



# Accompanying document for BioMonitor data platform

*October 2021 (M41)*

**D3.3:**

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Monitoring the Bioeconomy



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 652683.

## Technical References

Project Acronym	BIOMONITOR
Project Title	<b>Monitoring the Bioeconomy</b>
Project Coordinator	Justus Wesseler Wageningen University justus.wesseler@wur.nl
Project Duration	June 2018 – May 2022 (48 months)

Deliverable No.	D3.3
Dissemination level <sup>1</sup>	
Work Package	WP 3 - Methodology development and creation of the BioMonitor Data Platform
Task	T 3.5 - Filling the data gaps in the bioeconomy database
Lead beneficiary	17 (NOVA)
Contributing beneficiary(ies)	8 (CBS), 10 (JRC), 13 (WEcR)
Due date of deliverable	31 May 2021
Actual submission date	07 October 2021

<sup>1</sup> PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

Document history			
V	Date	Beneficiary	Author
1	Oct. 7 <sup>th</sup> 21	NOVA	Nicolas Hark, Hugo González Hermoso
2	Dec. 10 <sup>th</sup> 21	NOVA	Nicolas Hark, Hugo González Hermoso
3	Jan. 21 <sup>st</sup> 22	NOVA	Nicolas Hark, Hugo González Hermoso



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# 1 The BioMonitor data platform

*How to access it, how it is structured, what can be found on the platform*

In this document, information can be found regarding:

- **How to access the BioMonitor data platform**
- **How the BioMonitor data platform is structured**
- **Which information can be found on the platform**

Detailed information on the respective indicators included in the DataM dashboards can be found in the DataM BioMonitor section.

## 2 Structure of each indicator results

Using the *Bioeconomic shares* indicator as a reference, we will have three result elements for each indicator:

- **Dataset**
- **Dashboard**
- **Publications related to the indicator.**

For each indicator, there is content in DataM, which can include the following items as seen in the picture below:

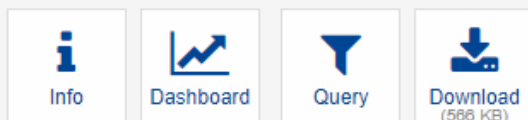
- **Info (mandatory)**
- **Dashboard (optional)**
- **Query (optional)**
- **Download [to download the dataset] (optional)**

Once published, each indicator dashboard will include mandatory meta information on the data set and the methodologies behind it. This information will be included in the '**Info**' section of each dashboard together with a more extensive fact sheet including all relevant information regarding the indicators in the dashboard. The fact sheets will include information on the relevance, methodologies, metrics, data sources and limitations of each dashboard.



## BIOMONITOR - Bioeconomic shares

Development of the national income share of the bioeconomy for 27 European Union Member States plus the UK, and 16 industries, resulting from a study of the BIOMONITOR H2020 project based on input-output approach.



Published: 10/03/2021 | Updated: 16/04/2021

The Info section, which is available for each indicator, contains a description of the content and the references to the related publication and the people who have participated.

### BIOMONITOR - Bioeconomic shares

This dashboard is associated to the paper "A Cross-Country Measurement of the EU Bioeconomy: An Input-Output Approach" developed in the context of the BIOMONITOR project financed by Horizon 2020. The study measures the development of the national income share of the bioeconomy for 27 European Union Member States plus the UK, and 16 industries of BioMonitor scope from 2005 to 2015. The paper proposes a model which includes the up- and downstream linkages using Input-Output tables. The results show that for the majority of the MS the value added of the up- and downstream sector is at the band of 40%-50% of the total bioeconomy value added and has on average increased since the financial crisis.

**Data citation text**

"Cingiz, Kutay; González Hermoso, Hugo; Heijman, Wim; Wesseler, Justus H. H. (2021): BIOMONITOR - Bioeconomic shares. European Commission, Joint Research Centre (JRC) [Dataset] PID: <https://data.europa.eu/89h/code/85453-3e27-4b52-8349-0945e733993>"

(This is the text for citing the data. For citing the publication(s) please refer to citation rules normally indicated in the inside front cover of the scientific article)

**Methodology / publication(s)**

[A Cross-Country Measurement of the EU Bioeconomy: An Input-Output Approach](#)

**Licence**

[European Commission Reuse and Copyright Notice](#)

General info		Dataset spatial coverage	
Language:	English	Geographic area:	European Union
Main EuroVoc domain:	16 ECONOMICS	Bounding box W:	-10.478556
Additional EuroVoc domain:		Bounding box S:	34.632584672594

The '**Dashboard**' button opens the dashboard created for the indicator. The dashboards include interactive visualisations of the data provided for the respective indicator. The figures and visualisations can also be downloaded from the dashboards for further dissemination.

The '**Query**' button opens a new page, the query panel, which allows the user to consult the dataset and apply different filters to the dataset.



**BE Shares - Query**

We recommend to users that download DataM data to subscribe to the newsletter from the home page of the site, in order to be informed by email about possible data corrections or updates. [Subscribe to newsletter](#)

Please establish the filters for the different dimensions and time series. It is mandatory to select at least one element for each dimension.  
Hold the Ctrl key to select additional elements. Hold the Shift key to select adjacent elements.

**Filters**

**Country** - (Please select at least one element)

**Year** - (All years selected)

2005	2006	2007	2008	2009	2010	2011	2012
2013	2014	2015					

[Select all](#) [Clear selection](#)

**Sector** - (Please select at least one element)

If you have the list of elements in a file, you may use the List submission tool

**Export as** [CSV](#) [Excel](#) [JSON](#)

Name ID	ID	Complete Name
<input type="checkbox"/> Accommodation and food services	55156	55156 Accommodation and food services
<input type="checkbox"/> Agriculture, forestry and fishing	01103	01103 Agriculture, forestry and fishing
<input type="checkbox"/> All sectors	Available Total	Available Total: All sectors
<input type="checkbox"/> Arts, entertainment, recreation and other service activities	90796	90796 Arts, entertainment, recreation and other service activities

**Measures** - (All measures selected)

The Download button downloads the complete dataset in a '.csv' file.

## 3 BioMonitor project page in DataM

This perspective was created in [DataM](#) specifically for BioMonitor and for supporting different contents, which can be grouped by an overall common project.

It is possible to navigate to the page dedicated to BioMonitor in [DataM](#) using the menu option:

European Commission

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**10 SEP 2021**

**DEMETRA**

DEMETRA model: official website release

**3 SEP 2021**

Impacts of the cocoa living income differential policy in Ghana and Côte d'Ivoire

**JUL 2021**

Modelling environmental and climate ambition in the agricultural sector with the CAPRI model

AgMIP

**BioMonitor**

FOODSECURE

GTAP

Medium-term agricultural outlook

OECD-FAO Agricultural Outlook

Short-term agricultural outlook

SUPREMA

Hover over the 'Projects' button to open the drop-down menu. In the drop-down menu, a direct link to the [BioMonitor data platform](#) can be found.



All content related to BioMonitor, which is included in DataM is accessible on the linked website of the [BioMonitor data platform](https://biomonitor.eu).

## Data-Modelling platform of agro-economics research

[Home](#) > [Biomonitor](#)



### BioMonitor project page

Official website: <https://biomonitor.eu>

*BioMonitor addresses the information gap in bioeconomy research by re-structuring its existing data and modelling framework. The ultimate goal of the project is to get a clearer picture of how bioeconomy affects our lives.*

#### News

- 06/04/2021 - [Bioeconomic shares - new dashboard/study](#)

#### Open data

Bieconomic shares

- [Dashboard](#)
- [Open Data page](#)

#### Publications

Publication (1 selected over 83 loaded in DataM)

We upload in DataM all relevant publications from 2020. For the past we include a selection of key papers related to our datasets, models, or website sections

Date	Title	Cover's authors
10/03/2021	A Cross-Country Measurement of the EU Bioeconomy: An Input-Output Approach	Cingiz, K; González-Hermoso, H; Heijman, W; Wesseler, JHH

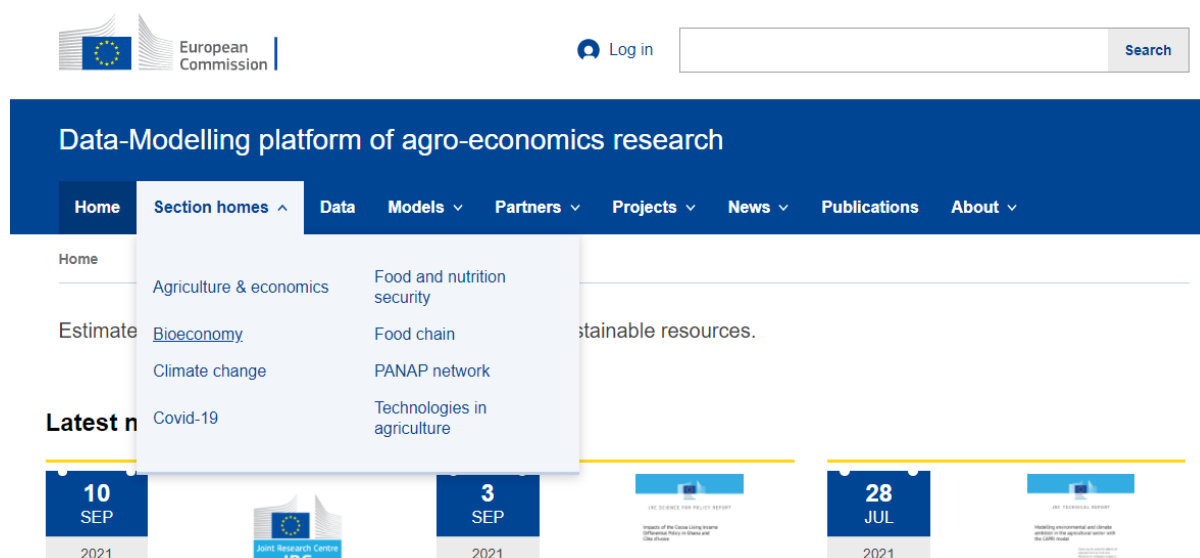
The page also shows a section for **News** where all the news related to BioMonitor is accessible. The dashboard and the open data page for each indicator are accessible from the section **Open data** with direct links to the **Dashboard** and the **Open Data page**. The **Publications** section shows all the potential publications available regarding the specific indicator.



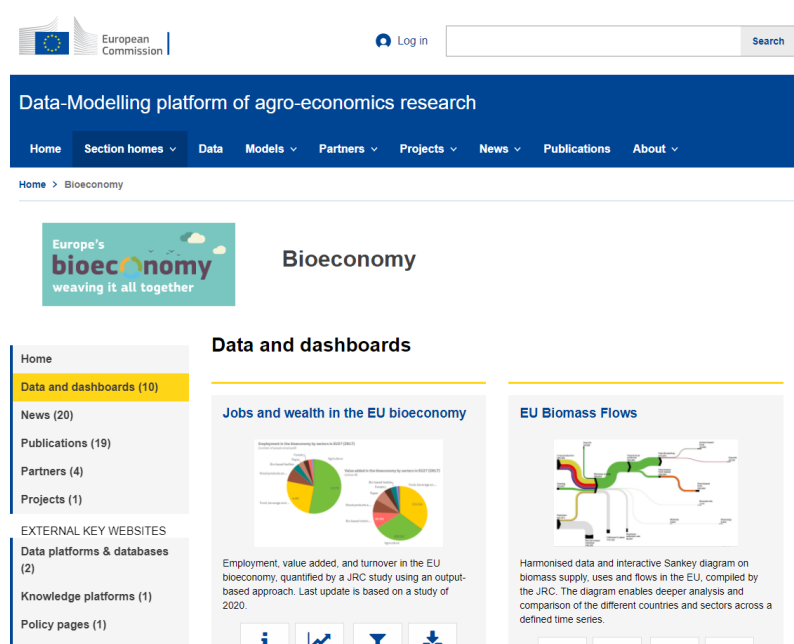
## 4 The BioMonitor content in DataM

### Indicator contents

The content created for each indicator can be found in DataM grouped in the *Bioeconomy* section, which is located in the drop-down menu of the *Section homes* on the main page. This link opens the [Bioeconomy section](#) directly.



In the '**Bioeconomy**' section of DataM, there are several sub-sections with content related to BioMonitor and other projects.





On the page '**Data and dashboards**' the content related to the overarching topic 'Bioeconomy' is located. In this section, there are additional information and contents which are unrelated to the BioMonitor project but provide additional information and figures of the European bioeconomy. The option '**Data and dashboards**' shows the indicator contents described in the first section.

As for the '**News**' sub-page, it shows all the news related to Bioeconomy content, not just the BioMonitor news. When new content is published, it can be highlighted in the '**News**' section, which is also shown in the landing page view of DataM for a certain amount of time in the field 'Latest News'.

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Estimates on the economic analysis of agriculture and sustainable resources.

### Latest news

10 SEP 2021

Joint Research Centre JRC

**DEMETRA**

DEMETRA model: official website release

3 SEP 2021

IMPACTS OF THE COCOA LIVING INCOME DIFFERENTIAL POLICY IN GHANA AND CÔTE D'IVOIRE

Impacts of the cocoa living income differential policy in Ghana and Côte d'Ivoire

28 JUL 2021

MODELLING ENVIRONMENTAL AND CLIMATE AMBITION IN THE AGRICULTURAL SECTOR WITH THE CAPRI MODEL

Modelling environmental and climate ambition in the agricultural sector with the CAPRI model

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The sub-page ‘**Publications**’ follows the same logic, in this case for publications related to the Bioeconomy.

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### [A Cross-Country Measurement of the EU Bioeconomy: An Input-Output Approach](#)

**Year:** 2021

**Authors:** Cingiz, K; González-Hermoso, H; Heijman, W; Wesseler, JHH

**Journal:** Sustainability

**Abstract:** This paper measures the development of the national income share of the bioeconomy for 28 European Union Member States (MS) and 16 industries of BioMonitor scope from 2005 to 2015. The paper proposes a model which includes the up- and downstream linkages using Input-Output tables. The results show that for the majority of the MS the value added of the up- and downstream sector is at the band of 40%–50% of the total bioeconomy value added and has on average increased since the financial crisis.



### [Improved modelling framework for assessing the interactions between the energy, agriculture, forestry and land use change sectors](#)

**Year:** 2021


**Authors:** Sahoo, A; Pérez-Domínguez, I; Mubareka, S; Fiorese, G; Grassi, G; Pilli, R; Himics, M; Blujdea, V. N. B.; Witzke, P; Follador, M; Neuwahl, F; Salvucci, R; Rozsai, M; Kesting, M

**Journal:** Publications Office of the European Union

**Abstract:** This report is an attempt to develop a modelling framework integrating different sectoral stand-alone models used at the JRC for policy impact assessment in the fields of agriculture, forestry, land use change and energy. The proposed quantitative framework should improve the capability of assessing greenhouse gas emissions and removals resulting from complex interactions between the agriculture, forestry, and other land use (AFOLU) sectors, and facilitate the analysis of policy scenarios relevant for a sustainable and carbon-neutral European economy. Four models are considered, for which a revised model specification and harmonization of relevant databases and model parameters is needed. The Common Agricultural Policy Regionalized Impact (CAPRI) Modelling System is a widely used large-scale multi-commodity agricultural economic model. The Land Use-based Integrated Sustainability Assessment modelling platform for BioEconomy and Ecosystem Services (LUIA-BEES) is primarily [Read more...](#)



On the sub-page '**Projects**', the projects related to the Bioeconomy in DataM are listed and introduced. For now, only BioMonitor is listed and introduced in this section as a bioeconomy-related project displayed in DataM.



## Bioeconomy

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### Projects

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**BioMonitor** [↗](#)

BioMonitor addresses the information gap in bioeconomy research by re-structuring its existing data and modelling framework. The ultimate goal of the project is to get a clearer picture of how bioeconomy affects our lives.



This is the link to the DataM area dedicated to the project  
[\(https://datam.jrc.ec.europa.eu/datam/project/BIOMONITOR\)](https://datam.jrc.ec.europa.eu/datam/project/BIOMONITOR)

The official project web page  
 is <https://biomonitor.eu>

The BioMonitor information page under '**Projects**' contains the direct links to the project homepage and the DataM content related to BioMonitor.

## 5 Next steps

To complete the database and eventually accomplish the deliverable D3.3 as soon as possible, several important next steps will be taken. The dashboards that have already been prepared and cover several of the final indicators are currently being double-checked regarding potential data inaccuracies or issues in the visualisation. Once these dashboards are confirmed to be accurate, they may be considered for publication. There are also a few remaining indicator dashboards yet to be created with the respective data currently being integrated into the database.

While the dashboards and visualisations are being completed in the database, there are also so-called fact sheets being prepared as a guidance document for each dashboard. The indicator fact sheets include meta information on each indicator regarding data sources, derivation and calculation of the metrics, explanations on how to handle and interpret the data, who the respective author and reference for this output is, and more.



The already published [dashboard on the bioeconomic shares](#) serves as a specimen and shows how the dashboards are going to look like and how the information is presented.

Once a dashboard is confirmed by the respective partner to be accurately double-checked and the accompanying fact sheet is prepared, the dashboard will be published in the DataM database for everyone to find, use, extract and disseminate.

