro Quality | 39 | 2 271 | 582 | 527 | **55** | 31% | 34% |
| DNCA Invest SRI Europe Growth | 35 | 2 130 | 142 | 136 | **6** | 17% | 23% |
| Centifolia | 40 | 1 007 | 1 576 | 1 437 | **139** | 23% | 30% |
| DNCA Opportunités Zone Euro | 51 | 951 | 803 | 747 | **57** | 22% | 24% |
| DNCA Invest Value Europe | 44 | 802 | 2 507 | 1 269 | **1 230** | 36% | 34% |
| Ecureuil Profil 90 (Act Euro) | 39 | 738 | 599 | 545 | **54** | 31% | 33% |
| DNCA Sérénité Plus | 89 | 379 | 16 092 | 15 683 | **404** | 25% | 25% |
| DNCA Invest SRI Norden Europe | 52 | 812 | 98 | 94 | **5** | 10% | 16% |
| DNCA Invest Beyond Global Leaders | 45 | 666 | 74 | 63 | **11** | 22% | 25% |
| DNCA Invest Beyond Semperosa | 35 | 345 | 79 056 | 78 993 | **63** | 29% | 32% |
| DNCA Invest Beyond Alterosa | 111 | 187 | 150 662 | 150 517 | **131** | 24% | 29% |
| DNCA Invest Beyond Climate | 39 | 98 | 89 500 | 89 360 | **130** | 26% | 32% |
| Alba Value | 33 | 62 | 44 597 | 44 526 | **71** | 33% | 32% |

Source: DNCA Finance, Factset, CDP.

## 11.  Land use and transformation

Absolute environmental footprints in 2022 (ha). The DNCA Invest Beyond Climate portfolio has the highest land use, while 10 of the 15 portfolios have zero land use. The footprints are probably influenced by the limited hedging rates.

| 2022 | Number of transmitters | AUM (€M) | Production use | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 39 | 82 | **742,1** | - | 113,4 | 7,7% | 5,6% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **577,5** | - | 58,8 | 2,0% | 3,4% |
| DNCA Opportunités Zone Euro | 46 | 844 | **388,0** | - | 311,2 | 2,2% | 2,3% |
| Eurose | 183 | 2 035 | **9,5** | - | 4,6 | 0,5% | 0,1% |
| DNCA Invest Eurose | 183 | 1 601 | **8,3** | - | 4,0 | 0,5% | 0,1% |
| DNCA Sérénité Plus | 97 | 491 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 42 | 611 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 37 | 1 815 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 42 | 892 | **-** | - | - | 0,0% | 0,0% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **-** | - | - | 0,0% | 0,0% |
| Alba Value | 34 | 49 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

Absolute environmental footprints in 2022 according to the old methodology (ha). For some funds, we note very significant variations between 2021 and 2022. This can be explained by the addition of investments publishing information on land use. For example, for DNCA Opportunités Zone Euro, the land-use footprint is entirely explained by the addition of Vallourec to the portfolio.

| 2022 - net cash | Number of transmitters | AUM (€M) | **Production use** | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 39 | 82 | **711,5** | - | 102,0 | 7,7% | 5,6% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **548,4** | - | 56,0 | 2,0% | 3,4% |
| DNCA Opportunités Zone Euro | 46 | 844 | **482,9** | - | 387,3 | 2,2% | 2,3% |
| Eurose | 183 | 2 035 | **9,5** | - | 4,6 | 0,5% | 0,1% |
| DNCA Invest Eurose | 183 | 1 601 | **8,3** | - | 4,0 | 0,5% | 0,1% |
| DNCA Sérénité Plus | 97 | 491 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 42 | 611 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 37 | 1 815 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 42 | 892 | **-** | - | - | 0,0% | 0,0% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **-** | - | - | 0,0% | 0,0% |
| Alba Value | 34 | 49 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Absolute environmental footprints in 2021 according to the old methodology (ha).

| 2021 - net cash | Number of transmitters | AUM (€M) | **Production use** | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 40 | 98 | **688,3** | 0,0 | 43,0 | 10,0% | 6,2% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **561,6** | - | 77,0 | 1,8% | 3,1% |
| DNCA Opportunités Zone Euro | 51 | 951 | **-** | - | - | 0,0% | 0,0% |
| Eurose | 174 | 2 277 | **16,1** | - | 8,3 | 1,1% | 1,5% |
| DNCA Invest Eurose | 174 | 1 947 | **14,0** | - | 7,1 | 1,1% | 1,4% |
| DNCA Sérénité Plus | 89 | 379 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 44 | 802 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 40 | 2 271 | **4,7** | - | 11,0 | 2,5% | 4,1% |
| DNCA Invest Beyond Global Leaders | 45 | 666 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 40 | 1 007 | **1,9** | - | 4,4 | 2,5% | 3,7% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **1,4** | - | 3,3 | 2,5% | 3,8% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **0,5** | - | 1,1 | 2,9% | 2,7% |
| Alba Value | 34 | 62 | **0,1** | - | 0,3 | 2,9% | 4,7% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

Below, the environmental footprints for 2022 are standardized by the assets in the scope studied (ha/million euros invested).

| 2022 | Number of transmitters | AUM (€M) | Production use | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 39 | 82 | **9,0** | - | 1,4 | 7,7% | 5,6% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **3,4** | - | 0,4 | 2,0% | 3,4% |
| DNCA Opportunités Zone Euro | 46 | 844 | **0,5** | - | 0,4 | 2,2% | 2,3% |
| Eurose | 183 | 2 035 | **<0,1** | - | 0,0 | 0,5% | 0,1% |
| DNCA Invest Eurose | 183 | 1 601 | **<0,1** | - | 0,0 | 0,5% | 0,1% |
| DNCA Sérénité Plus | 97 | 491 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 42 | 611 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 37 | 1 815 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 42 | 892 | **-** | - | - | 0,0% | 0,0% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **-** | - | - | 0,0% | 0,0% |
| Alba Value | 34 | 49 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

Below, the environmental footprints for 2022, according to the old methodology, are normalized by the assets in the scope studied (ha/million euros invested). As with the absolute footprint, for some funds we see very significant variations between 2021 and 2022. This can be explained by the addition of investments publishing information on land use. For example, for DNCA Opportunités Zone Euro, the usage footprint is entirely explained by the addition of Vallourec to the portfolio.

| 2022 - net cash | Number of transmitters | AUM (€M) | **Production use** | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 39 | 82 | **8,7** | - | 1,2 | 7,7% | 5,6% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **3,3** | - | 0,3 | 2,0% | 3,4% |
| DNCA Opportunités Zone Euro | 46 | 844 | **0,6** | - | 0,5 | 2,2% | 2,3% |
| Eurose | 183 | 2 035 | **<0,1** | - | 0,0 | 0,5% | 0,1% |
| DNCA Invest Eurose | 183 | 1 601 | **<0,1** | - | 0,0 | 0,5% | 0,1% |
| DNCA Sérénité Plus | 97 | 491 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 42 | 611 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 37 | 1 815 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Global Leaders | 40 | 377 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 42 | 892 | **-** | - | - | 0,0% | 0,0% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **-** | - | - | 0,0% | 0,0% |
| Alba Value | 34 | 49 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Below, the environmental footprints for 2021, according to the old methodology, are standardized by the amount of land in the scope studied (ha/million euros invested).

| 2021 - net cash | Number of transmitters | AUM (€M) | Production use | Conversion | Other uses | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Climate | 40 | 98 | **7,0** | <0,1 | 0,4 | 10,0% | 6,2% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **3,0** | - | 0,4 | 1,8% | 3,1% |
| DNCA Opportunités Zone Euro | 51 | 951 | **-** | - | - | 0,0% | 0,0% |
| Eurose | 174 | 2 277 | **<0,1** | - | <0,1 | 1,1% | 1,5% |
| DNCA Invest Eurose | 174 | 1 947 | **<0,1** | - | <0,1 | 1,1% | 1,4% |
| DNCA Sérénité Plus | 89 | 379 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Value Europe | 44 | 802 | **-** | - | - | 0,0% | 0,0% |
| DNCA SRI Euro Quality | 40 | 2 271 | **<0,1** | - | <0,1 | 2,5% | 4,1% |
| DNCA Invest Beyond Global Leaders | 45 | 666 | **-** | - | - | 0,0% | 0,0% |
| Centifolia | 40 | 1 007 | **<0,1** | - | <0,1 | 2,5% | 3,7% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **<0,1** | - | <0,1 | 2,5% | 3,8% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **-** | - | - | 0,0% | 0,0% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **<0,1** | - | <0,1 | 2,9% | 2,7% |
| Alba Value | 34 | 62 | **<0,1** | - | <0,1 | 2,9% | 4,7% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **-** | - | - | 0,0% | 0,0% |

Source: DNCA Finance, Factset, CDP.

## 12. Climate change

Temperature 2022 - ECOTS. 13 of the 15 portfolios have implied temperatures below 2.0°c. The remaining two are slightly above the 2.0°c threshold.

| 2022 | Number of transmitters | AUM (€M) | T°c - Available | T°c - Fault | T°c - Complete | Issuer coverage (Available) | AUM coverage (Available) |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | **2,07** | 2,15 | 2,15 | 40% | 48% |
| DNCA Sérénité Plus | 97 | 491 | **2,06** | 2,07 | 2,07 | 71% | 74% |
| Eurose | 183 | 2 035 | **1,92** | 1,95 | 1,95 | 60% | 70% |
| DNCA Invest Eurose | 183 | 1 601 | **1,92** | 1,96 | 1,96 | 60% | 70% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **1,85** | 1,91 | 1,91 | 65% | 76% |
| Centifolia | 42 | 892 | **1,77** | 1,92 | 1,92 | 62% | 73% |
| DNCA Opportunités Zone Euro | 46 | 844 | **1,77** | 1,86 | 1,86 | 67% | 70% |
| DNCA Invest Value Europe | 42 | 611 | **1,72** | 1,74 | 1,73 | 83% | 83% |
| DNCA SRI Euro Quality | 37 | 1 815 | **1,71** | 1,71 | 1,71 | 76% | 84% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **1,70** | 1,71 | 1,71 | 76% | 84% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **1,66** | 2,09 | 2,09 | 49% | 63% |
| Alba Value | 34 | 49 | **1,66** | 1,67 | 1,66 | 76% | 84% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **1,65** | 1,73 | 1,73 | 61% | 67% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **1,62** | 1,64 | 1,63 | 78% | 83% |
| DNCA Invest Beyond Climate | 39 | 82 | **1,61** | 1,64 | 1,63 | 62% | 70% |

Source: DNCA Finance, Factset, CDP.

Temperature 2022 - EOTS

Between 2021 and 2022, we see a general decline in the temperature scores of the funds selected. As discussed in the introduction, this improvement can be explained by the increase in the number of companies with a temperature score (+140%), reducing the use of the default temperature. In addition, the improvement is explained by the increase in the number of companies whose targets are validated by the Science Based Target Initiative (SBTi, +117%), increasing the proportion of temperatures below 2°c.

| 2022 - net cash | Number of transmitters | AUM (€M) | T°c - Available | T°c - Fault | T°c - Complete | Issuer coverage (Available) | AUM coverage (Available) |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | 2,11 | 2,17 | 2,17 | 40% | 48% |
| DNCA Sérénité Plus | 97 | 491 | 1,94 | 1,96 | 1,96 | 71% | 74% |
| Eurose | 183 | 2 035 | 1,87 | 1,90 | 1,90 | 60% | 71% |
| DNCA Invest Eurose | 183 | 1 601 | 1,87 | 1,90 | 1,90 | 60% | 70% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 1,85 | 1,91 | 1,91 | 65% | 76% |
| Centifolia | 42 | 892 | 1,77 | 1,95 | 1,95 | 57% | 72% |
| DNCA Opportunités Zone Euro | 46 | 844 | 1,76 | 1,93 | 1,93 | 63% | 66% |
| DNCA Invest Value Europe | 42 | 611 | 1,72 | 1,74 | 1,74 | 83% | 83% |
| DNCA SRI Euro Quality | 37 | 1 815 | 1,71 | 1,71 | 1,71 | 76% | 84% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 1,71 | 1,71 | 1,71 | 76% | 84% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 1,65 | 2,08 | 2,08 | 49% | 63% |
| Alba Value | 34 | 49 | 1,66 | 1,67 | 1,66 | 76% | 84% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 1,65 | 1,71 | 1,71 | 61% | 67% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 1,63 | 1,65 | 1,64 | 78% | 83% |
| DNCA Invest Beyond Climate | 39 | 82 | 1,61 | 1,64 | 1,63 | 62% | 70% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Temperature 2021 - EOTS

| 2021 - net cash | Number of transmitters | AUM (€M) | T°c - Available | T°c - Fault | T°c - Complete | Issuer coverage (Available) | AUM coverage (Available) |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **2,84** | 2,95 | 2,93 | 27% | 30% |
| DNCA Sérénité Plus | 89 | 379 | **2,17** | 2,17 | 2,17 | 56% | 64% |
| Eurose | 174 | 2 277 | **2,00** | 2,03 | 2,03 | 56% | 64% |
| DNCA Invest Eurose | 174 | 1 947 | **2,01** | 2,04 | 2,04 | 56% | 64% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **1,95** | 2,48 | 2,44 | 39% | 47% |
| Centifolia | 40 | 1 007 | **2,08** | 2,18 | 2,17 | 50% | 71% |
| DNCA Opportunités Zone Euro | 51 | 951 | **1,91** | 2,19 | 2,19 | 55% | 57% |
| DNCA Invest Value Europe | 44 | 802 | **1,80** | 2,12 | 1,97 | 59% | 61% |
| DNCA SRI Euro Quality | 40 | 2 271 | **1,95** | 1,97 | 1,96 | 65% | 76% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **1,95** | 1,99 | 1,97 | 65% | 75% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **1,79** | 2,33 | 2,32 | 29% | 41% |
| Alba Value | 34 | 62 | **1,79** | 1,80 | 1,80 | 79% | 84% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **1,74** | 1,79 | 1,78 | 59% | 63% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **1,75** | 1,77 | 1,76 | 74% | 80% |
| DNCA Invest Beyond Climate | 40 | 98 | **1,70** | 1,73 | 1,73 | 65% | 74% |

Source: DNCA Finance, Factset, CDP.

Temperature 2022 - WATS

Between 2021 and 2022, we see a drop in temperature scores for 11 of the 15 funds selected. The 4 remaining funds see their temperature rise slightly.

| Portfolio | Number of transmitters | AUM (€M) | **T°c - Available** | T°c - Fault | T°c - Complete | Issuer coverage (Available) | AUM coverage (Available) |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | **2,01** | 2,57 | 2,57 | 40% | 48% |
| DNCA Sérénité Plus | 97 | 491 | **1,76** | 2,06 | 2,05 | 73% | 77% |
| Eurose | 183 | 2 035 | **1,70** | 2,08 | 2,03 | 63% | 73% |
| DNCA Invest Eurose | 183 | 1 601 | **1,69** | 2,09 | 2,04 | 63% | 72% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **1,83** | 2,13 | 2,13 | 65% | 76% |
| Centifolia | 42 | 892 | **1,64** | 2,03 | 1,94 | 62% | 73% |
| DNCA Opportunités Zone Euro | 46 | 844 | **1,72** | 2,11 | 2,07 | 70% | 71% |
| DNCA Invest Value Europe | 42 | 611 | **1,68** | 1,88 | 1,77 | 86% | 86% |
| DNCA SRI Euro Quality | 37 | 1 815 | **1,65** | 1,82 | 1,81 | 78% | 88% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **1,65** | 1,82 | 1,81 | 78% | 88% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **1,68** | 2,20 | 2,19 | 49% | 63% |
| Alba Value | 34 | 49 | **1,61** | 1,80 | 1,78 | 79% | 87% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **1,67** | 2,11 | 2,08 | 62% | 69% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **1,62** | 1,82 | 1,79 | 81% | 86% |
| DNCA Invest Beyond Climate | 39 | 82 | **1,59** | 1,99 | 1,94 | 64% | 73% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Temperature 2021 - WATS

| Portfolio | Number of transmitters | AUM (€M) | T°c - Available | T°c - Fault | T°c - Complete | Issuer coverage (Available) | AUM coverage (Available) |
|---|---|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **1,92** | 2,78 | 2,76 | 29% | 32% |
| DNCA Sérénité Plus | 89 | 379 | **1,80** | 2,30 | 2,21 | 58% | 65% |
| Eurose | 174 | 2 277 | **1,72** | 2,25 | 2,13 | 57% | 65% |
| DNCA Invest Eurose | 174 | 1 947 | **1,72** | 2,25 | 2,14 | 57% | 64% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **1,69** | 2,39 | 2,31 | 42% | 54% |
| Centifolia | 40 | 1 007 | **1,67** | 2,10 | 1,99 | 50% | 71% |
| DNCA Opportunités Zone Euro | 51 | 951 | **1,71** | 2,28 | 2,23 | 59% | 62% |
| DNCA Invest Value Europe | 44 | 802 | **1,71** | 2,29 | 2,15 | 59% | 61% |
| DNCA SRI Euro Quality | 40 | 2 271 | **1,68** | 1,98 | 1,94 | 68% | 80% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **1,68** | 2,01 | 1,96 | 68% | 78% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **1,60** | 2,54 | 2,49 | 29% | 41% |
| Alba Value | 34 | 62 | **1,63** | 1,88 | 1,80 | 79% | 84% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **1,72** | 2,26 | 2,17 | 61% | 64% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **1,63** | 1,91 | 1,86 | 77% | 82% |
| DNCA Invest Beyond Climate | 40 | 98 | **1,61** | 1,99 | 1,90 | 68% | 76% |

Source: DNCA Finance, Factset, CDP.

Absolute carbon emissions in 2022 (tCO2eq/year). Eurose and DNCA Invest Eurose have the highest absolute carbon emissions. DNCA Invest SRI Norden Europe has the lowest level of emissions.

| 2022 | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | **7 922** | 68% | 79% |
| DNCA Sérénité Plus | 97 | 491 | **139 381** | 80% | 82% |
| Eurose | 183 | 2 035 | **283 587** | 74% | 85% |
| DNCA Invest Eurose | 183 | 1 601 | **219 048** | 74% | 84% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **22 628** | 92% | 95% |
| Centifolia | 42 | 892 | **62 715** | 88% | 95% |
| DNCA Opportunités Zone Euro | 46 | 844 | **50 400** | 89% | 88% |
| DNCA Invest Value Europe | 42 | 611 | **53 588** | 98% | 97% |
| DNCA SRI Euro Quality | 37 | 1 815 | **95 186** | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **31 846** | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **2 822** | 86% | 94% |
| Alba Value | 34 | 49 | **2 800** | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **10 347** | 78% | 83% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **12 307** | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | **6 794** | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

Absolute carbon emissions in 2022 using the old method (tCO2eq/year). We note an increase for 5 of the 15 funds selected.

| 2022 - net cash | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | 8 222 | 68% | 79% |
| DNCA Sérénité Plus | 97 | 491 | 265 328 | 80% | 82% |
| Eurose | 183 | 2 035 | 472 688 | 74% | 85% |
| DNCA Invest Eurose | 183 | 1 601 | 363 223 | 74% | 85% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 22 469 | 92% | 95% |
| Centifolia | 42 | 892 | 77 366 | 83% | 94% |
| DNCA Opportunités Zone Euro | 46 | 844 | 61 979 | 85% | 84% |
| DNCA Invest Value Europe | 42 | 611 | 61 657 | 98% | 97% |
| DNCA SRI Euro Quality | 37 | 1 815 | 101 391 | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 33 936 | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 2 695 | 86% | 94% |
| Alba Value | 34 | 49 | 3 082 | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 11 600 | 78% | 83% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 12 033 | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | 7 391 | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Absolute carbon emissions in 2021 (tCO2eq/year).

| 2021 - net cash | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **3 752** | 51% | 57% |
| DNCA Sérénité Plus | 89 | 379 | **120 746** | 82% | 87% |
| Eurose | 174 | 2 277 | **405 042** | 79% | 88% |
| DNCA Invest Eurose | 174 | 1 947 | **342 535** | 79% | 88% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **39 194** | 81% | 85% |
| Centifolia | 40 | 1 007 | **132 227** | 88% | 93% |
| DNCA Opportunités Zone Euro | 51 | 951 | **36 992** | 84% | 88% |
| DNCA Invest Value Europe | 44 | 802 | **102 762** | 93% | 94% |
| DNCA SRI Euro Quality | 40 | 2 271 | **114 732** | 93% | 94% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **36 494** | 93% | 94% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **5 057** | 60% | 73% |
| Alba Value | 34 | 62 | **5 614** | 100% | 100% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **13 218** | 81% | 85% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **22 529** | 91% | 95% |
| DNCA Invest Beyond Climate | 40 | 98 | **10 514** | 90% | 95% |

Source: DNCA Finance, Factset, CDP.

Below, carbon emissions in 2022 are standardized by the AUMs of the areas studied (tCO2eq/year/million euros invested).

| 2022 | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | **21** | 68% | 79% |
| DNCA Sérénité Plus | 97 | 491 | **284** | 80% | 82% |
| Eurose | 183 | 2 035 | **139** | 74% | 85% |
| DNCA Invest Eurose | 183 | 1 601 | **137** | 74% | 84% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **21** | 92% | 95% |
| Centifolia | 42 | 892 | **70** | 88% | 95% |
| DNCA Opportunités Zone Euro | 46 | 844 | **60** | 89% | 88% |
| DNCA Invest Value Europe | 42 | 611 | **88** | 98% | 97% |
| DNCA SRI Euro Quality | 37 | 1 815 | **52** | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **53** | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **5** | 86% | 94% |
| Alba Value | 34 | 49 | **58** | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **62** | 78% | 83% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **47** | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | **83** | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

Below, carbon emissions in 2022, according to the old methodology, are normalized by the AUM of the perimeters studied (tCO2eq/year/million euros invested). We note an increase in the normalized footprint for 8 of the 15 funds selected.

| 2022 - net cash | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | 22 | 68% | 79% |
| DNCA Sérénité Plus | 97 | 491 | 541 | 80% | 82% |
| Eurose | 183 | 2 035 | 232 | 74% | 85% |
| DNCA Invest Eurose | 183 | 1 601 | 227 | 74% | 85% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 20 | 92% | 95% |
| Centifolia | 42 | 892 | 87 | 83% | 94% |
| DNCA Opportunités Zone Euro | 46 | 844 | 73 | 85% | 84% |
| DNCA Invest Value Europe | 42 | 611 | 101 | 98% | 97% |
| DNCA SRI Euro Quality | 37 | 1 815 | 56 | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 56 | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 5 | 86% | 94% |
| Alba Value | 34 | 49 | 63 | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 69 | 78% | 83% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 46 | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | 90 | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Below, carbon emissions in 2021 are standardized by the AUMs of the areas studied (tCO2eq/year/million euros invested).

| 2021 - net cash | Number of transmitters | AUM (€M) | Scope 1&2 GHG emissions | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **6** | 51% | 57% |
| DNCA Sérénité Plus | 89 | 379 | **319** | 82% | 87% |
| Eurose | 174 | 2 277 | **178** | 79% | 88% |
| DNCA Invest Eurose | 174 | 1 947 | **176** | 79% | 88% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **18** | 81% | 85% |
| Centifolia | 40 | 1 007 | **131** | 88% | 93% |
| DNCA Opportunités Zone Euro | 51 | 951 | **39** | 84% | 88% |
| DNCA Invest Value Europe | 44 | 802 | **128** | 93% | 94% |
| DNCA SRI Euro Quality | 40 | 2 271 | **51** | 93% | 94% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **49** | 93% | 94% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **6** | 60% | 73% |
| Alba Value | 34 | 62 | **91** | 100% | 100% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **71** | 81% | 85% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **65** | 91% | 95% |
| DNCA Invest Beyond Climate | 40 | 98 | **107** | 90% | 95% |

Source: DNCA Finance, Factset, CDP.

Below are the carbon intensities for 2022 (tCO2eq/year/million euros turnover). Only 2 of the 15 funds selected have increased their carbon intensity.

| 2022 | Number of transmitters | AUM (€M) | Carbon intensity | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | 58 | 68% | 79% |
| DNCA Sérénité Plus | 97 | 491 | 286 | 82% | 85% |
| Eurose | 183 | 2 035 | 168 | 77% | 87% |
| DNCA Invest Eurose | 183 | 1 601 | 164 | 77% | 87% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | 78 | 92% | 95% |
| Centifolia | 42 | 892 | 91 | 88% | 95% |
| DNCA Opportunités Zone Euro | 46 | 844 | 82 | 89% | 88% |
| DNCA Invest Value Europe | 42 | 611 | 148 | 100% | 100% |
| DNCA SRI Euro Quality | 37 | 1 815 | 162 | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | 162 | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | 19 | 86% | 94% |
| Alba Value | 34 | 49 | 141 | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | 126 | 78% | 83% |
| DNCA Invest Beyond Semperosa | 32 | 264 | 103 | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | 196 | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

Below are the carbon intensities for 2021 (tCO2eq/year/million euros of sales).

| 2021 | Number of transmitters | AUM (€M) | **Carbon intensity** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **25** | 51% | 57% |
| DNCA Sérénité Plus | 89 | 379 | **463** | 84% | 88% |
| Eurose | 174 | 2 277 | **284** | 80% | 88% |
| DNCA Invest Eurose | 174 | 1 947 | **269** | 80% | 88% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **94** | 81% | 85% |
| Centifolia | 40 | 1 007 | **152** | 90% | 94% |
| DNCA Opportunités Zone Euro | 51 | 951 | **60** | 88% | 91% |
| DNCA Invest Value Europe | 44 | 802 | **228** | 95% | 96% |
| DNCA SRI Euro Quality | 40 | 2 271 | **164** | 93% | 94% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **164** | 93% | 94% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **43** | 60% | 73% |
| Alba Value | 34 | 62 | **186** | 100% | 100% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **169** | 81% | 85% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **220** | 91% | 95% |
| DNCA Invest Beyond Climate | 40 | 98 | **291** | 90% | 95% |

Source: DNCA Finance, Factset, CDP.

Below are the variations in carbon intensity in 2022 (%). We see a general amplification of the decreases in intensity of the funds selected.

| Portfolio | Number of transmitters | AUM (€M) | **Carbon intensity variation** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 40 | 377 | **-13,6%** | 60% | 72% |
| DNCA Sérénité Plus | 97 | 491 | **-13,9%** | 81% | 84% |
| Eurose | 183 | 2 035 | **-14,1%** | 74% | 85% |
| DNCA Invest Eurose | 183 | 1 601 | **-13,8%** | 74% | 85% |
| DNCA Invest SRI Europe Growth | 37 | 1 098 | **-17,8%** | 84% | 92% |
| Centifolia | 42 | 892 | **-20,8%** | 86% | 95% |
| DNCA Opportunités Zone Euro | 46 | 844 | **-12,2%** | 83% | 83% |
| DNCA Invest Value Europe | 42 | 611 | **-20,0%** | 93% | 94% |
| DNCA SRI Euro Quality | 37 | 1 815 | **-11,1%** | 89% | 92% |
| Ecureuil Profil 90 (Act Euro) | 37 | 606 | **-11,2%** | 89% | 92% |
| DNCA Invest SRI Norden Europe | 43 | 544 | **-29,4%** | 72% | 86% |
| Alba Value | 34 | 49 | **-14,5%** | 91% | 94% |
| DNCA Invest Beyond Alterosa | 102 | 168 | **-12,1%** | 75% | 80% |
| DNCA Invest Beyond Semperosa | 32 | 264 | **-14,0%** | 91% | 92% |
| DNCA Invest Beyond Climate | 39 | 82 | **-15,2%** | 85% | 89% |

Source: DNCA Finance, Factset, CDP.

Below are the variations in carbon intensity in 2021 (%).

| Portfolio | Number of transmitters | AUM (€M) | **Carbon intensity variation** | Issuer coverage | AUM coverage |
|---|---|---|---|---|---|
| DNCA Invest Beyond Global Leaders | 45 | 666 | **-6,7%** | 51% | 57% |
| DNCA Sérénité Plus | 89 | 379 | **-10,3%** | 84% | 88% |
| Eurose | 174 | 2 277 | **-1,7%** | 79% | 87% |
| DNCA Invest Eurose | 174 | 1 947 | **-1,9%** | 79% | 87% |
| DNCA Invest SRI Europe Growth | 36 | 2 130 | **-13,8%** | 78% | 85% |
| Centifolia | 40 | 1 007 | **3,8%** | 88% | 94% |
| DNCA Opportunités Zone Euro | 51 | 951 | **-3,7%** | 84% | 87% |
| DNCA Invest Value Europe | 44 | 802 | **1,0%** | 95% | 96% |
| DNCA SRI Euro Quality | 40 | 2 271 | **0,1%** | 88% | 88% |
| Ecureuil Profil 90 (Act Euro) | 40 | 738 | **-0,3%** | 88% | 88% |
| DNCA Invest SRI Norden Europe | 52 | 812 | **-9,5%** | 54% | 65% |
| Alba Value | 34 | 62 | **-0,2%** | 94% | 98% |
| DNCA Invest Beyond Alterosa | 111 | 187 | **-7,4%** | 79% | 83% |
| DNCA Invest Beyond Semperosa | 35 | 345 | **-4,9%** | 89% | 94% |
| DNCA Invest Beyond Climate | 40 | 98 | **-3,6%** | 83% | 88% |

Source: DNCA Finance, Factset, CDP.

● KPI stable compared with N-1

● KPI improved on N-1

● KPI downgraded compared with N-1

# V. TOOLS FOR ENGAGEMENT - THE CASE OF CLIMATE CHANGE

In line with our objectives and ambitions, DNCA Finance is putting in place the necessary tools and methods. The topic of climate change has historically received the most attention. In this section we present the tools and methods put in place at DNCA Finance on the subject of climate change.

## A. Identification of commitment targets: Attribution analysis of DNCA Finance's main temperature contributors

In line with our commitment to reduce the temperature of our investments, DNCA Finance seeks to engage key contributors to change their targets in order to reduce their contributions and °c scores. As proposed in last year's Environmental Pressures report, we are using the attribution tool to identify key contributors that are relevant to engage.

To do this, we break down each contribution into a weight effect, a temperature effect and a weight X temperature interaction effect. The interpretation of these effects is as follows:

- A positive weight effect indicates that the weight of the emitter leads to a greater contribution to the aggregate temperature. A negative weight effect means that the sender's weight makes a smaller contribution to the aggregate temperature.

- A positive temperature effect indicates that the temperature of the emitter makes a greater contribution to the aggregate temperature. A negative temperature effect means that the emitter's temperature contributes less to the aggregate temperature.

- A positive interaction effect is obtained when an emitter with a lower than average temperature has a lower than average weight, or when an emitter with a higher than average temperature has a higher than average weight. A negative interaction effect is obtained when an emitter with a lower-than-average temperature has a higher-than-average weight, or when an emitter with a higher-than-average temperature has a lower-than-average weight.

Using this last effect, we decide to engage in 2023 the main contributors with a positive interaction effect and a t°c score greater than 2°c. Using ABA temp, we apply this rule and identify the following 10 target companies (we use the temperature scores available and the ECOTS weighting):

| Top 10 "bad" contributors to DNCA's t°C score | % AUM | Temperature score | Contribution to the DNCA temperature score |
|---|---|---|---|
| ArcelorMittal SA | 0,3% | 2,56 | 0,36 |
| Anonymous issuer | 0,1% | 2,65 | 0,03 |
| Anonymous issuer | 0,1% | 2,10 | 0,03 |
| International Consolidated Airlines Group SA | 0,2% | 2,31 | 0,02 |
| Anonymous issuer | 0,1% | 2,56 | 0,01 |
| Anonymous issuer | 0,0% | 2,09 | 0,01 |
| Associated British Foods PLC | 0,2% | 2,22 | 0,01 |
| Naturgy Finance BV | 0,1% | 2,25 | 0,01 |
| Anonymous issuer | 0,0% | 3,10 | 0,01 |
| Elis SA | 0,2% | 3,10 | 0,01 |

In addition, as in previous years, we identify the main DNCA Finance positions that do not have a temperature score. Thanks to ABA temp we identify the following 10 target companies

| The top 10 positions without a temperature score | % AUM |
|---|---|
| BNP Paribas SA | 1,4% |
| Dassault Aviation SA | 0,9% |
| Anonymous issuer | 0,7% |
| D'ieteren Group | 0,7% |
| Amadeus IT Group SA | 0,6% |
| Adyen NV | 0,6% |
| Stellantis NV | 0,6% |
| IMCD NV | 0,5% |
| Universal Music Group NV | 0,5% |
| IPSOS | 0,5% |

Source: DNCA Finance, Factset, CDP.

## B. Analysis of engagement scenarios

We propose to simulate the impact of different commitment scenarios on the temperature score of the areas studied.

The 4 scenarios selected are among those proposed by SBTi :

- In scenario 1, all portfolio companies that have not set emission reduction targets would be committed and would set themselves a 2°c alignment.

- In scenario 2, all the companies that have already set emission reduction ambitions would be committed and would set themselves an alignment well below 2°c. This is simulated by setting an alignment of 1.75°c.

- In scenario 4a, all the companies we decide to commit to would set themselves a 2°c alignment.

- In scenario 4b, all the companies we decide to engage would set themselves a 1.75°c alignment.

The 4 scenarios selected enable the aggregate temperature of DNCA Finance's portfolio to be reduced more or less significantly.

The most significant gain for the ECOTS weighting is obtained with scenario 2, whereas it is obtained with scenario 1 for the WATS weighting. This reflects greater ambitions on stocks with high GHG emissions.

Furthermore, if our commitment actions were to achieve their objective, we would be able to significantly reduce DNCA Finance's temperature from -3.4% to -8.4% depending on the aggregation method and the scenario adopted.

**Effect of applying the scenarios on the default basis**

|  | ECOTS Default | WATS Default |
|---|---|---|
| DNCA - Actuel | 1,91 | 2,06 |
| DNCA - Scenario 1 | 1,86 | **1,78** |
| % | -2,6% | **-13,6%** |
| DNCA - Scenario 2 | **1,74** | 1,98 |
| % | **-8,9%** | -3,9% |
| DNCA - Scenario 4 a | 1,82 | 1,99 |
| % | -4,7% | -3,4% |
| DNCA - Scenario 4 b | 1,75 | 1,96 |
| % | -8,4% | -4,9% |

Source: DNCA Finance, Factset, CDP.

## C. ABA Temp: DNCA Finance's portfolio temperature dashboard

Managers and financial analysts have access to ABA Temp, a temperature dashboard. This tool enables them to analyse the temperature of their portfolios and integrate this dimension into their investment decisions.

**Figure 6 Screenshot of ABA Temp**
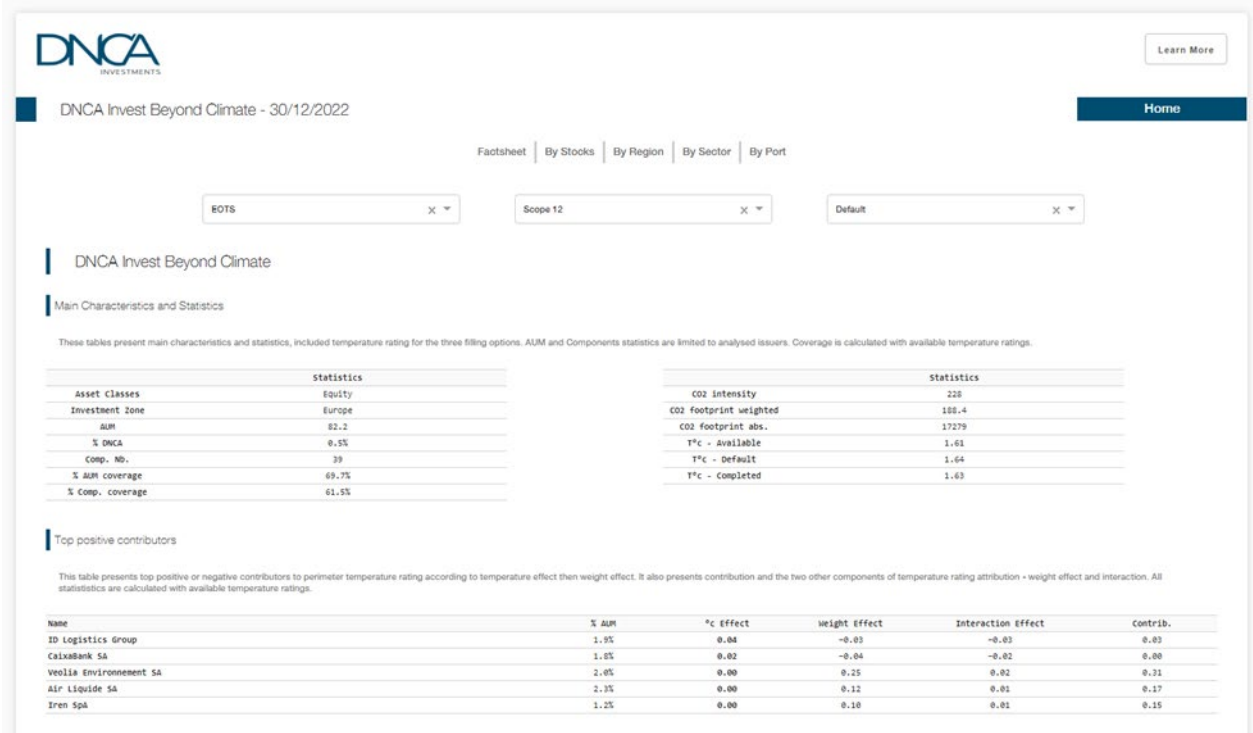


Source: DNCA Finance.

# VI. APPENDICES

## A. Comments on PEVE and ECOTS weightings

The PEVE and ECOTS methods require additional financial data on the company. Calculating enterprise value (EV) requires assumptions to be made when manipulating large scopes of analysis and, although we use EV unadjusted for cash, to check whether it is negative or whether the EV share is greater than 100%.

### 1. Environmental pressures weighted by share of enterprise value held

| Environmental pressures weighted according to share of enterprise value held (SEVB) | Environmental pressures are weighted according to the share of enterprise value held in the portfolio | $$\sum_{i=1}^{n}\left(\frac{Weight_i \times AUM}{EV_i} \times Pressures_i\right)$$ |
|---|---|---|

### 2. Temperature score weighted by emissions held

| Temperature score weighted by emissions held (ECOTS) | Temperature scores are weighted by the share of emissions held in total emissions held. | $$\sum_{i=1}^{n}\left(\frac{\left(\frac{Weight_i \times AUM}{EVi} \times Emissions_i\right)}{\sum_{j=1}^{n}\left(\frac{Weight_j \times AUM}{EV_j} \times Emissions_j\right)} \times T_i\right)$$ |
|---|---|---|

### 3. Enterprise Value

The enterprise value used in the formula is a value on the calculation date.

It is sourced from Factset and includes minority interests and operating leases.

EV = Price * shares + [ Total debt + preferred stocks + total accumulated minority interest]

Items in brackets are book value.

### 4. Time synchronisation

$$\sum_{i=1}^{n}\left(\left(\frac{\frac{Investment\ value_{it}}{EV_{i,t}} * Emissions_{l-1,l}}{\sum_{j=1}^{n} Owned\ Emissions_j}\right) * TS_i\right)$$

$$with\ Owned\ Emissions_i = \frac{Investment\ value_{it}}{EV_{i,t}} * Emissions_{l-1,l}$$

For calculation to 30/12/2022

l = 2022 disclosure (emission periods ≤ 2021) - implicit "forward fill" assumption for emissions

t = 2022 (EV accounting fundamentals 2021 and equity 2022)

In 2022, we observe 19 companies with a negative EV in the DNCA scope and in the benchmark scope. This represents 0.9% of the companies in the scope. Companies with a negative EV are excluded from the ECOTS analysis. Environmental pressures are attributed a maximum of 100%.

## B. Comments on carbon intensity calculations

The calculation of intensities and intensity variations requires methodological choices. These choices are presented below.

For the calculation of intensity variations, we apply a floor and a ceiling of +/- 50% variation in order to deal with variations that are a priori abnormal.

### 1. Carbon intensity and weighted variation of portfolio weights

| Carbon intensity weighted by portfolio weight | The carbon intensities are weighted by the portfolio weights, rebased according to the availability of the intensity. | $$\sum_{i=1}^{n}\left(Weight_i \times \frac{Emissions_i}{Revenue_i}\right)$$ |
|---|---|---|
| Change in carbon intensity weighted by portfolio weights | Variations in carbon intensity are weighted by the portfolio weights, rebased according to the availability of the intensity variation. | $$\sum_{i=1}^{n}\left(Revenue_i \times \left(\left(\frac{\frac{Emissions_{i,t}}{Revenue_{i,t}}}{\frac{Emissions_{i,t-1}}{Revenue_{i,t-1}}}\right) - 1\right)\right)$$ |

### 2. Time synchronisation

For calculation to 30/12/2022

t = 2022 disclosure (emission periods ≤ 2021) for emissions and calendar 2021 for sales. Emissions and sales are synchronized.

t-1 = 2021 disclosure (emission periods ≤ 2020) for emissions and calendar 2020 for sales. Emissions and sales are synchronised

## C. Temperature attribution analysis - formula

Attribution analysis makes it possible to isolate the effect of weighting, temperature and the interaction between these two effects on the contribution of a value to the aggregate temperature of a given perimeter.

Attribution analysis is the most appropriate tool to identify companies that contribute negatively or positively to the aggregate temperature. In the logic of engagement, to decrease the temperature score of a portfolio, DNCA should engage the main contributors that have a significant positive interaction effect.

Formula used :

$$(w_i - \bar{w}) * \bar{t} + (t_i - \bar{t}) * \bar{w} + (w_i - \bar{w}) * (t_i - \bar{t}) + \bar{w} * \bar{t} = t_i * w_i$$

$$S = \sum t_i * w_i$$

| | |
|---|---|
| $S$ : | perimeter temperature score |
| $t_i * w_i$ : | contribution of company i to temperature score S |
| $(w_i - \bar{w}) * (t_i - \bar{t})$ | interaction effect |
| $(t_i - \bar{t}) * \bar{w}$ : | effect of temperature |
| $(w_i - \bar{w}) * \bar{t}$ : | effect of weighting |
| $\bar{w} * \bar{t}$ : | average contribution to temperature score S |

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