



# BIOSCOPE

## USER'S QUICK START

### About

BioScope provides businesses and financial institutions with a simple and fast indication of the most important impacts on biodiversity arising from their supply chain, their investments, or a specific sector.

The results brought by BioScope are aimed at helping you to formulate meaningful actions to further assess and reduce the impact of your business activity on biodiversity. It not only indicates the potential impact of the commodity you purchase or the investment you make, but also of the upstream supply chain of these products. Examples of questions which can be answered are:

- Which of the commodities purchased by my business could be the largest cause of impact on biodiversity?
- Which of the investments made or financial products provided by my financial institution cause impacts on biodiversity?
- What could the new purchasing strategy of my business mean for our impact on biodiversity?
- What commodity, investments, or financial products, purchased or provided by my business, do we need to focus on if we want to make a meaningful contribution to conservation of biodiversity?

BioScope makes use of Exiobase v3.4 enabling you to select commodities and resources purchased from 163 sectors in 44 countries (27 EU countries and all large economies outside the EU) and 5 rest-of-world regions, covering all global economic activities. The resulting impacts on biodiversity are calculated with the ReCiPe method, which was specially adapted for BioScope.

This tool has been developed by [PRé Sustainability](#), [Arcadis](#) and CODE commissioned by Platform BEE (Biodiversity, Ecosystems and Economy); a collaboration between [IUCN NL](#) and [VNO-NCW](#) financed by the Dutch ministry of Economic Affairs. The 2022 update of Bioscope was funded by the Partnership Biodiversity Accounting Financials and PRé Sustainability.



## Disclaimer

This tool gives an approximation of the biodiversity impact resulting from the commodities purchased or from investments made by businesses and financial institutions. The use of country level data on economic activities and their impacts mean that the confidence of the outcome is limited. For a complete impact assessment, subsequent steps will always remain necessary. The results of this tool are meant for internal purposes only and cannot be used for public communication.

## Login Page

The screenshot shows the user interface of the Bioscope platform. At the top, a dark blue navigation bar contains the logo 'platform biodiversiteit, ecosystemen & economie' on the left, and two menu items: 'My Assessments' and 'FAQ'. A callout box points to the 'My Assessments' menu with the text 'Once logged in, the list of assessments can be accessed here'. Another callout box points to the 'FAQ' menu with the text 'FAQs page'. Below the navigation bar, the main content area is titled 'Welcome to Bioscope' and 'Biodiversity Input-Output for Supply Chain & Operations Evaluation'. It includes a brief description of the tool's purpose and a list of example questions. A world map is visible on the right side of the main content. On the far right, a grey sidebar contains a 'Login' button and a 'Register' button. A callout box points to the 'Register' button with the text 'Request a new account'. Another callout box points to the text above the buttons: 'The assessments are stored in a private account. You will need to register prior to creating an assessment'. A third callout box points to the 'Login' button with the text 'Login page (Account required)'.

platform biodiversiteit, ecosystemen & economie

My Assessments

FAQ

Once logged in, the list of assessments can be accessed here

FAQs page

Welcome to Bioscope

Login page (Account required)

### Biodiversity Input-Output for Supply Chain & Operations Evaluation

Platform BEE's BioScope provides businesses and financial institutions with a simple and fast indication of the most important impacts on biodiversity arising from their supply chain or their financial products.

The results brought by BioScope are aimed at helping you to formulate meaningful actions to further assess and reduce the impact of your business or financial product on biodiversity. It not only indicates the potential impact of the commodity you purchase, but also of the upstream supply chain of these commodities. Examples of questions which can be answered with are:

- Which of the commodities purchased by my business could be the largest cause of impact on biodiversity?
- Which of the investments made or financial products provided by my financial institution cause impacts on biodiversity?
- What could the new purchasing strategy of my business mean for our impact on biodiversity?
- What commodity, investments, or financial products, purchased or provided by my business, do we need to focus on if we want to make a meaningful contribution to conservation of biodiversity?

BioScope makes use of [Exiobase v 3.4](#), enabling you to select commodities and resources purchased from 170 sectors in 43 countries (27 EU countries and all large economies outside the EU), covering the largest part of global economic activities. The resulting impacts on biodiversity are calculated with the [ReCiPe method](#), which was specially adapted for BioScope and includes the following impact drivers:

- Global warming, terrestrial ecosystems
- Global warming, freshwater ecosystems
- Ozone formation, terrestrial ecosystems
- Terrestrial acidification
- Freshwater eutrophication
- Marine eutrophication
- Terrestrial ecotoxicity
- Marine ecotoxicity
- Freshwater ecotoxicity
- Land use
- Water consumption, terrestrial ecosystems
- Water consumption, aquatic ecosystems

The assessments are stored in a private account. You will need to register prior to creating an assessment

Login

Register

Request a new account

# Your assessments



Bioscope

Create new assessment

Total approximate impact per assessment

Visual display of results per impact category

Create a copy an assessment

Delete an assessment

## My Assessments

*Disclaimer: This tool gives an approximation of the biodiversity impact resulting from the commodities purchased or from investments made by businesses and financial institutions. The use of country level data on economic activities and their impacts mean that the confidence of the outcome is limited. For a complete impact assessment, subsequent steps will always remain necessary. The results of this tool are meant for internal purposes only and cannot be used for public communication.*

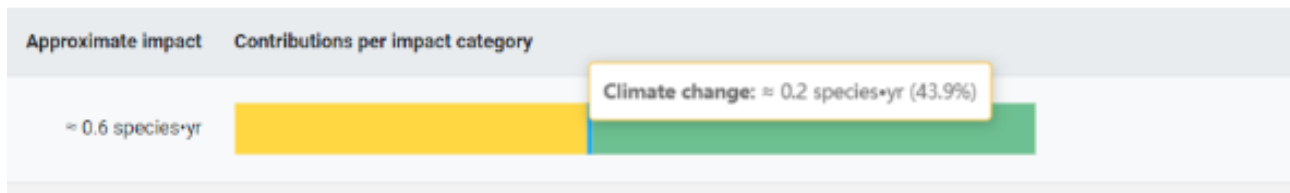
The unit for biodiversity impact is PDF.m2.yr, with PDF as the potentially disappeared fraction of species. Loss of species is calculated in a certain area (hence m2) or volume (hence m3), during a certain time (hence the addition of years). A conversion factor was adapted to bring PDF.m2.yr and PDF.m3.yr under one common unit: species.yr. This factor works by dividing the results for land and water by the species density on land per square meter, and the average species density in water per cubic meter. The unit species.year is a measure for how many vascular plants and lower organisms, on land and in water, are expected to disappear because of the assessed activities. These lower organisms are typically at the beginning of the food chain, and if something goes wrong there, it will have impact on the higher organisms, on which impacts are much more difficult to model.

Name	Last edited	Approximate impact	Contributions per impact category	
Steel company	a year ago	≈ 302.5 species·yr		
Paper company	7 months ago	≈ 0.4 species·yr		

Name of assessment

Type of visual display: A visual impression of the impact assessment is displayed in the following:

The impact is displayed as a bar chart as 100%. By hovering over the different colored sections, the % contribution of impact categories to total impacts is displayed.



# Modify or Create a New assessment



Bioscope

Excel template for offline data gathering

Input Results on map Results table 🗖

On this input page you can provide the data needed to perform the assessment. The data template below will help you if you need to gather the data off-line. Once you have all the data, you can input it manually into the tool.

[Download Commodities matrix](#) [Download Offline collection template](#)

**Commodities matrix – listing the availability of commodities per country**

**General information**

Please add a name to the assessment. If you want to add additional information for your own use, you can make use of the notes field.

Name

Notes

**Additional notes or general information for your own reference**

**Commodities Selection**

Add the commodities you purchase by clicking the button below. First select the right commodity, then select the country where you purchase it and finally add the amount. [All quantities are in million Euros (Millions of euros (€) 2007)].

Commodity	Country of origin	Amount	Unit
No commodities have yet been added to this assessment. You can add up to 15 commodities.			

[Add another commodity](#)

[Save and calculate](#)



## Bioscope

Input

Results on map Results table

On this input page you can provide the data needed to perform the assessment.  
The data template below will help you if you need to gather the data off-line. Once you have all the data, you can input it manually into the tool.

[Download Commodities matrix](#) [Download Offline collection template](#)

General information

Please add a name to the assessment. If you want to add additional information for your own use, you can make use of the notes field.

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Notes

Commodities Selection

Add the commodities you purchase by clicking the button below. First select the right commodity, then select the country where you purchase it and finally add the amount. [All quantities are in million Euros (Millions of euro's (€) 2007)].

Commodity	Country of origin	Amount	Unit
No commodities have yet been added to this assessment			

[Add another commodity](#)

[Save and calculate](#)

### List of Commodities used in Supply Chain or investment:

- Commodity
- Country
- Amount (in Million euros)

Max. limit of commodities: 15

Select commodity to be added from list

Save and start calculation

Add commodity ×

Search

Activities auxiliary to financial intermediation <span>▼</span>	<span>Select</span>
Activities of membership organisation n.e.c. <span>▼</span>	<span>Select</span>
Air transport <span>▼</span>	<span>Select</span>
Aluminium production <span>▼</span>	<span>Select</span>
Animal products nec <span>▼</span>	<span>Select</span>
Biogasification of food waste, incl. land application <span>▼</span>	<span>Select</span>
Biogasification of paper, incl. land application <span>▼</span>	<span>Select</span>
Biogasification of sewage sludge, incl. land application <span>▼</span>	<span>Select</span>
Casting of metals <span>▼</span>	<span>Select</span>
Cattle farming <span>▼</span>	<span>Select</span>
Chemicals nec <span>▼</span>	<span>Select</span>
Collection, purification and distribution of water <span>▼</span>	<span>Select</span>
Composting of food waste, incl. land application <span>▼</span>	<span>Select</span>
Composting of paper and wood, incl. land application <span>▼</span>	<span>Select</span>
Computer and related activities <span>▼</span>	<span>Select</span>
Construction <span>▼</span>	<span>Select</span>
Copper production <span>▼</span>	<span>Select</span>
Cultivation of cereal grains nec <span>▼</span>	<span>Select</span>

Search commodities or key words

**Air transport** ▲ Select

Includes:  
+ Transport of passengers or freight by air or via space

Excludes:  
- Crop spraying  
- Overhaul of aircraft or aircraft engines  
- Aerial advertising  
- Aerial photography

Commodity name

Commodity description  
Short text describing included / excluded processes

Add commodity to assessment

Navigate through commodities list

Close

# Results Table













Total approx. impact

Approximate impact  $\approx 1.1e-8$  species·yr

Results on map

Results table

Show results table, results on map, or print results

	Impact category	Approximate impact	Relative contribution
	Ecotoxicity, terrestrial ecosystems	$\approx 7.6e-11$ species·yr	0.7%
	Climate Change, freshwater ecosystems	$\approx 1.5e-13$ species·yr	< 0.1%
	Ecotoxicity, freshwater ecosystems	$\approx 2.6e-14$ species·yr	< 0.1%
	Ozone formation, Terrestrial ecosystems	$\approx 1.2e-9$ species·yr	10.7%
	Water consumption, terrestrial ecosystems	$\approx 1.7e-11$ species·yr	0.2%
	Climate Change, terrestrial ecosystems	$\approx 5.6e-9$ species·yr	52.5%
Commodity		Approximate Impact	Contribution by commodity
	Air transport (62) from/in Belgium	$\approx -5.6e+0$ species·yr	100.0%
	Land use	$\approx 2.7e-9$ species·yr	24.8%
	Acidification, terrestrial ecosystems	$\approx 1.2e-9$ species·yr	10.9%
	Eutrophication, freshwater ecosystems	$\approx 2.5e-11$ species·yr	0.2%
	Ecotoxicity, marine ecosystems	$\approx 3.0e-13$ species·yr	< 0.1%
	Eutrophication, marine ecosystems	$\approx 2.3e-13$ species·yr	< 0.1%
	Water consumption, aquatic ecosystems	$\approx 7.6e-16$ species·yr	< 0.1%

## Results per Impact Driver

Table with results from calculation. The colors highlight the highest contributors to the Total approx. impact

## Relative contribution

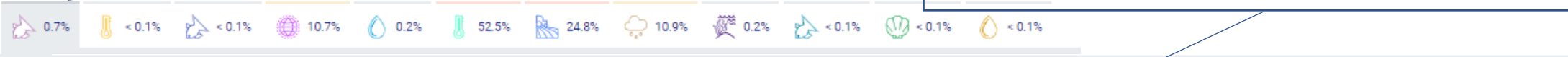
This shows the contribution in percentage to the overall impact of each impact driver

Clicking on an impact driver will display the contribution of each commodity entered to the impact driver selected

# Results Map

*Impact drivers tabs*  
Including the contribution percentage to the overall impact

*Map*  
Showing in which country the impact on biodiversity is caused for the selected impact driver.  
For each highlighted country, the contribution of the supply chain is shown (by hovering or clicking over)



**Ecotoxicity, terrestrial ecosystems**  
The environmental persistence and accumulation in the food chain, and toxicity of chemicals, affecting species composition in terrestrial ecosystems.

**Total impact on biodiversity** ≈ 7.6e-11 species\*yr 0.7%

**Result Map**  
The map below displays the impact of the upstream supply chain of the selected commodities per country or region. By hovering your mouse over a country or region, you can see which of these upstream processes are contributing to the national or regional impact of your supply chain.



**Impact on Biodiversity and relative contribution of the commodities entered, for selected impact driver**  
Including the contribution percentage to the overall impact

Commodity	Country of origin	Approximate impact	Relative contribution
Air transport (62)	Belgium	≈ -7.6e+0 species*yr	100.0%
Process	Country of origin	Approximate impact	Relative contribution
Air transport	Belgium	≈ -3.8e+0 species*yr	100.0%

*Contribution per process table*  
Shows the commodities, from the entire supply chain, which contribute to selected impact driver.