



Engaging with users to modernise the dissemination of European statistics

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B.4 Digital dissemination

Eurostat

Content

- Context
- User profiling exercise
- Usability studies
- Implementation of results
- Next steps



Google Analytics Solutions



BI INTELLIGENCE



Context

- Users' needs
 - Attractive and user-friendly products and services
 - New targeted products and services
- A place in the information market

User profiling exercise – Setup

- **Field studies:** remote, in–context interviews and observation of user behavior
- 40 participants
- Individual sessions in English of 1,5 hour each
 - Profiling questions (closed questions)
 - Interview about participants' typical use of statistical tools (open questions)
 - Observation of users interacting with at least 3 products on the Eurostat website

User profiling exercise – Results

- Demographic and professional information on users needs to be complemented with goals and behaviour
- Users' continuum
- Potential users can fit as advanced, intermediate or light users
- Five personas of users of European statistics

Technical Advanced User — Pietro

	<p>Key Goals</p> <p>Pietro wants to collect data of high quality for his clients. He is motivated to go the extra mile to provide them with exactly what they need fast.</p> <p><i>“The search time to find the right datasets is too long, but I cannot give up, it is my job to find the data I am looking for.”</i></p>	<p>Characteristics</p> <p>Statistical literacy </p> <p>Computer proficiency </p>
<p>Demographics</p> <p>31 years old</p> <p>Works for a big consultancy firm that redistributes European and international statistics as a commodity to its clients.</p>	<p>He is not looking for publications or visualisations, he is only interested in raw data. At his firm, they create publications and data visualisations themselves.</p> <p>Main Tasks</p> <ul style="list-style-type: none">● Setting up automatic downloading of multiple datasets● Browsing for new datasets that his clients might want● Looking up datasets to send the link to clients● Checking datasets suggested by clients	<p>Visits Eurostat daily, sometimes several times in one day.</p> <p>Tools used</p> <ul style="list-style-type: none">● Bulk Download● Web Services● Database

👍 **We should** make automation as easy as possible, allowing Pietro to download many datasets at once.

🗨️ **We must not** change the way data are disseminated or the way variables are measured without any notification.

Analytical Advanced User — Ingrid

	Key Goals <p>Ingrid typically goes straight to Eurostat’s database to get raw data, at least if she knows what she is looking for. Sometimes, however, she needs data on an unfamiliar topic. In that case she will search Google for publications from Eurostat to get an idea of the statistics available.</p>	Characteristics <p>Statistical literacy  5</p> <p>Computer proficiency  4</p>
Demographics <p>63 years old</p> <p>Works as a policy maker for the European Commission's Directorate General for Trade.</p>	<p><i>“I sometimes distrust processed data, I prefer to draw my own conclusions”</i></p> <p>She needs to find datasets and download them to do her own calculations and create her own graphs.</p> Main Tasks <ul style="list-style-type: none">● Looking for relevant datasets● Adjusting the layout and format of the tables● Saving bookmarks to return to the datasets later● Downloading tables to Excel	<p>Visits Eurostat sometimes daily, when writing a research paper, but at least weekly.</p> Tools used <ul style="list-style-type: none">● Database● Statistics Explained● Statistical Reports (but no PDFs because they are not user friendly)

👍 **We should** provide a good overview of everything that is available on Eurostat.

🗨️ **We must not** provide publications as PDFs, because they are not easy to work with (copy-paste).

Data Oriented Intermediate User — Isak

	<p>Key Goals</p> <p>As a journalist, Isak is constantly looking for many different angles to support the stories he is working on. This means he comes to the Eurostat website with a very specific goal in mind, not just to browse around. He does look at both data visualisations and tables with raw data, yet he only uses the latter for his articles. A graphical designer at his editorial office will create charts or infographics from those data when necessary.</p> <p><i>“The challenge lies in finding the data, more than in interpreting the data.”</i></p> <p>Main Tasks</p> <ul style="list-style-type: none">● Searching for visualisations and raw data● Downloading selections of specific tables● Sometimes taking screenshots to show the graphic designer how the data could be presented	<p>Characteristics</p> <p>Statistical literacy </p> <p>Computer proficiency </p> <p>Visits Eurostat a few times a week.</p> <p>Tools used</p> <ul style="list-style-type: none">● Tables, Graphs, Maps● Database (but less)● Statistics Illustrated
<p>Demographics</p> <p>28 years old</p> <p>Works as a journalist for a national newspaper. He does not write about data, but looks for statistics on the topics he is writing about to support articles.</p>		

👍 **We should** provide good crosslinks between different extraction and dissemination tools with data on the same topic

🗨️ **We must not** let users waste time with looking for relevant data

Visually Oriented Intermediate User — Mia

	<p>Key Goals</p> <p>Mia typically only visits Eurostat whenever she needs to put things in a European perspective for her studies. Although she has a specific goal in mind, she often deviates from that goal and starts exploring other topics too.</p> <p>Although she can interpret tables, she prefers to look at graphs and maps because they are easier to interpret and give an overview much more quickly. Mia does not mind getting conclusions from Eurostat’s publications and reports, but she draws her own when writing essays.</p> <p><i>“Raw numbers are interesting but graphs immediately give you an overview.”</i></p>	<p>Characteristics</p> <p>Statistical literacy </p> <p>Computer proficiency </p> <p>Visits Eurostat once a month, but sometimes more when writing an essay.</p>
<p>Demographics</p> <p>21 years old</p> <p>Studies Political Sciences and International Relations. She is currently in the third year of her Bachelor program.</p>	<p>Main Tasks</p> <ul style="list-style-type: none">● Searching for reports, publications and visualisations● Copy/pasting text and making screenshots	<p>Tools used</p> <ul style="list-style-type: none">● Visualisation Tools● Tables, Graphs, Maps● Database (but less)● Statistics Explained● Statistical Reports

👍 **We should** provide her with the tools to easily save and download the bits and pieces she needs for later reference

🗨️ **We must not** let her get lost inside Eurostat, but still allow her to explore

Personally Interested Light User — Kristoffer

	<p>Key Goals</p> <p>Although Kristoffer occasionally uses an article or data visualisation from Eurostat in his English class, he visits the website more out of personal interest. Usually he arrives on Eurostat by clicking on a Facebook post that intrigues him. He is very much interested in the European project and likes to look for similarities and differences between European member states.</p>	<p>Characteristics</p> <p>Statistical literacy </p> <p>Computer proficiency </p> <p>Visits Eurostat about once a month.</p>
<p>Demographics</p> <p>42 years old</p> <p>Teaches English and History in high school. He is very interested in the European project and checks statistics out of personal interest.</p>	<p>Looking at visualisations and occasionally reading reports is where it stops for Kristoffer. He never downloads data and seldomly digs deeper to draw his own conclusion.</p> <p><i>“The general view is enough for me, I am not enough of a specialist to dig deep into the data.”</i></p> <p>Main Tasks</p> <ul style="list-style-type: none">• Checking out data visualisations (that he gets from Facebook) or reading reports	<p>Tools used</p> <ul style="list-style-type: none">• Facebook page• Themes in the Spotlight• Digital Publications• Visualisation Tools• Tables, Graphs, Maps



We should make sure that users who arrive on Eurostat via Facebook can navigate their way around the rest of the site



We must not ignore the fact that he will also end up in the database or main tables every now and then

Usability studies

- Statistics Explained – new page structure
- Thematic sections on Eurostat website – new landing page layout

Usability studies – Setup

- 12 participants
- 5 days of testing
- In-lab or remote sessions in English
- Individual observation
- Think-aloud method
- Understanding users' goals and observing their behavior



← We need you!



18/05/2018



Eurostat is currently conducting usability studies to understand how people use statistical products on the Eurostat website. Users' feedback will be integrated in the process of designing Eurostat's statistical products in order to make sure that they are usable and useful to all citizens.

Do you ever look up Eurostat's statistics for research, to get general background information, for decision-making, for media use, or for personal interest? Are you willing to help us better understand your needs as users of European statistics?

We are looking for candidates to take part in individual sessions of one hour each between 22/05 and 01/06. The sessions will be in English and will be carried out remotely via a video conferencing tool in the browser.

If you are interested to take part, please [click here](#) and answer a few short questions and leave us your contact details.

Thanks for helping us to improve our products! And don't forget to share this with your friends and colleagues...

If you have any questions, please contact us: ESTAT-USER-RESEARCH@EC.EUROPA.EU

Share this page:

Usability studies – profiling Qs

- How often do (European) statistics play a role in your job?
- How and where did you learn to interpret statistics?
- Why do you visit Eurostat's website?
- Which tools/items/sections of the Eurostat website do you use?
- Can you tell me how you search for European statistics?
- Are there any other tools you use to consult (European) statistics?
- Do you follow any statistical organizations on social media?
- Why are you interested in (European) statistics?
- For what purpose would you use (European) statistics?

Video clip

Main findings

&

Implementation

Users want to be able to easily scan the page and identify the information that they are interested in

Employment and unemployment (LFS) – Overview

INTRODUCTION

What is the EU Labour Force Survey?

The EU Labour Force Survey (EU-LFS) is the largest European household sample survey. Its main statistical objective is to classify the population of working age (15 years and over) into three mutually exclusive and exhaustive groups: **employed persons**, **unemployed persons** (both together make up the so-called 'labour force') and economically inactive persons (the population 'outside the labour force'), for example students, pensioners and housewives or -men.

Eurostat currently publishes EU-LFS results for **34 participating countries**. These countries are the 28 Member States of the European Union, three EFTA countries (Iceland, Norway and Switzerland), and three EU candidate countries (Montenegro, the Former Yugoslav Republic of Macedonia and Turkey).

The EU-LFS provides **quarterly and annual data**; depending on the labour status of the people (employed, unemployed, economically inactive) different variables are collected.

[> read more](#)



Icons, labels, are only useful if they are clear



Unemployment statistics



Data up to March 2018
Planned article update: 31 May 2018

Highlights



Tweet

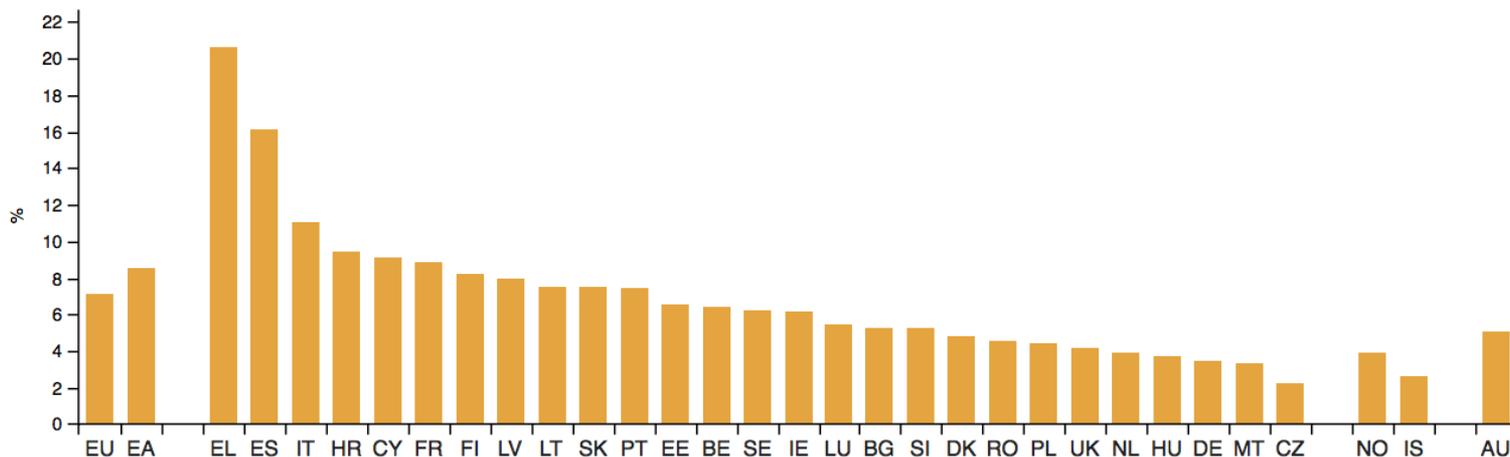
Euro area unemployment at 8.5% in March 2018



Tweet

The unemployment rate recorded in March 2018 is the lowest rate recorded in the euro area since December 2008

Unemployment rates, seasonally adjusted, March 2018 (%)



DIRECT ACCESS TO...



Complete database



Selected tables



Methodology



Legislation



Publications



Statistics Explained

**Visually appealing as important as
consistent and coherent**

DIRECT ACCESS TO...



Complete database



Selected tables



Methodology



Legislation



Publications



Statistics Explained

Direct access to



Other articles



Tables



Database



Dedicated section



Publications



Methodology



External links

**Font size and line spacing are important
for readability**

Trends in the euro area

The unemployment rate in the euro area (EA-19) followed roughly the same trend as in the EU-28. However, between 2000 and the beginning of 2004 the unemployment rate in the euro area was below that recorded in the EU-28. This pattern was subsequently reversed as, between 2005 and the beginning of 2008, unemployment declined more rapidly in the Member States [which do not yet have the euro](#). As in the EU-28, during the economic crisis unemployment increased at a considerable pace, with the exception of the period between mid-2010 and mid-2011 where it temporarily declined. The unemployment level peaked at 19.3 million in the second quarter of 2013, before going down since the second part of 2013 and reaching 15.7 million at the end of 2016.

Graphs and text complement each other if reflected in the structure of the page

Main statistical findings

Education

One of the prominent indicators in education statistics is the proportion of persons who have attained **tertiary education** (i.e. who graduated from universities or other higher education institutions). This indicator belongs to the **set of headline indicators used to monitor the Europe 2020 strategy** for smart, sustainable and inclusive growth. In particular, *one of EU-level headline targets of the strategy is to increase, by 2020, the share of the population aged 30–34 having completed tertiary education to at least 40%* [1].

From the 'tertiary education attainment' indicator, we derive a gender gap defined as the proportion of men aged 30-34 that have attained tertiary education minus that of women. In 2016, this gender gap was -9.5 percentage points (p.p.) in the **EU-28**, meaning that the proportion of women aged 30-34 that had attained tertiary education exceeded that for men by 9.5 p.p. (see Figure 1). All Member States, except Germany, recorded a negative gender gap in tertiary education attainment. In 2016, that gap ranged from 0.4 p.p. in Germany (the smallest gender gap in absolute value), -3.5 p.p. in Romania, -3.7 p.p. in Austria, -3.8 p.p. in Luxembourg and -4.3 p.p. in the United Kingdom to -20.7 p.p. in Lithuania, -21.7 p.p. in Slovenia and -26.0 p.p. in Latvia (the largest gender gap in absolute value).

For the population as a whole, the proportion of persons aged 30-34 that had attained tertiary education in 2016 ranged from 25.6 % in Romania to 58.7 % in Lithuania. Among EU Member States with the largest gender gap in absolute value (above 20 p.p.), the proportion of persons with tertiary education was 42.8 % in Latvia, 44.2 % in Slovenia and 58.7 % in Lithuania, above the EU-28 average of 39.1 %



The gap is the difference between women and men
Source: Eurostat, Datasets: (demo_mlexpec) (demo_find) (edat_lfse_03) (lfsa_egais) (lfst_hindwvs)
Further information: <http://bit.ly/1RsiMaM>
ec.europa.eu/eurostat

Infographic: Women in the EU-28

Source: Eurostat ([demo_mlexpec](#))

([demo_pjangroup](#)) ([demo_find](#)) ([edat_lfse_03](#)) ([lfsi_emp_a](#))

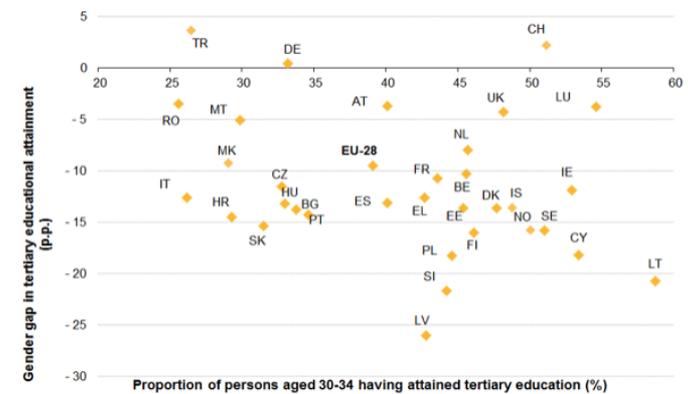


Figure 1: Tertiary education attainment and gender gap, 2016

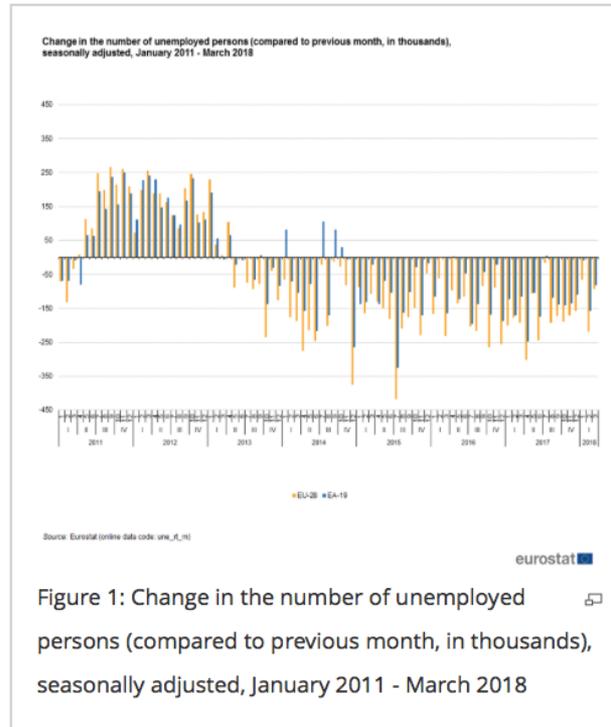
Source: Eurostat ([edat_lfse_03](#))



Recent developments

Unemployment in the EU and the euro area

Eurostat estimates that 17.481 million men and women in the EU-28^[1], of whom 13.824 million were in the euro area (EA-19)^[2], were unemployed in March 2018. Compared with February 2018, the number of persons unemployed decreased by 94 000 in the EU-28 and by 83 000 in the euro area. Compared with March 2017, unemployment fell by 1.930 million in the EU-28 and by 1.414 million in the euro area.



The euro area [seasonally-adjusted](#) unemployment rate was 8.5 % in March 2018, stable compared with February 2018 and down from 9.4 % in March 2017. The EU-28 unemployment rate was 7.1 % in March 2018, stable compared with February 2018 and down from 7.9 % in March 2017.

Unemployment in the Member States

Among the Member States, the lowest unemployment rates in March 2018 were recorded in the Czech Republic (2.2 %), Malta (3.3 %) and Germany (3.4 %). The highest unemployment rates were observed in Greece (20.6 % in January 2018) and Spain (16.1 %).

Users should not easily get lost in the website

rates; they have however also risen since 2008 due to the effects of the crisis on the labour market.

	Youth unemployment rate				Youth unemployment ratio			
	2007	2014	2015	2016	2007	2014	2015	2016
EU-28	15.9	22.2	20.3	18.7	6.9	9.2	8.4	7.7
Euro area	15.6	23.8	22.4	20.9	6.7	9.5	8.8	8.2
Belgium	18.8	23.2	22.1	20.1	6.4	7.0	6.6	5.7
Bulgaria	14.1	23.8	21.6	17.2	4.2	6.5	5.6	4.1
Czech Republic	10.7	15.9	12.6	10.5	3.4	5.1	4.1	3.4
Denmark	7.5	12.6	10.8	12.0	5.3	7.8	6.7	7.9
Germany	11.8	7.7	7.2	7.0	6.1	3.9	3.5	3.5
Estonia	10.1	15.0	13.1	13.4	3.8	5.9	5.5	5.8
Ireland	9.1	23.9	20.9	17.2	5.1	8.9	7.6	6.7
Greece	22.7	52.4	49.8	47.3	7.0	14.7	12.9	11.7
Spain	18.1	53.2	48.3	44.4	8.7	19.0	16.8	14.7
France	19.5	24.2	24.7	24.6	7.2	8.7	9.0	9.0
Croatia	25.4	44.9	42.3	31.1	9.2	15.3	14.0	11.6
Italy	20.4	42.7	40.3	37.8	6.3	11.6	10.6	10.0
Cyprus	10.2	36.0	32.8	29.1	4.2	14.5	12.4	10.7
Latvia	10.6	19.6	16.3	17.3	4.5	7.9	6.7	6.9
Lithuania	8.4	19.3	16.3	14.5	2.3	6.6	5.5	5.1
Luxembourg	15.6	22.3	16.6	19.2	4.0	6.0	6.1	5.8
Hungary	18.1	20.4	17.3	12.9	4.6	6.0	5.4	4.2
Malta	13.5	11.7	11.8	11.1	7.3	6.1	6.1	5.7
Netherlands	9.4	12.7	11.3	10.8	4.3	8.6	7.7	7.4
Austria	9.4	10.3	10.6	11.2	5.6	6.0	6.1	6.5
Poland	21.6	23.9	20.8	17.7	7.1	8.1	6.8	6.1
Portugal	21.4	34.7	32.0	28.2	8.6	11.9	10.7	9.3
Romania	19.3	24.0	21.7	20.6	6.1	7.1	6.8	5.8
Slovenia	10.1	20.2	16.3	15.2	4.2	6.8	5.8	5.1
Slovakia	20.6	29.7	26.5	22.2	7.1	9.2	8.5	7.2
Finland	16.5	20.5	22.4	20.1	8.8	10.7	11.7	10.5
Sweden	19.2	22.9	20.4	18.9	10.1	12.7	11.2	10.4
United Kingdom	14.3	17.0	14.6	13.0	8.8	9.8	8.6	7.6
Iceland	7.1	10.0	8.8	6.5	5.6	7.7	7.1	5.4
Norway	7.2	7.9	9.9	10.9	4.4	4.3	5.5	6.1
Switzerland	:	:	:	:	:	:	:	:
Turkey	17.2	18.0	18.6	19.6	6.3	7.3	7.7	8.2
United States	10.5	13.4	11.6	10.4	:	:	:	:
Japan	7.7	6.2	5.5	5.1	:	:	:	:

: data not available

Source: Eurostat (une_rt_a)

Table 2: Youth unemployment figures, 2007-2016 (%)

Source: Eurostat (une_rt_q) and (lfsi_act_a)



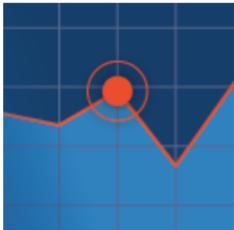
**Different products on the same topic
should be cross-linked to provide easy
access and complete overview**

HIGHLIGHTS



Find out about your country's labour market

Do you know how many persons in your country are employed, unemployed or economically inactive? How does this compare to other European countries? Find out using our interactive visualisation.



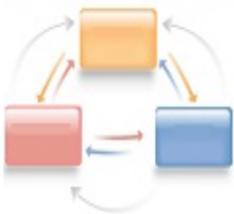
Compare unemployment rates

How has the unemployment rate in your country developed over the last months? Is it below or above the EU or euro area average?



Dig into statistics for your region & city

The visualisation tool 'Regions and cities illustrated' lets you easily explore labour market statistics for your region or city using maps, graphs and bar charts.



Illustrating labour market flows

With the help of our infographics in this Statistics Explained article, you can see movements of people between employment, unemployment and economic inactivity from quarter to quarter.

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Complete database



Selected tables



Methodology



Legislation



Publications



Statistics Explained

EXPLORE FURTHER



Release calendar

Find out when our newest quarterly LFS data will be published.



More labour market statistics

Looking for other labour market data such as earnings or labour cost? Then check out our complete range of labour market statistics.

**If you're asking questions, help users find
the answer**

Energy - Overview

INTRODUCTION

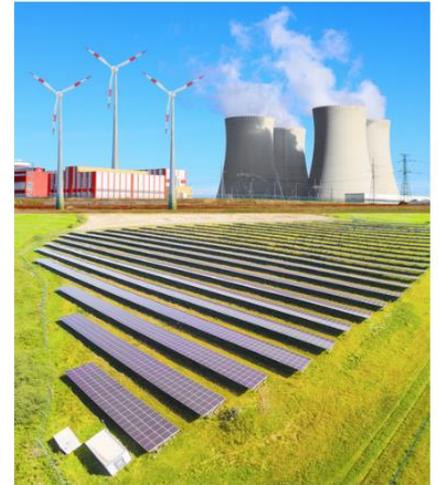
The importance of energy statistics

Lighting, heating, transport, industry: energy is vital to run our essential day-to-day services and businesses. We take it for granted that we can switch on our computers and start our cars, yet these simple actions are the final stages of a **complex process**. For more information, watch our [short video](#) explaining how electricity is produced.

Statistics can help to make the complex processes of the energy we use **more understandable** and can help us to answer questions such as:

- [Where does our energy come from?](#)
- [How dependent are we on energy imports?](#)
- [Which kind of energy do we consume in the EU and how much does it cost?](#)

[> read more](#)



Key take-aways

- Good understanding of users requires direct and continuous engagement
- Users' experiences with other organizations/websites create expectations for ours as well
- Learning exercise both for users and for Eurostat
- Communication and promotion!

Next steps

- Use of user personas for product design and usability studies
- ESS usability guidelines for websites disseminating statistics
- ESS guidelines on user analytics, user research and user personas
- ESS user research event
- Usability studies for national statistical institutes



**Thank you for your
attention!**

Questions?