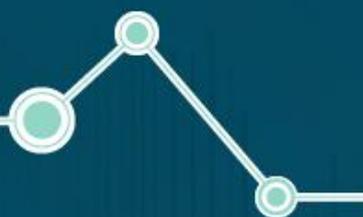




# **Territorial Economic Data Viewer (TEDv)**

Data visualization of EU R&I funding and beyond

**QUICK USER GUIDE**



**TITLE** *QUICK USER GUIDE TO TERRITORIAL ECONOMIC DATA VIEWER (TEDV)*

**AUTHOR** European Commission

Joint Research Centre

Unit B7 – Innovation Policies and Economic Impact

**Regional Economic Monitoring (REMO) team**

**WEBPAGE** <https://web.jrc.ec.europa.eu/dashboard/TEDV/index.html>

**CONTACT** [JRC-B7-REMO@ec.europa.eu](mailto:JRC-B7-REMO@ec.europa.eu)

**VERSION** 1.0

**LAST UPDATE** 16-05-2023

FIND out more about the data and methods behind the development of the Territorial Economic Data viewer (TEDv) here:

<https://publications.jrc.ec.europa.eu/repository/handle/JRC133404>

## Table of Contents

1. About the Territorial Economic Data viewer (TEDv).....	4
2. How can TEDv help you? .....	5
3. Quick tips to navigate through TEDv .....	6
4. Dashboards.....	9
4.1 Regional Dashboard .....	9
4.2 Sectorial Dashboard .....	10
4.3 Comparison dashboard .....	10
4.4 Regional info-sheet.....	13
GLOSSARY.....	14

## 1. About the Territorial Economic Data viewer (TEDv)

The Territorial Economic Data viewer (TEDv) is a data visualization platform including territorial statistics of the different Research and Innovation (R&I) EU funding programmes and beyond. It has been developed by the Regional Economic Monitoring (REMO) pillar of the Territorial Data Analysis and Modelling (TEDAM) team of the European Commission's Joint Research Centre (JRC).

The TEDv includes territorial statistics from [Cohesion Policy](#) (supported by European Structural and Investment Funds - ESIF), Horizon Framework ([Horizon 2020](#) and [Horizon Europe](#)) and [Recovery and Resilience Facility](#) (RRF) included in the Next Generation EU. These statistics are displayed across three dashboards: (i) the Regional dashboard, (ii) the Sectorial dashboard, (iii) the Comparison dashboard. Beyond EU funding indicators, the TEDv also reports territorial socio-economic and demographic statistics displayed in the 'Regional info-sheet' dashboard. For more details about the data and methods behind the TEDv see JRC133404.

The territorial statistics in TEDv make use of the Nomenclature of Territorial Units for Statistics (NUTS)<sup>1</sup> and are disaggregated at country-, NUTS 1- or NUTS 2-level.

The TEDv compiles information from several data sources: [EUROSTAT](#); [Cohesion Open Data Platform](#); eCORDA (COmmon Research DATA Warehouse) - main data source behind the [Horizon dashboard](#); [Recovery and Resilience Scoreboard](#); [Kohesio](#); [JRC-WIFO](#) ERDF beneficiaries; and [BvD ORBIS](#).

---

<sup>1</sup> The Nomenclature of Territorial Units for Statistics is a geographical nomenclature subdividing the economic territory of the EU into regions at three different levels: NUTS 1 for major socio-economic regions, NUTS 2 for basic regions for the application of regional policies, and NUTS 3 for small regions for specific diagnoses.

## 2. How can TEDv help you?

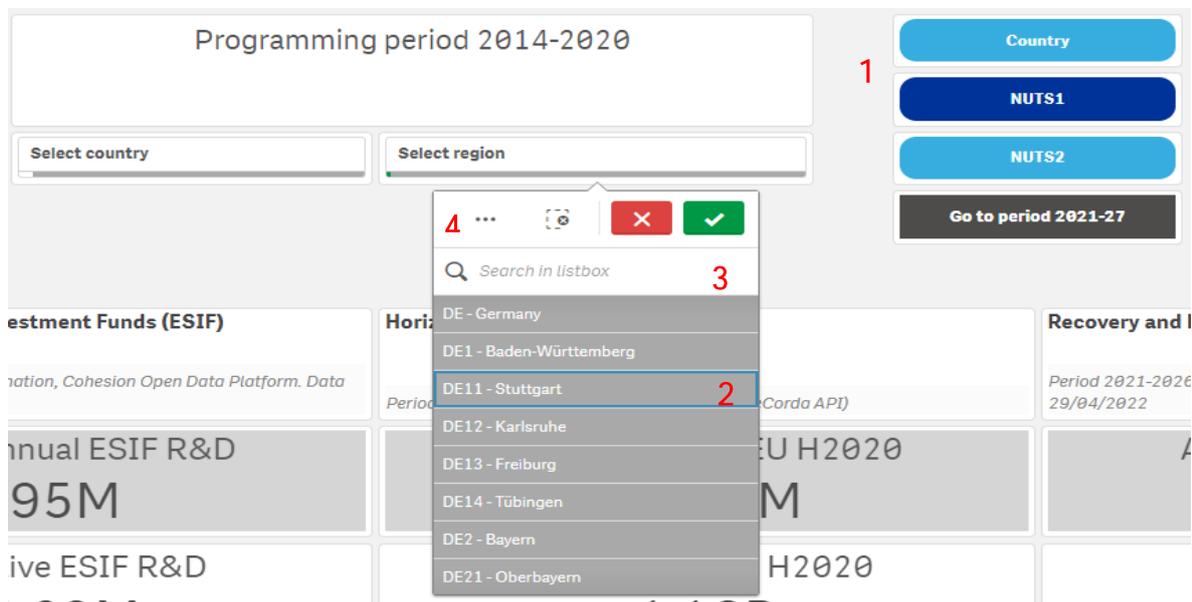
The TEDv platform offers:

- Monitoring of the territorial distribution of the R&I funds
- Simultaneous visualization of territorial information on a number of funding sources both as a standalone statistical information and through a number of derived combined indicators
- Easy way of comparing sub-categories of spending reflecting the different taxonomies adopted in the monitoring / implementation of these funds
- Bilateral regional benchmarking at the NUTS level of interest as well as through a set of pre-defined territorial categories / groupings
- Assessment the evolution of the socio-economic performance over time of a region compared to country and EU averages

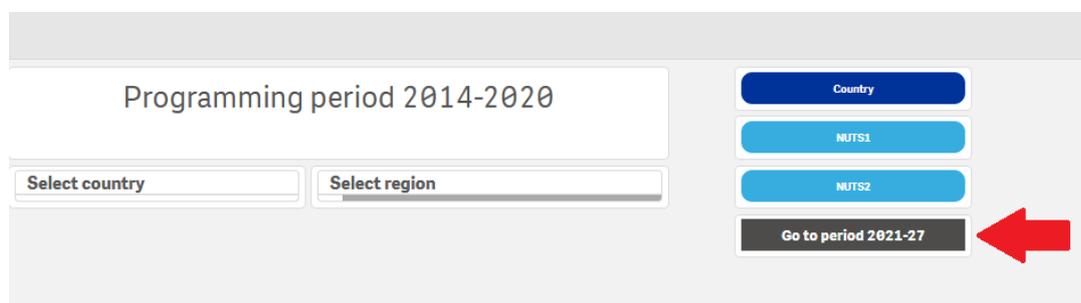
### 3. Quick tips to navigate through TEDv

#### *How to set up filters*

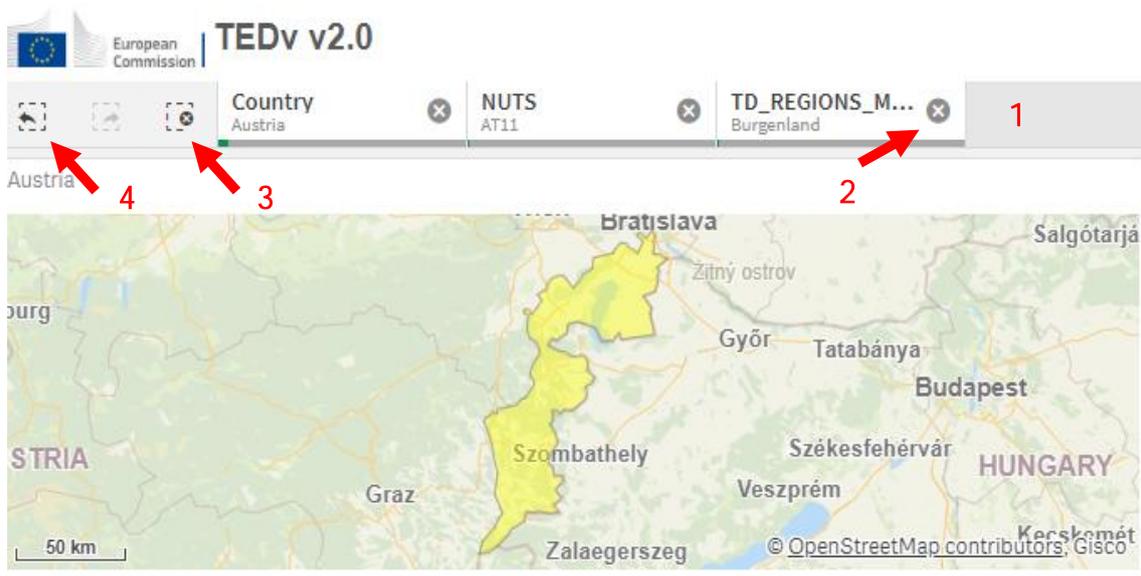
Each of the abovementioned dashboards – Regional, Sectorial or Comparison - includes different predefined filters for the three territorial level (Country, NUTS 1 and NUTS 2). These options are available at the top-central part, where the user can select the territorial aggregation level (1) and/or any region from the drill-down list (2). Note that the user can also type the region in the search bar (3) and select a group of regions in the menu icon (4).



Additionally, the regional dashboard incorporates the option of selecting the programming period of R&I funds (2014-2020 or 2021-2027).



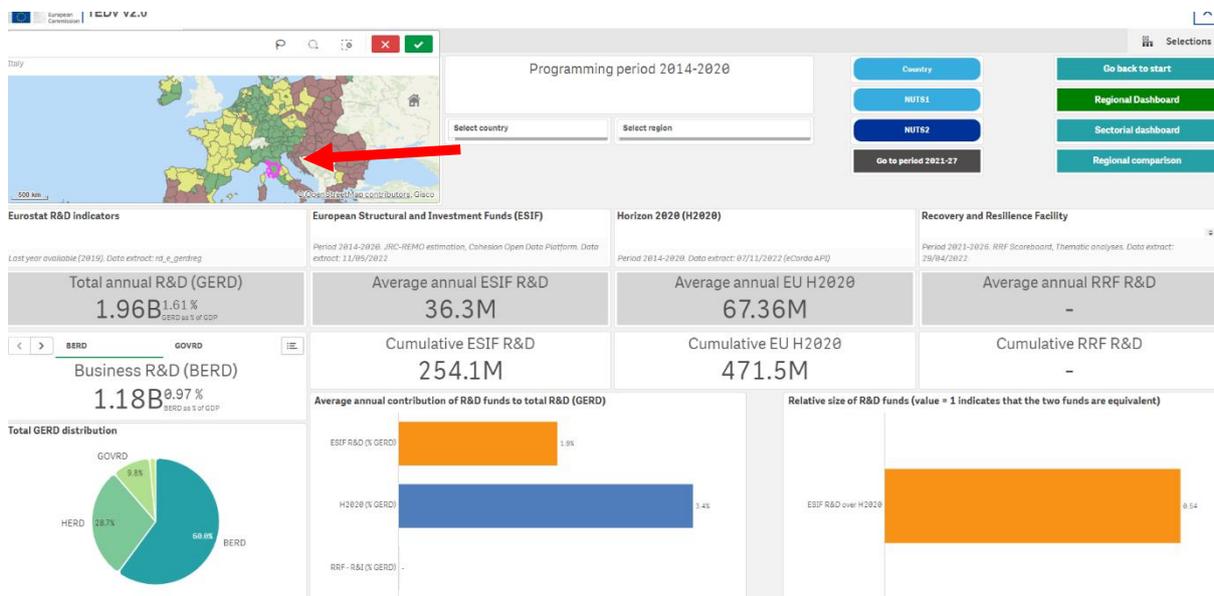
The user's selection will be reflected in tabs at the top-left part of the dashboard (1). To exclude any filter, the user can simply click on the grey cross of the tab (2). There is also an option to clear all tabs (3) or to return to the previous selection (4):



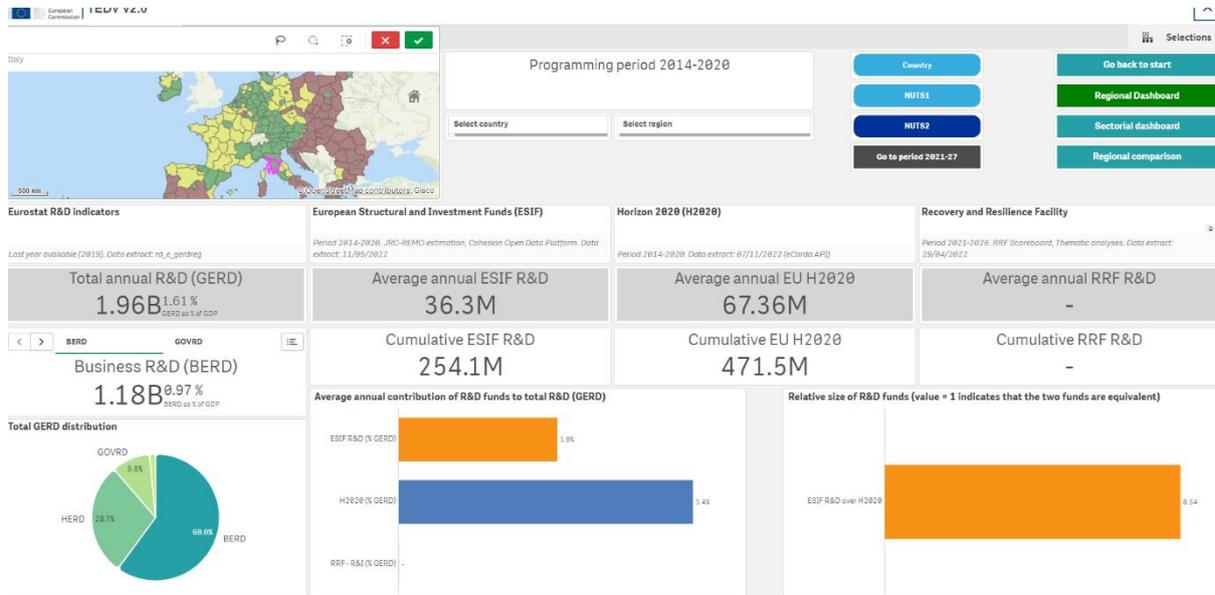
### How to navigate through the graphs

All graphs, tables and maps are interactive. This essentially means that selecting a region (NUTS 1- or NUTS 2-level) or a country on a map will instantly apply as a filter.

For example, as can be seen in the figure below, selecting the Italian Tuscany region on the map at the top-left corner of the dashboard will return the information related to this region.



In order to make a more structured selection, the user has the option of selecting the geographical unit to explore. For example, if the *Country* button is selected among the options presented at the top-right corner of the dashboard, the map in the top-left corner will be automatically updated to reflect country-level information. Alternatively, the user can choose the country directly from the map. The same applies for *NUTS 1* and *NUTS 2* regions.



## 4. Dashboards

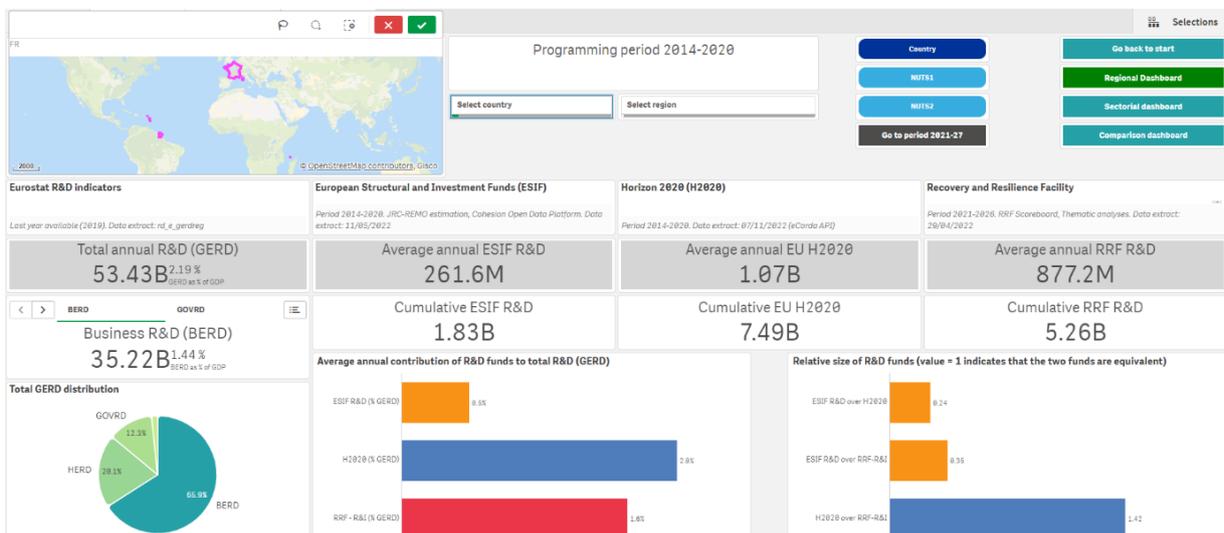
The current version of TEDv presents the information on R&I funding and investment by means of three complementary dashboards: the Regional dashboard, the Sectorial dashboard and the Comparison dashboard. In addition, TEDv incorporates a Regional info-sheet with some selected socio-economic and demographic indicators profiling of each region.

### 4.1 Regional Dashboard

The regional dashboard includes information at country-, NUTS 1- and NUTS 2- level on the following indicators:

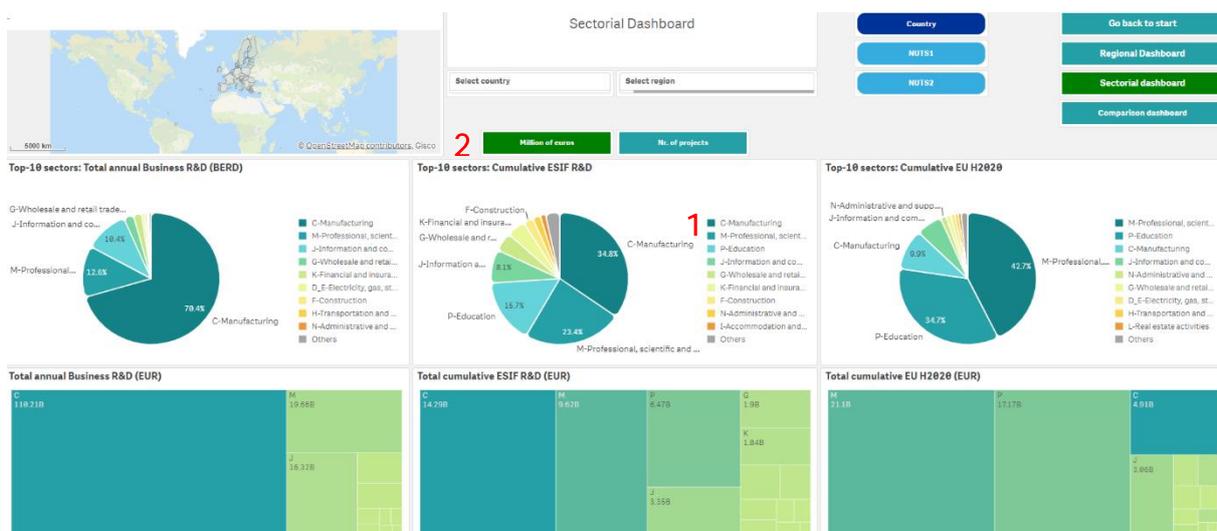
1. R&I indicators expressed in annual absolute terms and as percentage of the GDP: gross domestic expenditure on R&D, (GERD), and its components - business enterprise expenditure on R&D (BERD), government expenditure on R&D (GOVRD), and higher education expenditure on R&D (HERD);
2. Annual average and cumulative amount that the region has received from the following funding programs:
  - a. European Structural Investment Funds (ESIF) – only the R&I component;
  - b. Horizon Framework: Horizon 2020 for the 2014-2020 programming period and Horizon Europe (HE) for the 2021-2027 programming period;
  - c. Recovery and Resilience Facility – only the R&I component.

The user might also find figures for the average annual contribution of R&I funds to GERD and the relative size of R&I funds (ESIF – R&I initiatives over Horizon framework, ESIF–R&I initiatives over RRF-R&I initiatives, Horizon framework over RRF-R&I initiatives).



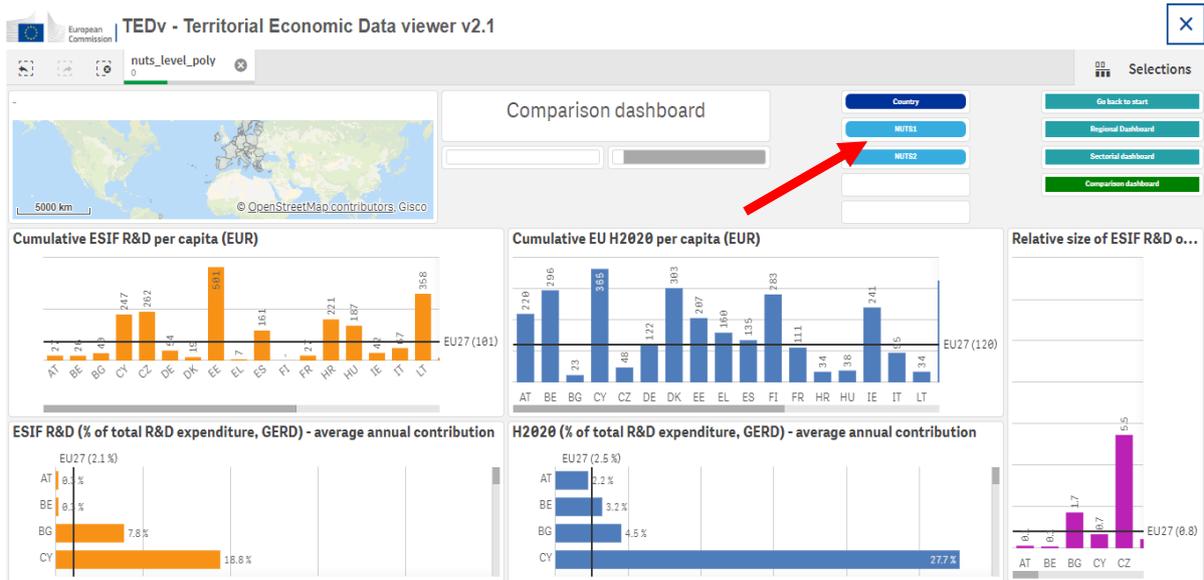
## 4.2 Sectorial Dashboard

The sectorial dashboard displays some of the indicators described in the previous regional section; this time including the sectorial dimension. The BERD indicator as well as the cumulative amount received from ESIF-R&I thematic objective and Horizon 2020 are braked down by the top-10 sectors according to NACE classification (1). Furthermore, the user has the possibility to obtain results expressed in millions of euros received or number of projects involved (2).

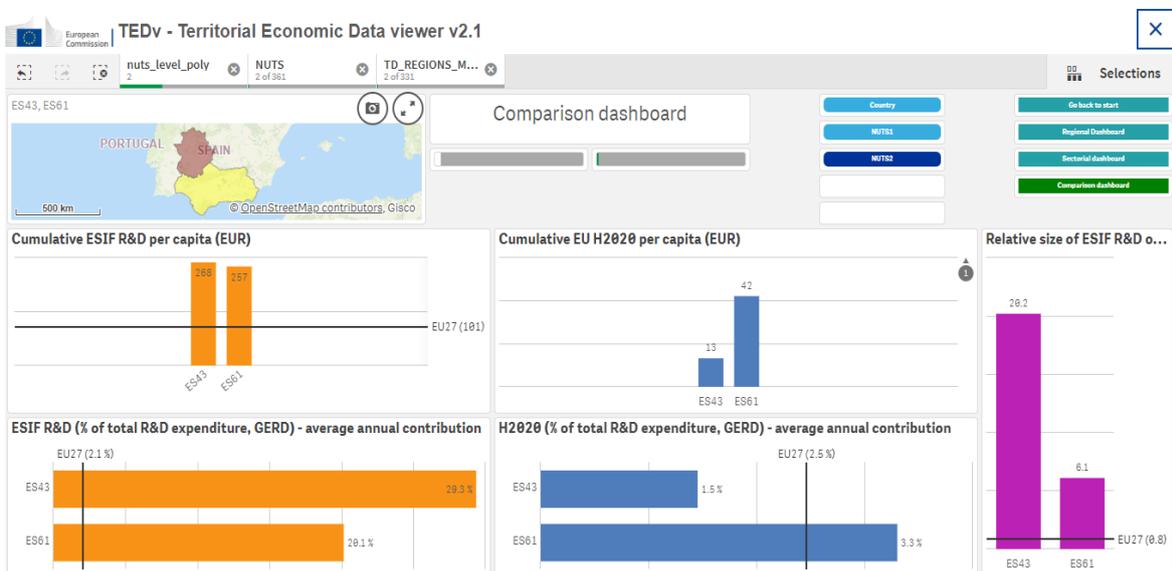


## 4.3 Comparison dashboard

The Comparison dashboard allows to compare EU countries and regions in terms of the allocation of R&I funding (i.e. ESIF and Horizon). Once inside the dashboard, comparisons can be made at different levels of geographical aggregations (i.e. across countries, NUTS 1 and NUTS 2 regions). The user can select the geographical level of comparison in the section indicated by the red arrow below. For instance, the user can select the NUTS 2 region and then choose one region either from the map on the left side, or the drop down menu at the centre.



Once a region has been selected (for example, the Spanish region of Andalucía), the user can pick additional ones from the map or the drop-down menu. For the example, we have selected another Spanish region, Extremadura. As can be seen in the figure below, this allows the user to directly visualize information concerning R&I funding for these two regions.



The dashboard features an additional functionality (available for NUTS 2 regions only): it automatically compares any NUTS 2 region with its three most similar regions, which are identified based on a data-driven procedure.<sup>2</sup> This alternative is very convenient to establish

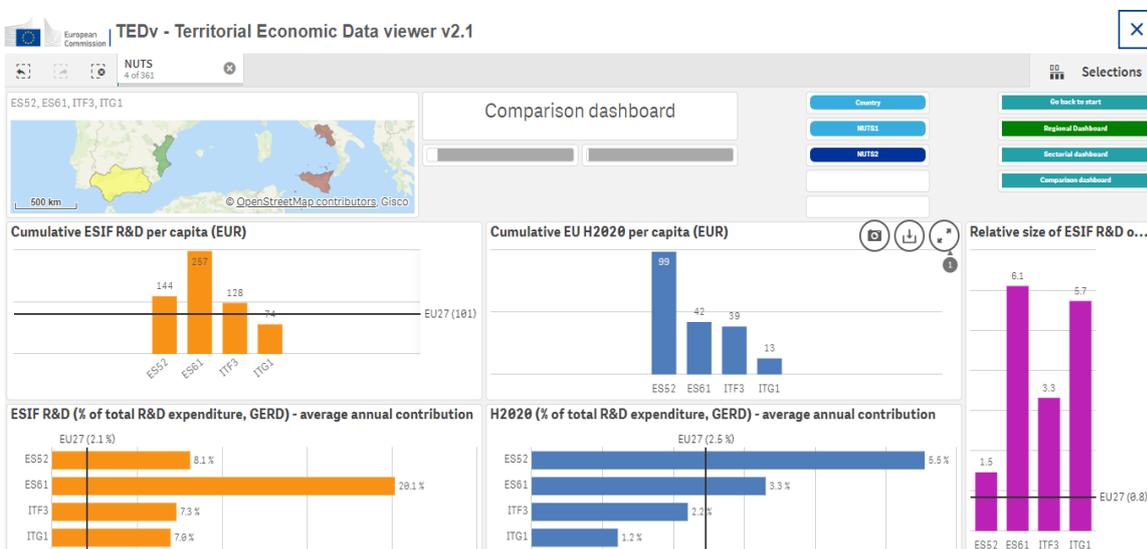
<sup>2</sup> To know more about how the peer regions are identified see JRC133404.

comparisons between territories that feature similar characteristics and visualize potential differences in terms of R&I funding, without resorting the manual selection.

Following the previous example, after having selected the region of Andalucía, the user can click on one of the orange buttons on the right side of the screen. The *Peers* option (top orange button) selects the regions that are most similar to Andalucía considering all potential EU regions. The *Peers (foreign)* option (bottom orange button) selects the regions that are most similar to Andalucía considering only regions outside of the country (in this case Spain).

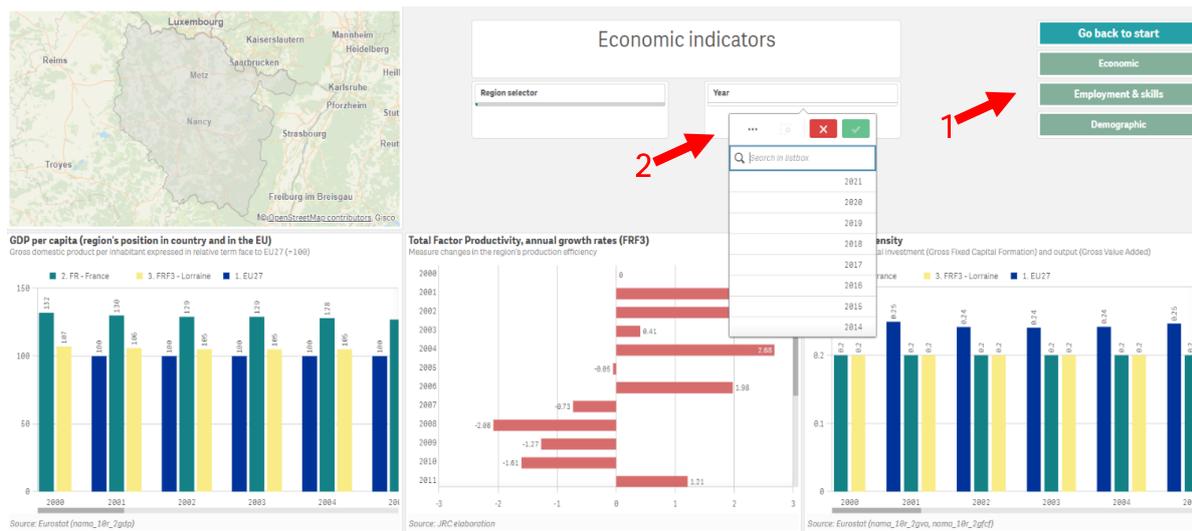


If the user chooses the Peers button, the dashboard will automatically display information on three peer regions of Andalucía, which are Comunidad Valenciana, Sicily, and Campania. In this way, it is easy to visualize differences concerning R&I funding across Andalucía and its three peer regions.



## 4.4 Regional info-sheet

Additionally to the three dashboards discussed before, TEDv includes a Regional info-sheet where the user might find crucial information for the profiling of the regions. This dashboard covers different economic, social and demographic indicators - separated by thematic area in tabs (1) that are involved in the innovation development of the regions, for the years 2000 - 2021 (2).



## GLOSSARY

- BERD: Business enterprises expenditures on R&D.
- CF: Cohesion Fund
- EAFRD: European Agricultural Fund for Rural Development
- EMFF: European Maritime and Fisheries Fund
- ERDF: European Regional Development Fund
- ESF: European Social Fund
- ESIF: European structural and investment funds
- EU: European Union
- GDP: Gross Domestic Product
- GERD: Gross Domestic Expenditures on R&D
- GOVRD: Government expenditures on R&D
- H2020: Horizon 2020
- HE: Horizon Europe
- HERD: Higher education expenditures on R&D
- NACE: Statistical classification of economic activities in the European Community
- NUTS: Nomenclature of territorial units for statistics
- PNPRD: Private non-profit expenditures on R&D
- R&D: Research and Development
- R&I: Research and Innovation
- RRF: Recovery and Resilience Facility
- RRP: Recovery and Resilience Plan
- TEDv: Territorial Economic Data viewer