

Trends in the “Europe 2020” Strategy An Overview

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Eight indicators corresponding to the targets of “Europe 2020” Strategy were used to estimate the deviation of EU Member-States from their targets. The study showed that: i) the distance to the employment target of 75 % of people aged 20-64 years has narrowed, ii) the expenditure for R&D as a percentage of GDP are still below the target of 3%, iii) the reduction of greenhouse gas emissions in ESD sectors by 20 % compared to 1990 levels are still below the target, iv) the increase of the share of renewable energy in final consumption to 20 % remains just below the target, v) the move towards a 20% increase in energy efficiency shows a good prospect, vi) the reduction of school drop-out rates to less than 10 % is steadily approaching its target, vii) the share of population aged 30-34 having completed tertiary education to at least 40 % is steadily approaching its target, viii) the lifting at least 20 million people out of risk of poverty was not achieved.

Keywords: “Europe 2020” Strategy, smart growth, sustainable growth, inclusive growth

THE “EUROPE 2020” STRATEGY AND SCOPE OF STUDY

The “Europe 2020” Strategy proposed by the Commission on 3 March 2010 and adopted by the European Council on 26 March 2010 set three priorities to promote growth: (a) smart, with more efficient investment in education, research and development and innovation, (b) sustainable, with transition to a low carbon economy, share of renewable energy and increase in energy efficiency, (c) inclusive, with a focus on job creation and poverty reduction (European Commission, 2010, 2012, 2014).

Five key EU-wide objectives have been agreed to assess the progress made in implementing the “Europe 2020” Strategy: (a) employment, (b) research and development, (c) climate change and energy sustainability, (d) education and (e) combating poverty and social exclusion. To reach the objectives, the EU has adopted eight ambitious targets at EU level. These targets are then converted into national targets for each Member State, reflecting the different situations, conditions and abilities in each Member State (Fischer et al., 2010, Hacker & Treck, 2010).

For the employment target it is foreseen to increase employment in the age group 20-64 from 69% to at least 75%. For the R&D target, it is foreseen that 3% of EU GDP should be invested in R&D. For the target of climate change and energy sustainability it is foreseen to reduce greenhouse gas emissions by 20% (or even 30% if conditions allow) compared to 1990, to secure 20% of renewable energy and a 20% increase in energy efficiency. For the target of education it is foreseen to reduce early school dropout rates from 15% to less than 10% and complete higher education in the age group of 30-34 from 31% to at least 40%. For the target of combating poverty and social exclusion it is foreseen to be reduced by at least 20%, i.e. by 20 million people who are or will be at risk of poverty and social exclusion. The following Table 4 illustrates the objectives and the targets of “*Europe 2020*” Strategy.

Member States are committed to achieving the objectives of the Strategy “*Europe 2020*”, which they have turned into national targets. However, the desired results for development can be achieved only with the coordination and proper targeting of efforts at national level. The Commission has introduced the “European Semester”, a cycle of economic policy coordination. The European Council of 17 June 2010 endorsed the idea of the “European Semester”. Each year, the Commission gives a detailed breakdown of the budgetary, macroeconomic and structural reforms programme for each Member State, and makes recommendations for the next 12-18 months.

TABLE 1
TARGETS AND OBJECTIVES OF “EUROPE 2020” STRATEGY

Priorities	Objectives	Targets
Smart growth	Investing in R&D	<ul style="list-style-type: none"> Increasing combined public and private investment in R&D to 3 % of GDP
	Education	<ul style="list-style-type: none"> Reducing school drop-out rates to less than 10 % Increasing the share of the population aged 30-34 having completed tertiary education to at least 40 %
Sustainable Growth	Climate Change	<ul style="list-style-type: none"> Reducing greenhouse gas emissions by at least 20 % compared to 1990 levels Increasing the share of renewable energy in final energy consumption to 20 % Moving towards a 20% increase in energy efficiency
Inclusive Growth	Employment	<ul style="list-style-type: none"> Increasing the employment rate of the population aged 20-64 to at least 75 %
	Combating Poverty & Exclusion	<ul style="list-style-type: none"> Lifting at least 20 million people out of the risk of poverty and social exclusion

Source: European Commission (2019), modified by the author.

The "European Semester" starts with the European Commission's *Annual Growth Survey* (AGS), usually during November of each year. This document sets out the EU's priorities for stimulating growth and employment. At the same time, the Commission is publishing the *Alert Mechanism Report* (AMR). On the basis of some indicators, the AMR identifies those Member-States that need further analysis, in the form of an in-depth review, to arrive at conclusions about the possible existence of imbalances and their nature. Also, the *Joint Employment Report* (JER), mandated by the *Treaty on the Functioning of the EU*, outlines important social achievements and employment developments in the EU. It also provides for actions taken by Member-States in accordance with the guidelines for the employment policies of each country. Two more documents are produced in this time: the Commission's *Recommendation for the Euro Area* and the Commission's *Opinions on Draft Budgetary Plans*. Also, during February a Country Report per Member-State is prepared, which include a reform agenda and imbalances (European Commission, 2020).

During April, each Member State sends two documents to the Commission and the Council: i) The *National Reform Programme* (NRP), which provides a detailed economic reform plan to be implemented by each country. ii) The *Stability Programme* (SP, for Eurozone countries) / The *Convergence Programme* (CP, for non-Eurozone countries), where each country sets out in the document the orientation and objectives of its budgetary and fiscal policies for 3 years. During May, the Commission proposes Country-Specific Recommendations (CSRs), which provide policy guidance tailored to each EU country on how to boost jobs and growth, while maintaining sound public finances (European Commission, 2020).

The scope of this study is the estimation of the deviation of all Member-States from the targets set by each state during the years 2008 – 2018. Recent available data from Eurostat (2019) will be used to estimate the current deviation from targets for each Member-State and to rank all of them according to this deviation (Gros & Roth, 2012). All used data are shown in the Appendix in Tables 2 – 10.

CALCULATION OF “EUROPE 2020” STRATEGY INDICATORS

Eight normalized indicators corresponding to the targets presented in Table 1 will be calculated. Data and targets for each Member-State have been extracted from Eurostat (2019) data bases. Data and targets for all states are presented in Appendix.

Following the description of the objectives of “*Europe 2020*” Strategy, the following indicators will be calculated, using the corresponding data and targets:

1. Employment indicator:

$$EMP_{i,t} = \frac{emp_{i,t} - emp_{i,\tau}}{emp_{i,\tau}} \quad (1)$$

where: $EMP_{i,t}$ = is the normalized employment indicator of Member State i during year t

$emp_{i,t}$ = is the employment rate of Member State i during year t as % of age group 20–64

$emp_{i,\tau}$ = is the employment rate target of Member State i as % of age group 20–64

2. Research and Development indicator:

$$R\&D_{i,t} = \frac{r\&d_{i,t} - r\&d_{i,\tau}}{r\&d_{i,\tau}} \quad (2)$$

where: $R\&D_{i,t}$ = is the normalized research and development indicator of Member State i during year t

$r\&d_{i,t}$ = is the research and development expenditure of Member State i during year t as % of $GDP_{i,t}$

$r\&d_{i,\tau}$ = is the research and development expenditure target of Member State i as % of $GDP_{i,t}$

3. Climate Change and Energy indicator A:

$$CEA_{i,t} = \frac{cea_{i,\tau} - cea_{i,t}}{cea_{i,\tau}} \quad (3)$$

where: $CEA_{i,t}$ = is the normalized climate change 1st indicator of Member State i during year t

$cea_{i,t}$ = is the greenhouse gas emissions of Member State i during year t compared to 1990 levels

$cea_{i,\tau}$ = is the greenhouse gas emissions target of Member State i compared to 1990 levels

4. Climate Change and Energy indicator B:

$$CEB_{i,t} = \frac{ceb_{i,t} - ceb_{i,\tau}}{ceb_{i,\tau}} \quad (4)$$

where: $CEB_{i,t}$ = is the normalized climate change 2nd indicator of Member State i during year t
 $ceb_{i,t}$ = is the share of renewable energy of Member State i during year t in final consumption %
 $ceb_{i,\tau}$ = is the share of renewable energy target of Member State i in final consumption %

5. Climate Change and Energy indicator C:

$$CEC_{i,t} = \frac{cec_{i,\tau} - cec_{i,t}}{cec_{i,\tau}} \quad (5)$$

where: $CEC_{i,t}$ = is the normalized climate change 3rd indicator of Member State i during year t
 $cec_{i,t}$ = is the final energy consumption of Member State i during year t in Mtoe
 $cec_{i,\tau}$ = is the final energy consumption target of Member State i in Mtoe

6. Education indicator A:

$$EDA_{i,t} = \frac{eda_{i,\tau} - eda_{i,t}}{eda_{i,\tau}} \quad (6)$$

where: $EDA_{i,t}$ = is the normalized education 1st indicator of Member State i during year t
 $eda_{i,t}$ = is the early leavers from education and training of Member State i during year t as % of population aged 18–24
 $eda_{i,\tau}$ = is the early leavers from education and training target of Member State i as % of population aged 18–24

7. Education indicator B:

$$EDB_{i,t} = \frac{edb_{i,t} - edb_{i,\tau}}{edb_{i,\tau}} \quad (7)$$

where: $EDB_{i,t}$ = is the normalized education 2nd indicator of Member State i during year t
 $edb_{i,t}$ = is the tertiary educational attainment of Member State i during year t as % of population aged 30–34
 $edb_{i,\tau}$ = is the tertiary educational attainment target of Member State i as % of population aged 30–34

8. People at Risk of Poverty indicator:

$$POV_{i,t} = \frac{pov_{i,\tau} - pov_{i,t}}{pov_{i,\tau}} \quad (8)$$

where: $POV_{i,t}$ = is the normalized people at risk of poverty indicator of Member State i during year t
 $pov_{i,t}$ = is the people at risk of poverty or social exclusion of Member State i during year t in thousands
 $pov_{i,\tau}$ = is the people at risk of poverty or social exclusion target of Member State i in thousands

Variables with capital letters refer to the final normalized indicators, while variables with lowercase letters refer to either target values (with index t) or values for a specific year (with index i). Obviously, if the value for a specific year equals to the target value, then the indicator value equals to 0 (zero). If the values of a specific year exceed the target values (ie if $emp_{i,t} > emp_{i,\tau}$, $r\&d_{i,t} > r\&d_{i,\tau}$, $cea_{i,\tau} > cea_{i,t}$, $ceb_{i,t} > ceb_{i,\tau}$, $cec_{i,\tau} > cec_{i,t}$, $eda_{i,\tau} > eda_{i,t}$, $edb_{i,t} > edb_{i,\tau}$, $pov_{i,\tau} > pov_{i,t}$), then the values of the final indicators are positive, while if this is not the case then the values of the final indicators are negative.

Total deviations from targets are calculated using only the negative values of the indicators, since zero and positive values mean that the targets have been reached.

RESULTS AND DISCUSSION

The obtained results for all Member-States and all targets of “*Europe 2020*” Strategy for years 2008 – 2018 are given in the following Figures 1 - 8 which illustrate graphically the change of all indicators for all EU28 Member-States, divided in two groups. The first group of Member-States (EU15) consist of the 15 Member-States before the 2004 enlargement. The second group of Member-States (EU13) consist of the 13 Member-States that joined the EU after 2004, eleven states from Central and Eastern Europe and two Mediterranean states (Cyprus and Malta).

Also, Table 2 illustrates the starting and the recent deviations from targets for all indicators of Strategy “*Europe 2020*” and the total deviations for all Member States, while Figure 9 illustrates in the form of radar charts the “*Europe 2020*” Strategy’s recent indicators and the starting indicators of year 2008, the baseline year for monitoring the “*Europe 2020*” Strategy, in comparison to the states targets. The charts show how far a Member-State is from its targets by comparing the national target (blue line), the country’s indicators in 2008 (yellow line) and the recent indicators (red line).

From the obtained results and for each of the eight indicators it is clear that:

1. Employment indicator (Increasing the employment rate of the population aged 20-64 to at least 75 %). EU15 Member States obviously have been affected widely by the recent global economic crisis, and as a result, the employment rate of age group 20–64 was reduced from year 2008 until year 2013 for most Member-States, with the exception of Germany and Sweden, where the employment rate have almost not been affected by the economic crisis. Recent data show that most of the Member-States of EU15 could not reach the figures of year 2008 yet, meaning that there is an increase in the deviation from final targets for most Member-States of EU15. On the other hand, EU13 Member-States, although they have been affected by the global economic crisis, they reacted more efficiently, and as a result, most of them have reached their targets, while the rest of them show a considerable decrease in their deviation from their target. But although the mean deviation of all EU Member-States is recently smaller than that of year 2008, mainly due to the behaviour of the EU13 Member-States, more effort is required especially from the EU15 Member-States, in order the average target for EU Member-States to be reached within the next two years.
2. Research and Development indicator (Increasing combined public and private investment in R&D to 3 % of GDP). With the exception of Germany and Denmark, the rest of EU15 Member-States did not reach their target. Actually, their expenditures for research and development as % of GDP, did not increase considerably for years 2008-2018. For EU13 and with the exception of Czechia, for which the target includes public sector only and is set to 1% of GDP, Cyprus is the only Member-State reached the target. As a result, the mean deviation of all EU Member-States is recently (2018) smaller than that of year 2008, but there is a lot to be done in order the average target for EU Member-States to be reached, especially from the EU13 Member-States.
3. Climate Change and Energy indicator A (Reducing greenhouse gas emissions in ESD sectors by at least 20 % compared to 1990 levels). Almost all EU15 Member-States have decreased their deviations from their targets, with the exception of Ireland. Seven Member-States have reached their final targets, among them Greece and Portugal which had reached their targets since 2008. Most of EU13 Member-States had reached their targets from year 2008, but their positive distance from targets in 2018 was decreased, while Poland and Malta, although they had indicators values above the target during 2008, their indicators during 2018 are below the target. More effort is required from some EU15 and EU13 Member-States in order the average target for EU Member-States to be reached.
4. Climate Change and Energy indicator B (Increasing the share of renewable energy in final energy consumption to 20 %). All Member-States of EU15 are approaching significantly their

final targets. Netherlands is the Member-State with the largest deviation from its target, while five Member-States have already reached their targets. From the E13 Member-States, six states have already reached their targets, from which, Croatia had reached its target since 2008. The rest of them are approaching their targets significantly. As a result, the deviation from the average target for all EU Member-States was decreased significantly, showing a good prospect for this indicator.

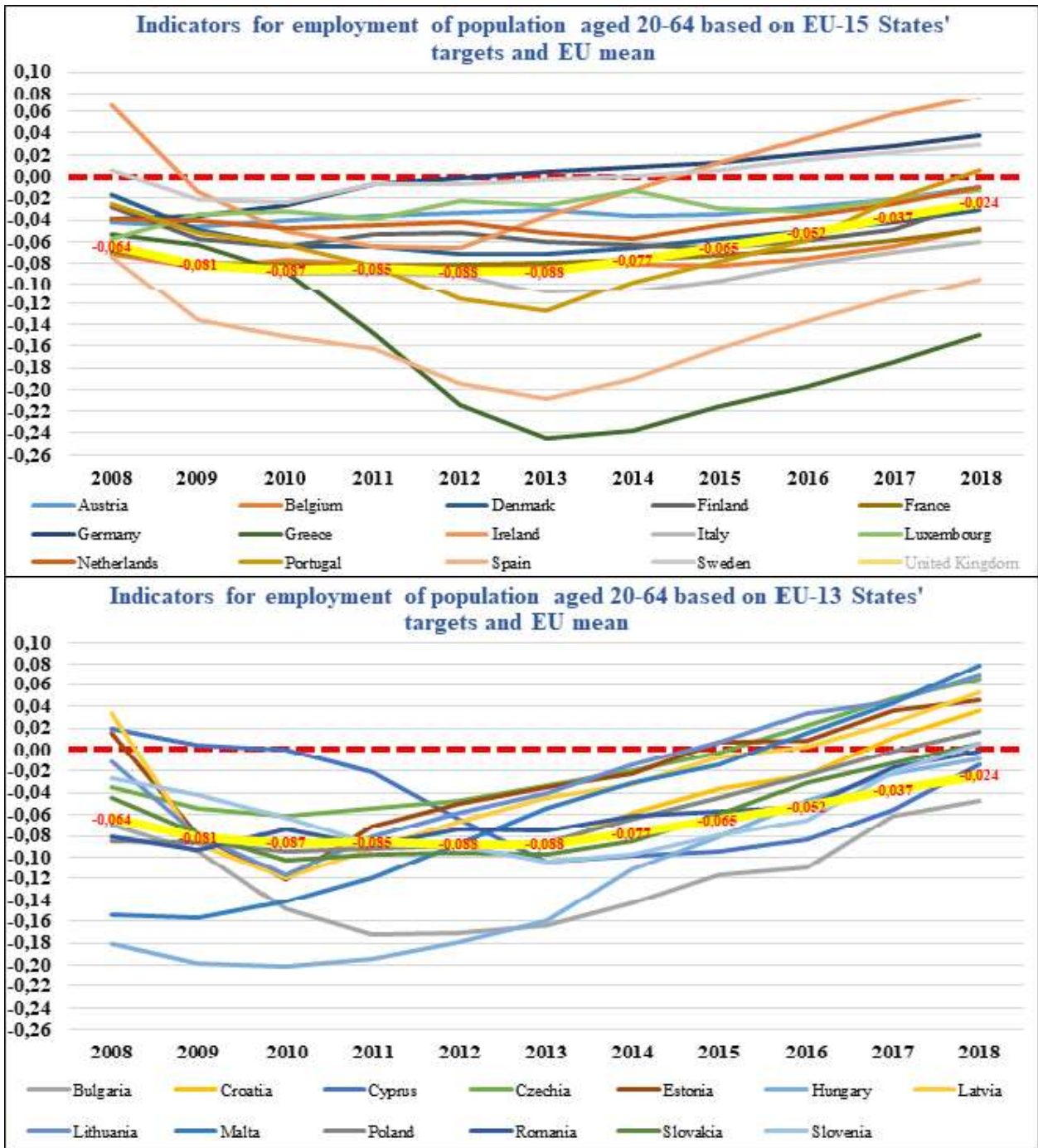
5. Climate Change and Energy indicator C (Moving towards a 20% increase in energy efficiency). All Member-States of EU15 are approaching significantly their final targets, while five Member-States have already reached their targets, from which, Finland had reached its target since 2008. From the E13 Member-States, seven states have already reached their targets, from which, five states had reached their targets since 2008. The rest of them are approaching their targets significantly. As a result, the deviation from the average target for all EU Member-States was decreased significantly, showing a good prospect for this indicator. Note that the target for all EU Member-States was almost reached during 2014.
6. Education indicator A (Reducing school drop-out rates to less than 10 %). Almost all Member-States of EU15 showed a very good behaviour in approaching and reaching their targets and eight of them have already reached their targets. Four Member-States of EU13 have already reached their targets, among which Lithuania which had reached its target since 2008, while the rest of them are approaching their targets significantly, with the exception of Slovakia which although it had indicator value above the target during 2008, its indicator during 2018 is below the target. The deviation from the average target for all EU Member-States was decreased significantly, showing a good prospect for this indicator.
7. Education indicator B (Increasing the share of the population aged 30-34 having completed tertiary education to at least 40 %). Nine Member-States of EU15 have already reached their final targets, from which, Finland had reached its target since 2008. The other six Member-States are approaching their targets significantly. Also, eight Member-States of EU13 have already reached their final targets, from which, Cyprus had reached its target since 2008. The other five Member-States are approaching their targets significantly. The average target for all EU Member-States has already reached, showing a good prospect for this indicator.
8. People at Risk of Poverty indicator (Lifting at least 20 million people out of the risk of poverty and social exclusion). Only two Member-States of EU15 have already reached their final targets, while other Member-States like Greece, Spain, Ireland and Italy have been affected by the global economic crisis. Luxembourg increased its deviation from the final target due to the difficult target set by it. Also, eight Member-States of EU13 have already reached their final targets, while from the rest Member-States Estonia and Cyprus increased their deviation from the final target, mainly due to the economic crisis. More effort is required from mainly EU15 and some EU13 Member-States in order the average target for EU Member-States to be reached.

CONCLUSIONS

Generally for all EU Member-States, i) the distance to the employment target of 75 % of people aged 20-64 years has narrowed but more effort is required especially from the EU15 Member-States, ii) the expenditure for R&D as a percentage of GDP are still below the target of 3%, which calls for increasing combined public and private R&D expenditure, iii) the reduction of greenhouse gas emissions in ESD sectors by at least 20 % compared to 1990 levels are still below the target and more effort is required from some Member-States, iv) the increase of the share of renewable energy in final energy consumption to 20 % remains just below the target, showing a good prospect from almost all Member-States, v) the move towards a 20% increase in energy efficiency was significant showing a good prospect from almost all Member-States, vi) the reduction of school drop-out rates to less than 10 % is steadily approaching its target, vii) the increase of the share of the population aged 30-34 having completed tertiary education to at

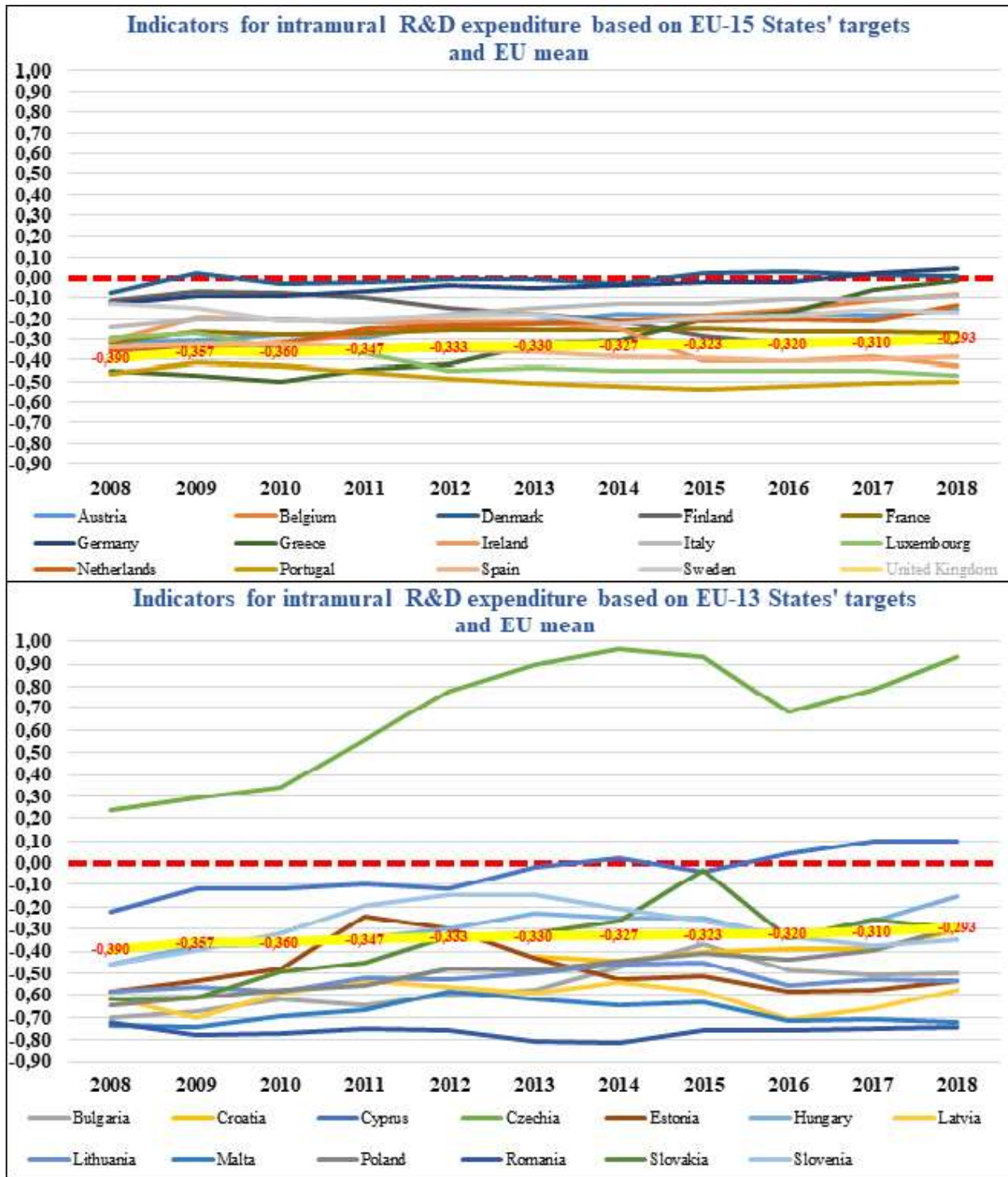
least 40 % is also steadily approaching its target, viii) the lifting at least 20 million people out of the risk of poverty and social exclusion was not achieved and more effort is required from mainly EU15 and some EU13 Member-State.

FIGURE 1
INDICATORS FOR EMPLOYMENT OF POPULATION AGED 20-64 BASED ON EU-15 AND EU13 STATES' TARGETS AND EU MEAN



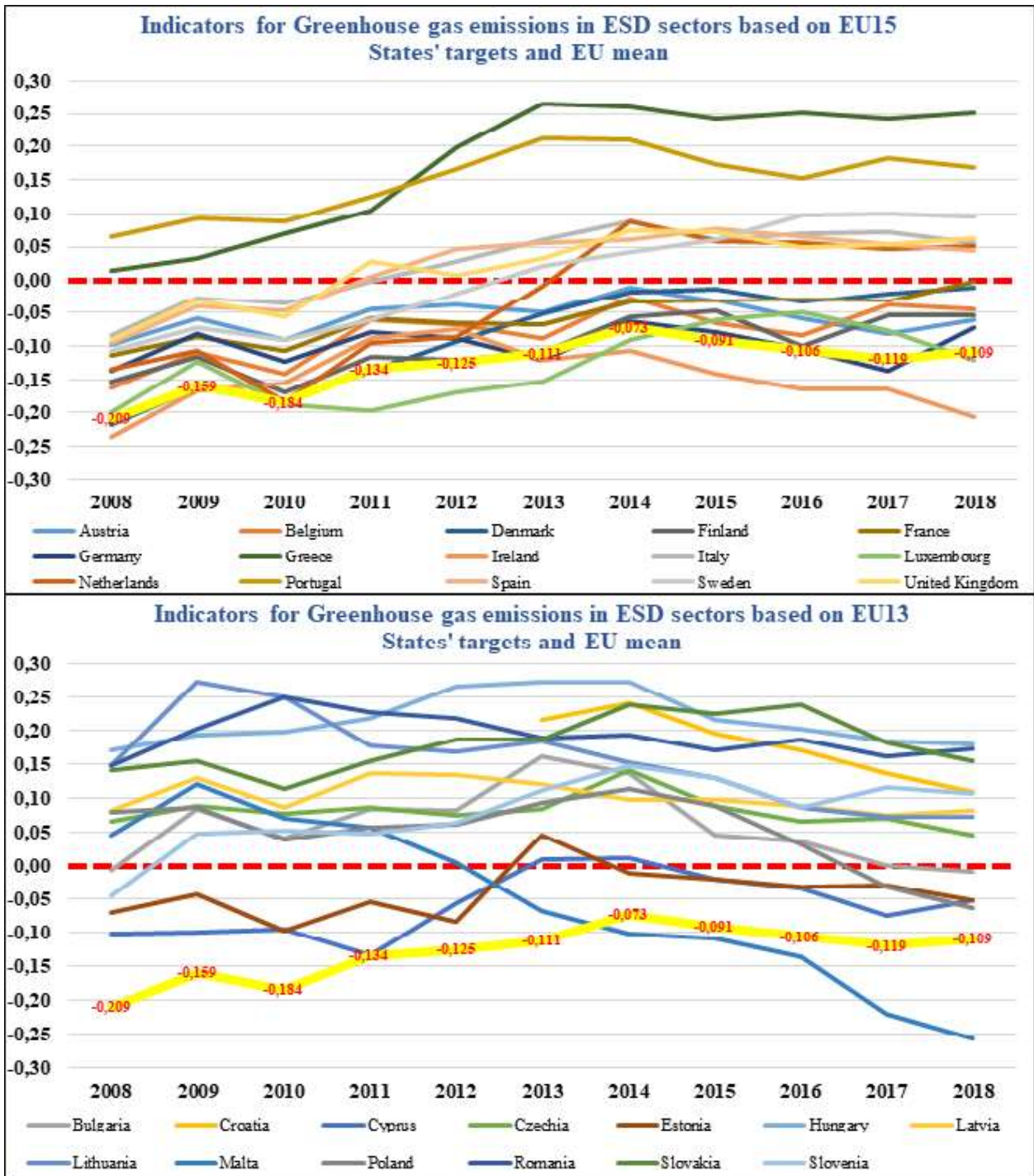
Source: author's calculations.

FIGURE 2
INDICATORS FOR INTRAMURAL R&D EXPENDITURE BASED ON EU-15 AND EU13 STATES' TARGETS AND EU MEAN



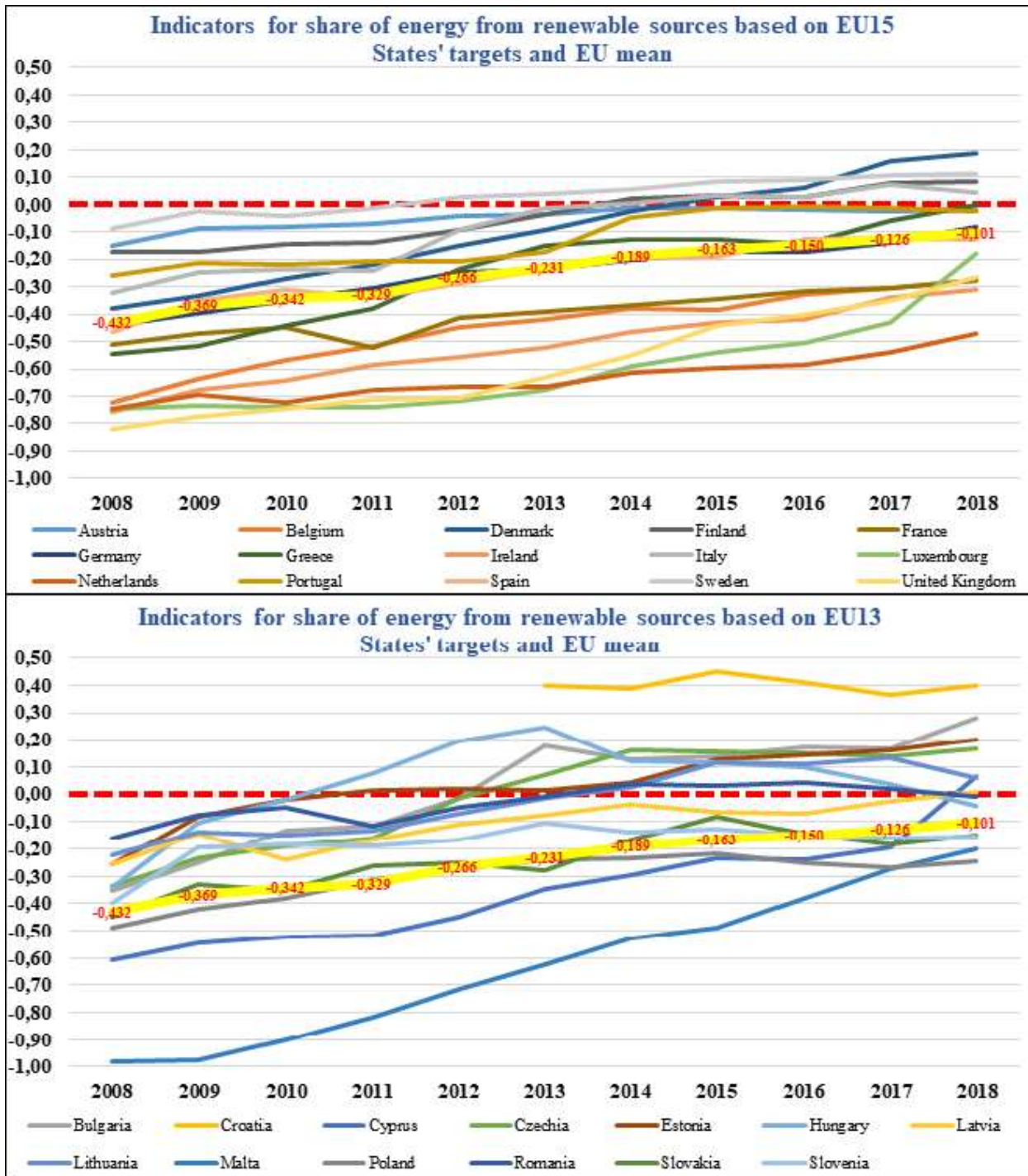
Source: Author's calculations.

FIGURE 3
INDICATORS FOR GREENHOUSE GAS EMISSIONS IN ESD SECTORS BASED ON EU15
AND EU13 STATES' TARGETS AND EU MEAN



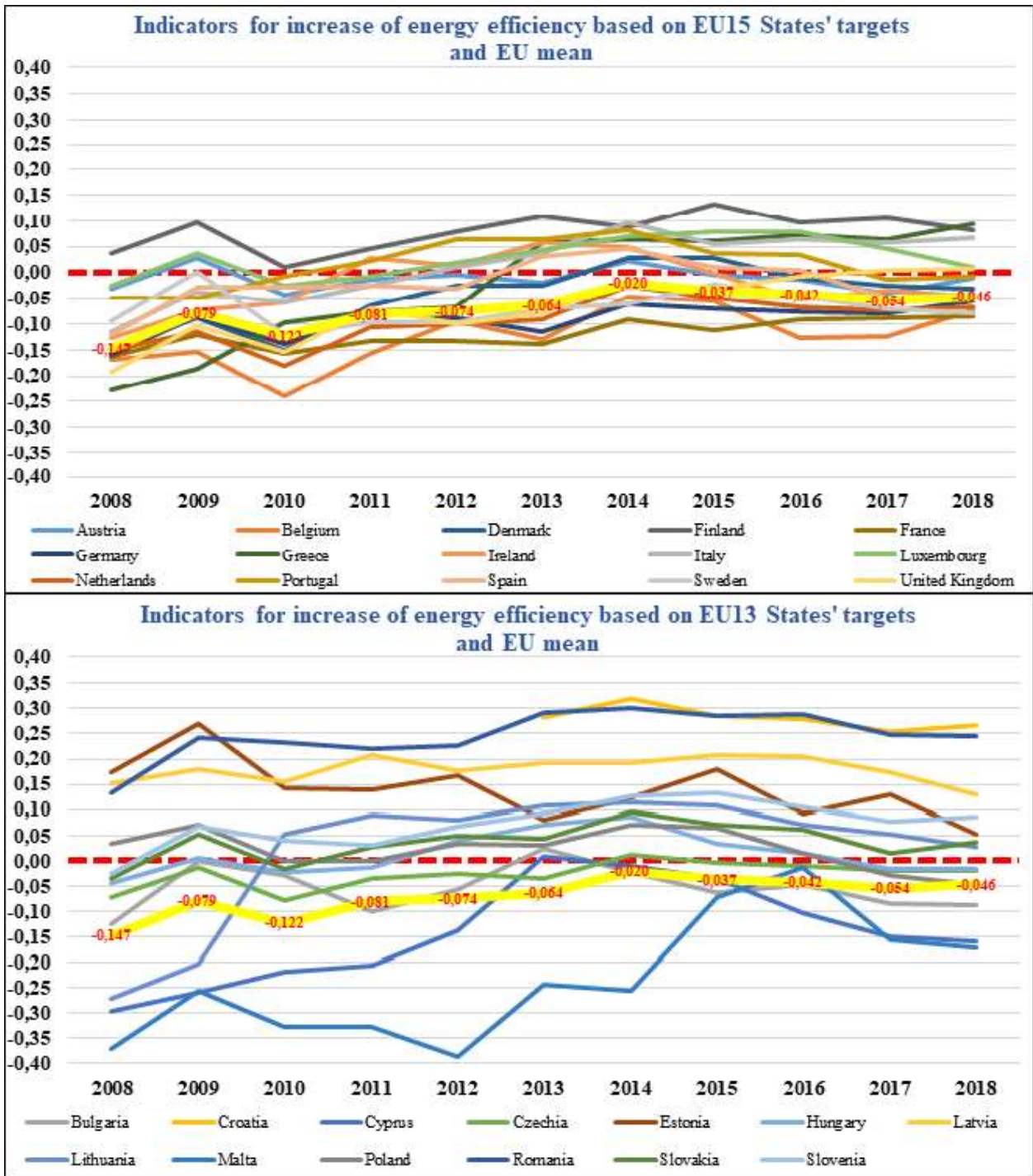
Source: Author's calculations

FIGURE 4
INDICATORS FOR SHARE OF ENERGY FROM RENEWABLE SOURCES BASED ON EU15
STATES' TARGETS AND EU MEAN



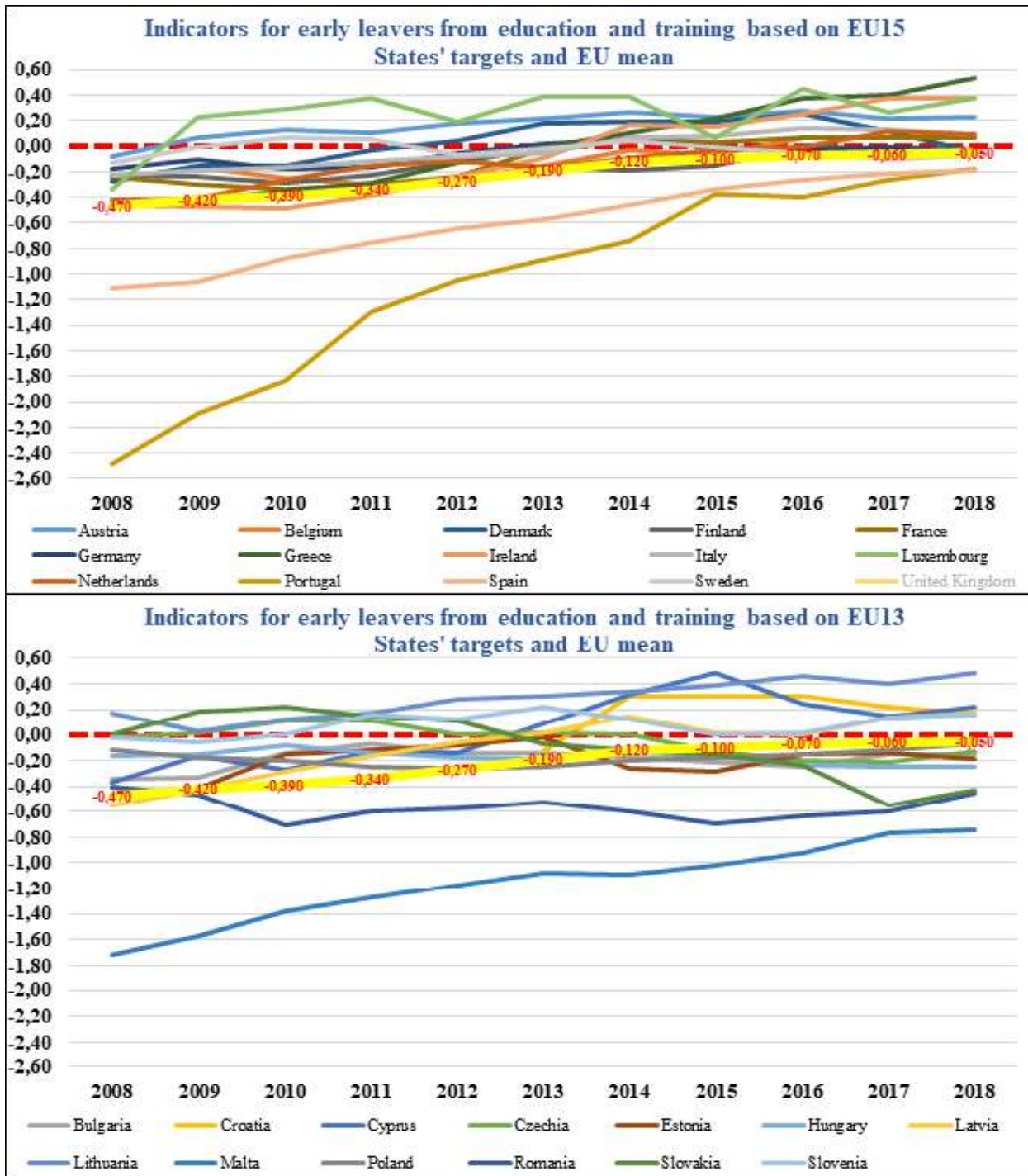
Source: Author's calculations.

FIGURE 5
INDICATORS FOR INCREASE OF ENERGY EFFICIENCY BASED ON EU15 AND EU13 STATES' TARGETS AND EU MEAN



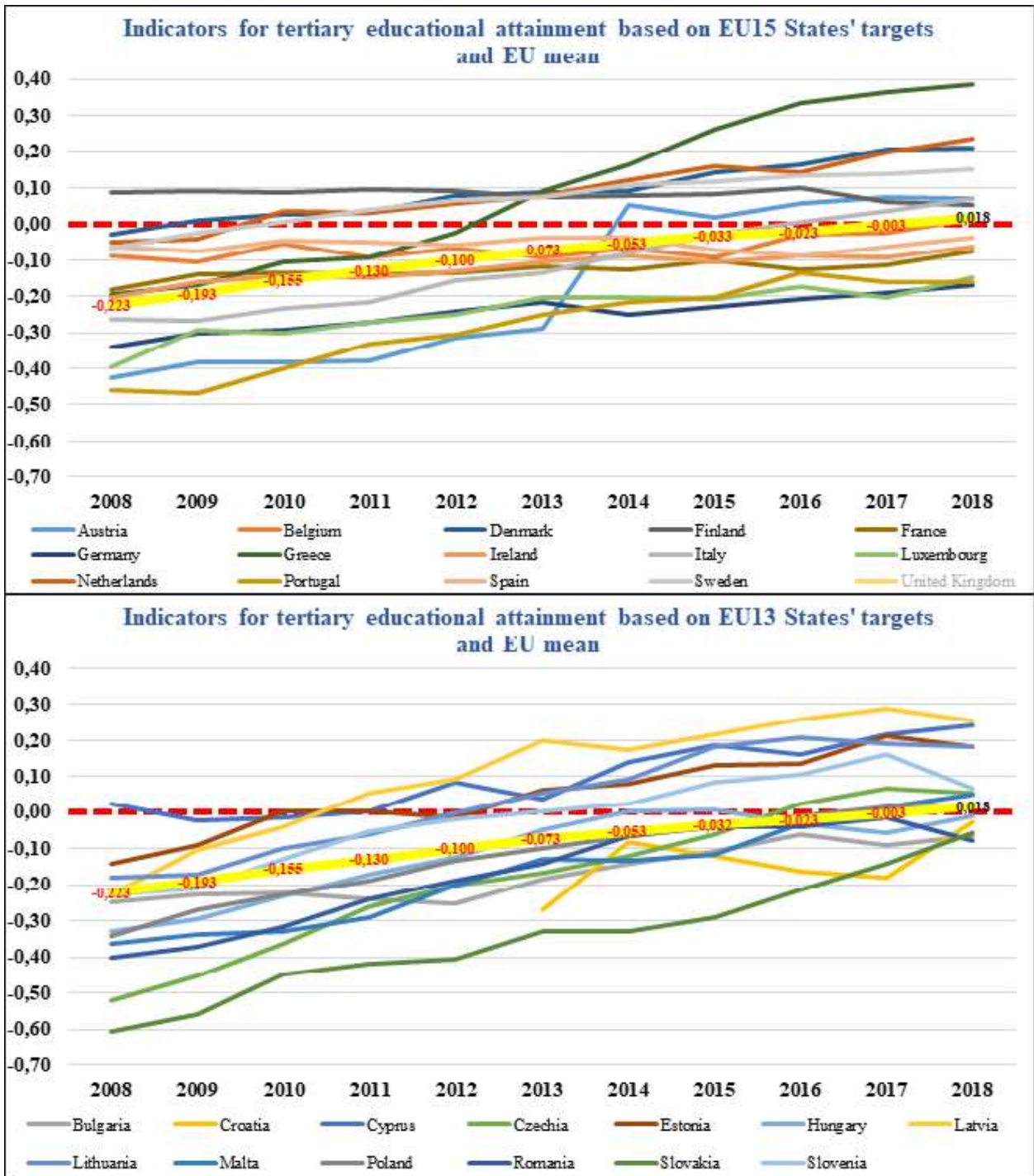
Source: Author's calculations

FIGURE 6
INDICATORS FOR EARLY LEAVERS FROM EDUCATION AND TRAINING BASED ON
EU15 AND EU13 STATES' TARGETS AND EU MEAN



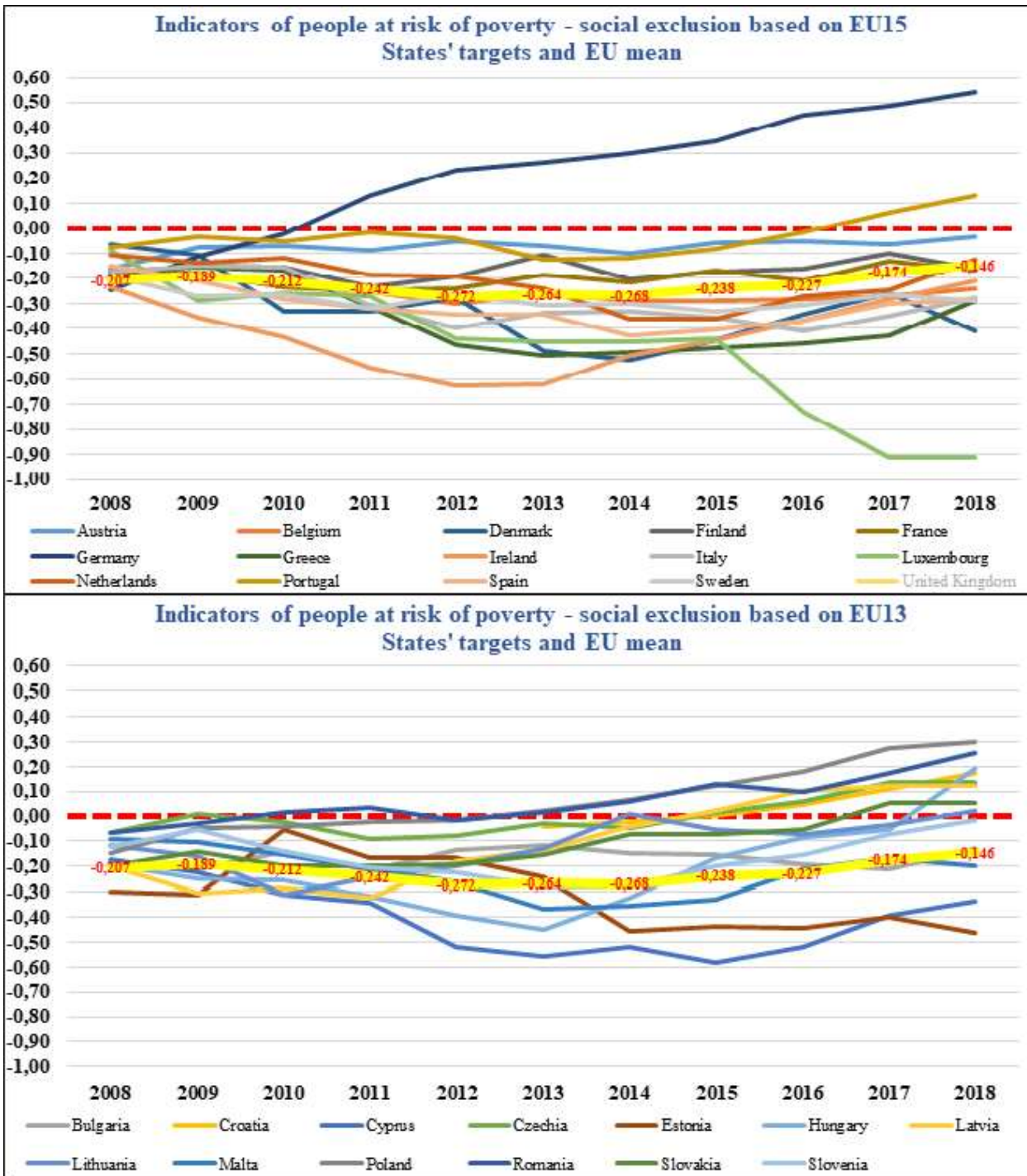
Source: Author's calculations

FIGURE 7
INDICATORS FOR TERTIARY EDUCATIONAL ATTAINMENT BASED ON EU15 AND EU13 STATES' TARGETS AND EU MEAN



Source: Author's calculations.

FIGURE 8
INDICATORS OF PEOPLE AT RISK OF POVERTY - SOCIAL EXCLUSION BASED ON EU15
AND EU13 STATES' TARGETS AND EU MEAN



Source: Author's calculations.

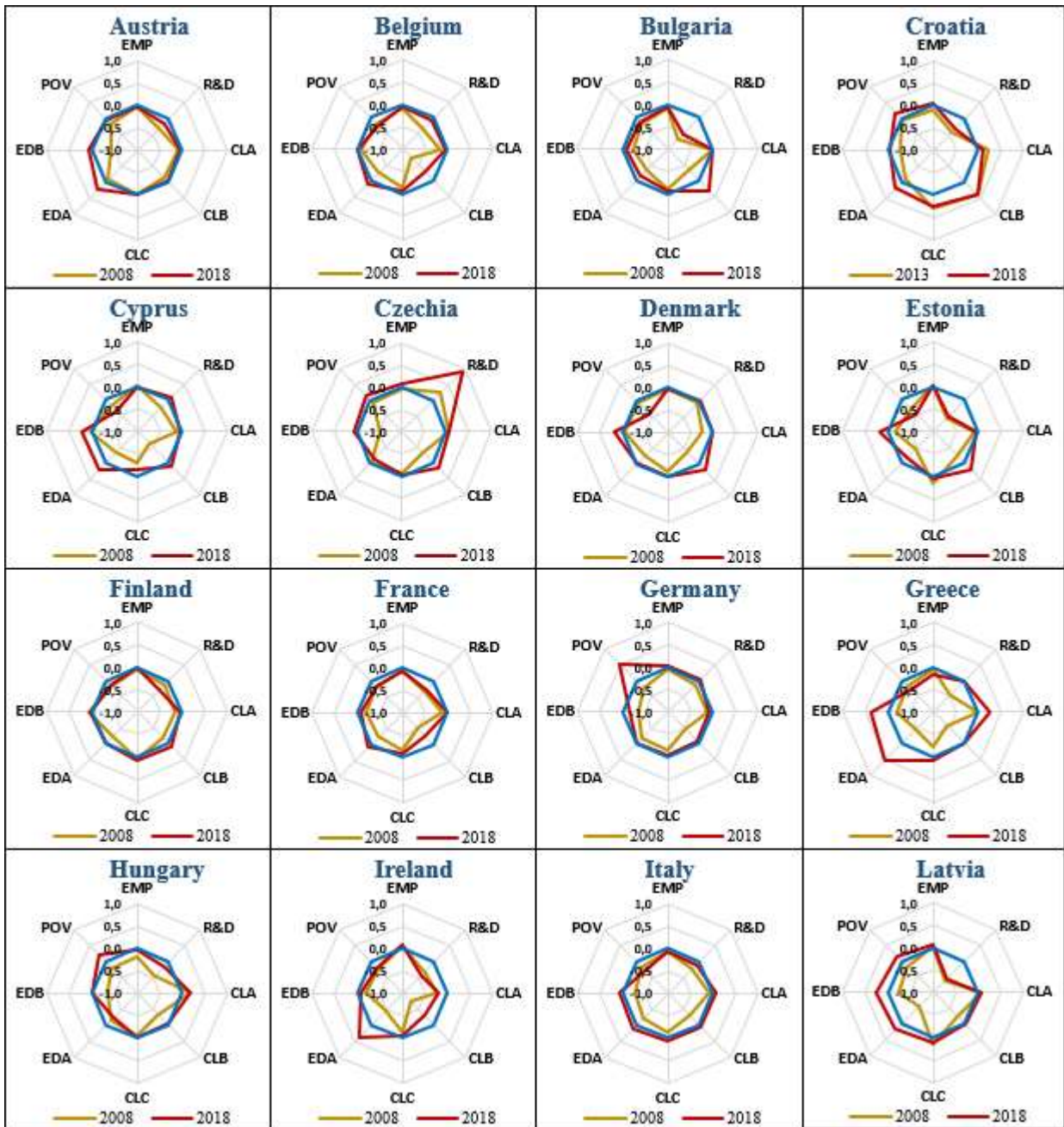
TABLE 2
DEVIATIONS FROM TARGETS FOR ALL INDICATORS OF “EUROPE 2020” STRATEGY

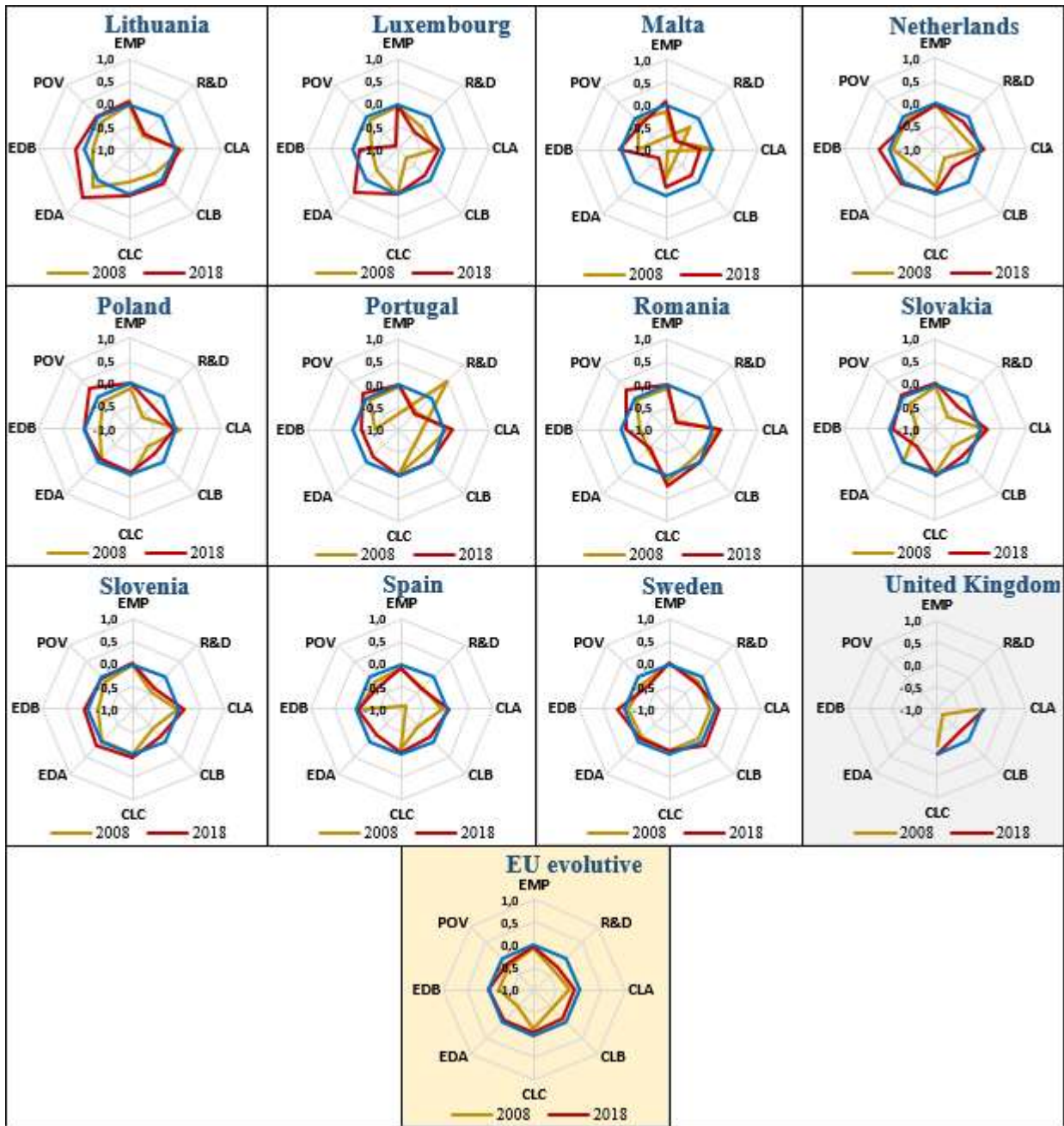
Member State	Years	EMP	R&D	CLA	CLB	CLC	EDA	EDB	POV	Deviation
Austria	2008	-0,041558	-0,316489	-0,098810	-0,151294	-0,030794	-0,073684	-0,423684	-0,160519	-0,287212
	2018	-0,010390	-0,156915	-0,060714	-0,016882	-0,009524	0,231579	0,071053	-0,032787	Rank: 2
Belgium	2008	-0,071038	-0,353333	-0,162353	-0,723846	-0,170023	-0,263158	-0,087234	-0,209482	-0,759403
	2018	-0,047814	-0,080000	-0,045882	-0,275154	-0,071854	0,094737	0,012766	-0,238699	Rank: 16
Bulgaria	2008	-0,069737	-0,700000	-0,007500	-0,353438	-0,125444	-0,345455	-0,247222	-0,189504	-0,990993
	2018	-0,047368	-0,500000	-0,008333	0,283000	-0,086391	-0,154545	-0,063889	-0,130466	Rank: 21
Croatia	2013	-0,090620	-0,421429	0,217117	0,401200	0,282511	-0,125000	-0,268571	-0,041803	-0,332857
	2018	0,036566	-0,307143	0,109009	0,401200	0,266368	0,175000	-0,025714	0,173770	Rank: 3
Cyprus	2008	0,020000	-0,220000	-0,102105	-0,605077	-0,295455	-0,370000	0,023913	-0,175325	-0,564051
	2018	-0,014667	0,100000	-0,052632	0,067846	-0,159091	0,220000	0,241304	-0,337662	Rank: 11
Czechia	2008	-0,034667	0,240000	0,066055	-0,332769	-0,073232	-0,018182	-0,518750	-0,068213	-0,147222
	2018	0,065333	0,930000	0,045872	0,165385	-0,019949	-0,127273	0,053125	0,137790	Rank: 1
Denmark	2008	-0,016250	-0,076667	-0,217500	-0,381833	-0,144253	-0,270000	-0,027500	-0,067692	-0,526992
	2018	-0,031250	0,010000	-0,011250	0,190267	-0,032184	-0,040000	0,210000	-0,412308	Rank: 9
Estonia	2008	0,014474	-0,583333	-0,069369	-0,254280	0,173846	-0,473684	-0,140000	-0,300000	-1,235059
	2018	0,046053	-0,533333	-0,052252	0,199840	0,050769	-0,189474	0,180000	-0,460000	Rank: 23
Finland	2008	-0,028205	-0,115000	-0,152381	-0,174684	0,037047	-0,225000	0,088095	-0,181818	-0,586405
	2018	-0,021795	-0,312500	-0,053571	0,083211	0,081058	-0,037500	0,052381	-0,161039	Rank: 13
France	2008	-0,068000	-0,313333	-0,113953	-0,513609	-0,161392	-0,242105	-0,180000	-0,175912	-0,923015
	2018	-0,049333	-0,266667	-0,001163	-0,278565	-0,086448	0,063158	-0,076000	-0,164839	Rank: 19
Germany	2008	-0,038961	-0,126667	-0,136047	-0,439556	-0,159653	-0,180000	-0,340476	-0,245023	-0,411465
	2018	0,037662	0,043333	-0,073256	-0,084389	-0,054772	-0,030000	-0,169048	0,539816	Rank: 4
Greece	2008	-0,052857	-0,450000	0,015625	-0,545389	-0,228745	-0,440000	-0,196875	-0,173344	-0,456728
	2018	-0,150000	-0,016667	0,252083	0,000111	0,092308	0,530000	0,384375	-0,290062	Rank: 6
Hungary	2008	-0,180000	-0,455556	0,170909	-0,341231	-0,043983	-0,170000	-0,329412	-0,191980	-0,472314
	2018	-0,008000	-0,150000	0,180000	-0,039308	-0,016183	-0,250000	-0,008824	0,194966	Rank: 7
Ireland	2008	0,065217	-0,305000	-0,236250	-0,754438	-0,125899	-0,462500	-0,201667	-0,235294	-1,253456
	2018	0,073913	-0,425000	-0,205000	-0,308688	-0,046043	0,375000	-0,061667	-0,207059	Rank: 24
Italy	2008	-0,061194	-0,241830	-0,085057	-0,324000	-0,114684	-0,225000	-0,261538	-0,170781	-0,427482
	2018	-0,059701	-0,091503	0,056322	0,045588	0,068101	0,093750	0,069231	-0,276277	Rank: 5
Latvia	2008	0,032877	-0,613333	0,082051	-0,254725	0,151852	-0,550000	-0,226471	-0,195477	-0,573333
	2018	0,052055	-0,573333	0,081197	0,007300	0,131481	0,170000	0,255882	0,122779	Rank: 12
Lithuania	2008	-0,010989	-0,584211	0,148696	-0,225043	-0,270769	0,166667	-0,180698	-0,117936	-0,536842
	2018	0,068681	-0,536842	0,072174	0,062257	0,026154	0,488889	0,182752	0,024570	Rank: 10
Luxembourg	2008	-0,057534	-0,295652	-0,198750	-0,744091	-0,024444	-0,340000	-0,396970	-0,090909	-1,840272
	2018	-0,012329	-0,473913	-0,120000	-0,176455	0,008889	0,370000	-0,148485	-0,909091	Rank: 26
Malta	2008	-0,154286	-0,735000	0,046667	-0,980500	-0,371429	-1,720000	-0,363636	-0,088125	-2,290413
	2018	0,078571	-0,725000	-0,256190	-0,202200	-0,171429	-0,740000	0,051515	-0,195594	Rank: 27

Netherlands	2008	-0,038750	-0,352000	-0,135714	-0,743143	-0,151236	-0,425000	-0,050000	-0,104932	-0,810481
	2018	-0,010000	-0,136000	0,052381	-0,472500	-0,066063	0,087500	0,235000	-0,125918	Rank: 17
Poland	2008	-0,084507	-0,647059	0,078947	-0,485800	0,034336	-0,111111	-0,340000	-0,150135	-0,713256
	2018	0,016901	-0,288235	-0,062281	-0,247733	-0,048340	-0,066667	0,015556	0,301772	Rank: 15
Portugal	2008	-0,025333	-0,466667	0,064356	-0,259903	-0,048444	-2,490000	-0,460000	-0,078217	-0,870593
	2018	0,005333	-0,500000	0,169307	-0,021871	-0,006222	-0,180000	-0,162500	0,130622	Rank: 18
Romania	2008	-0,080000	-0,725000	0,147059	-0,158167	0,132093	-0,407080	-0,400749	-0,067955	-1,281616
	2018	-0,001429	-0,745000	0,173109	-0,005208	0,244651	-0,451327	-0,078652	0,254833	Rank: 25
Slovakia	2008	-0,044444	-0,616667	0,141593	-0,448357	-0,035366	0,000000	-0,605000	-0,197674	-0,941119
	2018	0,005556	-0,300000	0,154867	-0,150286	0,037195	-0,433333	-0,057500	0,052326	Rank: 20
Slovenia	2008	-0,026667	-0,456667	-0,044231	-0,400200	-0,026027	-0,020000	-0,227500	-0,124611	-0,519616
	2018	0,005333	-0,350000	0,107692	-0,154040	0,086301	0,160000	0,067500	-0,015576	Rank: 8
Spain	2008	-0,074324	-0,335000	-0,096667	-0,463150	-0,122204	-1,113333	-0,061364	-0,149158	-1,155466
	2018	-0,094595	-0,380000	0,045556	-0,127350	-0,040317	-0,193333	-0,036364	-0,283507	Rank: 22
Sweden	2008	0,005000	-0,127500	-0,107229	-0,088449	-0,094240	-0,128571	-0,066667	-0,192857	-0,607523
	2018	0,030000	-0,172500	0,093976	0,115204	-0,077880	-0,071429	0,151111	-0,285714	Rank: 14
Un. Kingdom	2008	-	-	-0,091667	-0,820467	-0,192568	-	-	-	Undefined
	2018	-	-	0,061905	-0,265533	0,007489	-	-	-	-
EU evolutive	2008	-0,064000	-0,390000	-0,208750	-0,431600	-0,146952	-0,470000	-0,222500	-0,206549	-0,769601
	2018	-0,024000	-0,293333	-0,108750	-0,101150	-0,046473	-0,050000	0,017500	-0,145894	-

Source: Author's calculations.

FIGURE 9
RADAR CHARTS OF “EUROPE 2020” STRATEGY INDICATORS OF YEARS 2008 AND 2018
COMPARED TO TARGETS





Source: Author's calculations

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APPENDIX

Values for Targets of “Europe 2020” Strategy for Member States (Tables 3 – 10)

TABLE 3
EMPLOYMENT PERCENTAGE OF POPULATION AGED 20-64 (emp_{it})

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	73.8	73.4	73.9	74.2	74.4	74.6	74.2	74.3	74.8	75.4	76.2	77.0	
Bulgaria	68.0	67.1	67.6	67.3	67.2	67.2	67.3	67.2	67.7	68.5	69.7	73.2	
Bulgaria	70.7	68.8	64.7	62.9	63.0	63.5	65.1	67.1	67.7	71.3	72.4	76.0	
Croatia						57.2	59.2	60.6	61.4	63.6	65.2	62.9	
Cyprus	76.5	75.3	75.0	73.4	70.2	67.2	67.6	67.9	68.7	70.8	73.9	75.0	
Czechia	72.4	70.9	70.4	70.9	71.5	72.5	73.5	74.8	76.7	78.5	79.9	75.0	
Denmark	78.7	76.1	74.9	74.8	74.3	74.3	74.7	75.4	76.0	76.6	77.5	80.0	
Estonia	77.1	70.0	66.8	70.6	72.2	73.3	74.3	76.5	78.7	79.5	79.5	75.0	
Finland	75.8	73.5	73.0	73.8	74.0	73.3	73.1	72.9	73.4	74.2	76.3	78.0	
France	69.9	69.0	68.9	68.8	68.9	69.0	69.2	69.5	70.0	70.6	71.3	75.0	
Germany	74.0	74.2	75.0	76.5	76.9	77.3	77.7	78.0	78.6	79.2	79.9	77.0	
Greece	66.3	65.6	63.8	59.6	55.0	52.9	53.3	54.9	56.2	57.8	59.5	70.0	
Hungary	61.5	60.1	59.9	60.4	61.6	63.0	66.7	68.9	71.5	73.3	74.4	75.0	
Ireland	73.5	68.0	65.5	64.6	64.5	66.5	68.1	69.9	71.4	73.0	74.1	69.0	
Ireland	62.9	61.6	61.0	61.0	60.9	59.7	59.9	60.5	61.6	62.3	63.0	67.0	
Italy	75.4	66.6	64.3	66.3	68.1	69.7	70.7	72.5	73.2	74.8	76.8	73.0	
Latvia	72.0	67.0	64.3	66.9	68.5	69.9	71.8	73.3	75.2	76.0	77.8	72.8	
Lithuania	68.8	70.4	70.7	70.1	71.4	71.1	72.1	70.9	70.7	71.5	72.1	73.0	
Luxembourg	59.2	59.0	60.1	61.6	63.9	66.2	67.9	69.0	71.1	73.0	75.5	70.0	
Netherlands	76.9	76.8	76.2	76.4	76.6	75.9	75.4	76.4	77.1	78.0	79.2	80.0	
Netherlands	65.0	64.9	64.3	64.5	64.7	64.9	66.5	67.8	69.3	70.9	72.2	71.0	
Poland	73.1	71.1	70.3	68.8	66.3	65.4	67.6	69.1	70.6	73.4	75.4	75.0	
Portugal	64.4	63.5	64.8	63.8	64.8	64.7	65.7	66.0	66.3	68.8	69.9	70.0	
Romania	68.8	66.4	64.6	65.0	65.1	65.0	65.9	67.7	69.8	71.1	72.4	72.0	
Slovakia	73.0	71.9	70.3	68.4	68.3	67.2	67.7	69.1	70.1	73.4	75.4	75.0	
Slovenia	68.5	64.0	62.8	62.0	59.6	58.6	59.9	62.0	63.9	65.5	67.0	74.0	
Spain	80.4	78.3	78.1	79.4	79.4	79.8	80.0	80.5	81.2	81.8	82.4	80.0	
Sweden	75.2	73.9	73.5	73.5	74.1	74.8	76.2	76.8	77.5	78.2	78.7	-	(Not specified)
Un. Kingdom	70.2	68.9	68.5	68.6	68.4	68.4	69.2	70.1	71.1	72.2	73.2	75.0	

The employment rate is calculated by dividing the number of persons aged 20 to 64 in employment by the total population of the same age group. The indicator is based on the EU Labour Force Survey. The survey covers the entire population living in private households and excludes those in collective households such as boarding houses, halls of residence and hospitals. Employed population consists of those persons who during the reference week did any work for pay or profit for at least one hour, or were not working but had jobs from which they were temporarily absent. Last Updated Date: 28.02.2020.

Source: Eurostat. Last updated date: 28.02.2020.

TABLE 4
PERCENTAGE OF GDP INVESTED IN R&D (r&d_{i,t}).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	2,57	2,60	2,73	2,67	2,91	2,95	3,08	3,05	3,12	3,05	3,17	3,76	
Belgium	1,94	2,00	2,06	2,17	2,28	2,33	2,37	2,43	2,52	2,66	2,76	3,00	
Bulgaria	0,45	0,49	0,57	0,53	0,60	0,64	0,79	0,95	0,77	0,74	0,75	1,50	
Croatia						0,81	0,78	0,84	0,86	0,86	0,97	1,40	
Cyprus	0,39	0,44	0,44	0,45	0,44	0,49	0,51	0,48	0,52	0,55	0,55	0,50	(Public sector only)
Czechia	1,24	1,29	1,34	1,56	1,78	1,90	1,97	1,93	1,68	1,79	1,93	1,00	
Denmark	2,77	3,06	2,92	2,94	2,98	2,97	2,91	3,06	3,09	3,05	3,03	3,00	
Estonia	1,25	1,39	1,57	2,28	2,11	1,71	1,42	1,46	1,25	1,28	1,40	3,00	
Finland	3,54	3,73	3,71	3,62	3,40	3,27	3,15	2,87	2,72	2,73	2,75	4,00	
France	2,06	2,21	2,18	2,19	2,23	2,24	2,23	2,27	2,22	2,21	2,20	3,00	
Germany	2,62	2,74	2,73	2,81	2,88	2,84	2,88	2,93	2,94	3,07	3,13	3,00	
Greece	0,66	0,63	0,60	0,67	0,70	0,81	0,83	0,96	0,99	1,13	1,18	1,20	
Hungary	0,98	1,13	1,14	1,19	1,26	1,39	1,35	1,35	1,19	1,33	1,53	1,80	
Ireland	1,39	1,61	1,59	1,56	1,56	1,57	1,50	1,19	1,19	1,23	1,15	2,00	(Actually 2,5% of
Italy	1,16	1,22	1,22	1,20	1,26	1,30	1,34	1,34	1,37	1,37	1,39	1,53	
Latvia	0,58	0,45	0,61	0,70	0,66	0,61	0,69	0,62	0,44	0,51	0,64	1,50	
Lithuania	0,79	0,83	0,79	0,91	0,90	0,95	1,03	1,04	0,84	0,90	0,88	1,90	
Luxembourg	1,62	1,68	1,50	1,46	1,27	1,30	1,26	1,27	1,26	1,27	1,21	2,30	(Actually 2,3% -
Malta	0,53	0,52	0,61	0,67	0,83	0,77	0,71	0,74	0,57	0,58	0,55	2,00	
Netherlands	1,62	1,67	1,70	1,88	1,92	1,93	1,98	1,98	2,00	1,98	2,16	2,50	
Poland	0,60	0,66	0,72	0,75	0,88	0,87	0,94	1,00	0,96	1,03	1,21	1,70	
Portugal	1,44	1,58	1,54	1,46	1,38	1,32	1,29	1,24	1,28	1,32	1,35	2,70	(Actually 2,7% -
Romania	0,55	0,44	0,46	0,50	0,48	0,39	0,38	0,49	0,48	0,50	0,51	2,00	
Slovakia	0,46	0,47	0,61	0,66	0,80	0,82	0,88	1,16	0,79	0,89	0,84	1,20	
Slovenia	1,63	1,81	2,05	2,41	2,56	2,56	2,37	2,20	2,01	1,87	1,95	3,00	
Spain	1,33	1,36	1,36	1,33	1,30	1,28	1,24	1,22	1,19	1,21	1,24	2,00	
Sweden	3,49	3,41	3,17	3,19	3,24	3,27	3,11	3,23	3,25	3,37	3,31	4,00	
Un. Kingdom	1,61	1,67	1,65	1,65	1,58	1,62	1,64	1,65	1,66	1,65	1,71	-	(Not specified)
European	1,83	1,93	1,92	1,96	2,00	2,01	2,02	2,03	2,04	2,07	2,12	3,00	

The indicator provided is GERD (Gross domestic expenditure on R&D) as a percentage of GDP. "Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications" (Frascati Manual, 2002 edition, § 63). Last Updated Date: 28.02.2020.
Source: Eurostat. Last updated date:28.02.2020.

TABLE 5
GREENHOUSE GAS EMISSIONS IN EFFORT SHARING DECISION (ESD) SECTORS - EU BASE YEAR 1990 =100 (cea,i,t).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	92,30	89,00	91,60	87,80	87,30	88,10	84,80	86,70	89,00	90,90	89,10	84,00	
Belgium	98,80	94,30	97,10	90,20	90,70	92,50	87,30	90,60	92,20	88,20	88,90	85,00	
Bulgaria	120,90	110,00	115,10	110,00	110,10	100,50	103,50	114,60	115,70	119,90	121,00	120,00	
Croatia						86,90	84,30	89,40	92,00	95,80	98,90	111,00	
Cyprus	104,70	104,40	104,10	107,80	100,40	94,10	93,80	97,00	98,30	102,10	100,00	95,00	
Czechia	101,80	99,20	100,60	99,60	100,90	99,70	93,50	99,40	101,90	101,20	104,00	109,00	(Public sector only)
Denmark	97,40	93,00	94,60	91,00	87,50	84,10	81,40	81,10	82,60	81,50	80,90	80,00	
Estonia	118,70	115,80	121,90	116,90	120,40	106,00	112,10	113,20	114,60	114,30	116,80	111,00	
Finland	96,80	93,70	98,20	93,70	94,10	93,10	88,80	88,00	92,40	88,60	88,50	84,00	
France	95,80	93,50	95,20	91,00	91,70	91,90	88,80	88,60	88,40	88,60	86,10	86,00	
Germany	97,70	93,10	96,50	92,90	93,60	96,30	91,40	92,90	95,10	97,70	92,30	86,00	
Greece	94,50	92,90	89,20	86,10	77,00	70,60	71,00	72,70	71,80	72,70	71,80	96,00	
Hungary	91,20	88,60	88,20	86,00	80,70	80,00	80,00	86,30	87,60	89,80	90,20	110,00	
Ireland	98,90	93,40	92,40	87,10	86,00	89,70	88,50	91,40	93,10	93,10	96,40	80,00	(Actually 2,5% of
Italy	94,40	89,30	90,10	87,10	84,60	81,70	79,30	81,70	80,90	80,80	82,10	87,00	
Latvia	107,40	101,80	106,90	100,90	101,20	102,80	105,60	105,40	106,60	108,20	107,50	117,00	
Lithuania	97,90	83,60	86,10	94,50	95,60	93,90	97,50	100,00	105,10	106,60	106,70	115,00	
Luxembourg	95,90	89,80	94,90	95,70	93,60	92,30	87,30	84,80	84,00	86,20	89,60	80,00	(Actually 2,3% -
Malta	100,10	92,40	97,50	99,10	104,50	112,10	115,70	116,50	119,20	128,00	131,90	105,00	
Netherlands	95,40	92,90	99,40	92,10	91,20	84,70	76,60	79,10	79,30	80,10	79,60	84,00	
Poland	105,00	104,10	109,50	107,50	107,00	103,40	100,90	103,80	110,40	117,50	121,10	114,00	
Portugal	94,50	91,70	92,00	88,40	84,10	79,50	79,90	83,60	85,60	82,70	83,90	101,00	(Actually 2,7% -
Romania	101,50	94,90	89,20	91,90	92,90	96,40	96,10	98,80	96,90	99,90	98,40	119,00	
Slovakia	97,00	95,40	100,00	95,40	91,90	91,80	86,10	87,50	86,00	92,50	95,50	113,00	
Slovenia	108,60	98,90	98,60	99,10	97,40	92,30	88,50	90,60	95,00	92,00	92,80	104,00	
Spain	98,70	93,70	94,20	89,50	85,80	84,90	84,60	83,10	84,10	85,20	85,90	90,00	
Sweden	91,90	89,00	90,50	88,10	84,60	81,20	79,40	78,00	75,00	74,80	75,20	83,00	
Un. Kingdom	91,70	86,70	88,80	81,70	83,30	81,30	77,70	78,00	79,90	79,50	78,80	84,00	(Not specified)
European	96,70	92,70	94,70	90,70	90,00	88,90	85,80	87,30	88,50	89,50	88,70	80,00	

The indicator calculation is based on the emissions covered under the Effort Sharing Decision. The Effort Sharing Decision sets national annual binding targets for emissions not covered under the EU Emission Trading Scheme (ETS). The ESD emissions are calculated by deducting ETS verified emissions, CO₂ emissions from domestic aviation and NF₃ emissions from national total emissions. Total emissions are national totals reported under the UNFCCC (excluding LULUCF, international aviation and international maritime transport). For the period 2005-2012, additional emission estimates are deducted in order to reflect the current scope of the EU ETS, following the European Environment Agency methodology for calculating consistent time series. Last Updated Date: 31.01.2020.

Source: Eurostat. Last updated date:31.01.2020.

TABLE 6
RENEWABLE ENERGY SOURCES PERCENTAGE IN THE FINAL ENERGY CONSUMPTION (cebi,t).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	28,856	31,020	31,199	31,563	32,678	32,770	33,653	33,542	33,365	33,144	33,426	34,0	
Belgium	3,590	4,715	5,643	6,290	7,180	7,515	8,032	8,003	8,712	9,064	9,423	13,0	
Bulgaria	10,345	12,005	13,927	14,152	15,837	18,898	18,050	18,261	18,760	18,701	20,528	16,0	
Croatia						28,040	27,817	28,969	28,267	27,280	28,024	20,0	
Cyprus	5,134	5,925	6,173	6,261	7,137	8,456	9,172	9,929	9,859	10,491	13,882	13,0	
Czechia	8,674	9,978	10,514	10,945	12,816	13,931	15,078	15,073	14,930	14,803	15,150	13,0	
Denmark	18,545	19,950	21,889	23,388	25,466	27,174	29,310	30,835	31,837	34,720	35,708	30,0	
Estonia	18,643	22,931	24,574	25,345	25,524	25,324	26,145	28,228	28,684	29,127	29,996	25,0	
Finland	31,362	31,343	32,441	32,788	34,434	36,730	38,780	39,320	39,011	40,917	41,162	38,0	
France	11,187	12,216	12,672	11,016	13,437	14,043	14,581	15,012	15,680	16,011	16,593	23,0	
Germany	10,088	10,870	11,686	12,470	13,555	13,766	14,386	14,901	14,885	15,472	16,481	18,0	
Greece	8,183	8,731	10,077	11,153	13,741	15,326	15,683	15,690	15,390	16,951	18,002	18,0	
Hungary	8,564	11,673	12,742	13,972	15,530	16,205	14,618	14,495	14,315	13,517	12,489	13,0	
Ireland	3,929	5,177	5,707	6,646	7,054	7,618	8,598	9,108	9,258	10,588	11,061	16,0	
Italy	11,492	12,775	13,023	12,881	15,441	16,741	17,082	17,525	17,415	18,267	17,775	17,0	
Latvia	29,811	34,317	30,375	33,478	35,709	37,037	38,629	37,538	37,138	39,019	40,292	40,0	
Lithuania	17,824	19,798	19,640	19,945	21,437	22,689	23,593	25,751	25,614	26,039	24,448	23,0	
Luxembourg	2,815	2,940	2,864	2,874	3,140	3,531	4,512	5,050	5,440	6,286	9,059	11,0	
Malta	0,195	0,221	0,979	1,850	2,862	3,760	4,744	5,119	6,208	7,270	7,978	10,0	
Netherlands	3,596	4,266	3,917	4,524	4,659	4,691	5,415	5,657	5,827	6,461	7,385	14,0	
Poland	7,713	8,661	9,253	10,295	10,897	11,368	11,495	11,743	11,267	10,964	11,284	15,0	
Portugal	22,943	24,421	24,165	24,616	24,579	25,700	29,508	30,514	30,865	30,611	30,322	31,0	
Romania	20,204	22,157	22,834	21,186	22,825	23,886	24,845	24,785	25,032	24,454	23,875	24,0	
Slovakia	7,723	9,368	9,099	10,348	10,453	10,133	11,713	12,882	12,029	11,465	11,896	14,0	
Slovenia	14,995	20,147	20,420	20,257	20,818	22,407	21,539	21,894	21,293	21,056	21,149	25,0	
Spain	10,737	12,963	13,810	13,223	14,287	15,319	16,125	16,228	17,427	17,563	17,453	20,0	
Sweden	44,666	47,880	46,958	48,245	50,230	50,800	51,874	53,009	53,371	54,201	54,645	49,0	
Un. Kingdom	2,693	3,342	3,782	4,320	4,410	5,498	6,737	8,337	8,981	9,731	11,017	15,0	
European Union	11,368	12,622	13,158	13,411	14,690	15,378	16,219	16,732	16,995	17,473	17,977	20,0	

This indicator is based on the definitions included in the Directive 2009/28/EC (Renewable Energy Directive) on the promotion of the use of energy from renewable sources. It is calculated on the basis of data collected in the framework of Regulation (EC) No 1099/2008 on energy statistics and complemented by specific supplementary data transmitted by national administrations to Eurostat. This indicator measures how extensive is the use of renewable energy and, by implication, the degree to which renewable fuels have substituted fossil and/or nuclear fuels and therefore contributed to the decarbonisation of the EU economy. It also shows what is the progress on EU level towards Europe 2020 target for renewable energies of increasing the share of renewable energy in gross final energy consumption to 20% by 2020. Last Updated Date: 06.03.2020.

Source: Eurostat. Last updated date: 06.03.2020.

TABLE 7
REDUCTION OF PRIMARY ENERGY CONSUMPTION IN MTOE (MILLION TONNES OF OIL EQUIVALENT) (cec.i.t).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	32,47	30,64	32,86	31,97	31,64	32,11	30,80	31,62	31,90	32,81	31,80	31,5	
Belgium	51,13	50,47	54,14	50,52	47,78	49,34	45,70	46,06	49,18	49,09	46,84	43,7	
Bulgaria	19,02	16,91	17,40	18,57	17,84	16,51	17,27	17,96	17,68	18,34	18,36	16,9	
Croatia						8,00	7,60	7,96	8,05	8,33	8,18	11,2	
Cyprus	2,85	2,77	2,68	2,65	2,50	2,18	2,22	2,28	2,43	2,53	2,55	2,2	
Czechia	42,50	40,14	42,66	41,03	40,59	40,94	39,16	39,74	40,04	40,35	40,39	39,6	
Denmark	19,91	18,91	20,02	18,52	17,82	17,84	16,93	16,92	17,57	17,85	17,96	17,4	
Estonia	5,37	4,74	5,58	5,60	5,42	5,98	5,70	5,33	5,90	5,65	6,17	6,5	
Finland	34,57	32,39	35,50	34,25	33,02	32,04	32,70	31,15	32,43	32,09	32,99	35,9	
France	255,39	246,32	254,45	249,19	249,15	250,37	239,77	244,40	240,11	239,15	238,91	219,9	
Germany	320,76	299,92	315,15	297,80	301,12	308,29	293,60	295,93	297,63	298,12	291,75	276,6	
Greece	30,35	29,32	27,11	26,55	26,39	23,28	23,14	23,23	22,90	23,12	22,42	24,7	
Hungary	25,16	23,95	24,62	24,39	23,13	22,41	21,99	23,30	23,74	24,50	24,49	24,1	
Ireland	15,65	14,90	14,70	13,53	13,70	13,08	13,24	13,92	14,61	14,39	14,54	13,9	
Italy	176,12	164,08	167,28	162,00	156,56	152,05	142,66	149,12	147,97	148,95	147,24	158,0	
Latvia	4,58	4,43	4,56	4,28	4,44	4,36	4,36	4,27	4,29	4,47	4,69	5,4	
Lithuania	8,26	7,82	6,17	5,91	5,98	5,80	5,75	5,79	6,04	6,16	6,33	6,5	
Luxembourg	4,61	4,34	4,61	4,53	4,42	4,30	4,19	4,14	4,15	4,29	4,46	4,5	
Malta	0,96	0,88	0,93	0,93	0,97	0,87	0,88	0,75	0,71	0,81	0,82	0,7	
Netherlands	69,88	67,63	71,72	67,05	66,75	66,21	62,32	63,74	64,77	65,08	64,71	60,7	
Poland	93,09	89,53	96,56	96,55	93,10	93,53	89,49	90,06	94,83	99,16	101,06	96,4	
Portugal	23,59	23,62	22,64	22,00	21,04	21,03	20,68	21,64	21,76	22,82	22,64	22,5	
Romania	37,32	32,66	32,97	33,55	33,26	30,41	30,05	30,73	30,62	32,37	32,48	43,0	
Slovakia	16,98	15,52	16,66	15,97	15,59	15,69	14,83	15,22	15,37	16,15	15,79	16,4	
Slovenia	7,49	6,80	7,00	7,08	6,81	6,63	6,37	6,32	6,54	6,73	6,67	7,3	
Spain	134,44	123,38	123,34	122,98	123,41	116,06	114,20	118,60	119,29	125,79	124,63	119,8	
Sweden	47,49	43,33	48,59	47,62	47,59	46,44	46,03	44,32	45,41	46,45	46,78	43,4	
Un. Kingdom	211,80	195,99	205,09	190,09	195,15	191,63	180,72	183,11	179,01	176,87	176,27	177,6	
European	1,700,93	1,600,35	1,663,86	1,603,76	1,593,34	1,577,40	1,512,35	1,537,61	1,544,93	1,562,40	1,551,92	1,483,0	

By "Primary Energy Consumption" is meant the Gross Inland Consumption excluding all non-energy use of energy carriers (e.g. natural gas used not for combustion but for producing chemicals). This quantity is relevant for measuring the true energy consumption and for comparing it to the Europe 2020 targets. The "Percentage of savings" is calculated using these values of 2005 and its forecast for 2020 targets in Directive 2012/27/EU, the Europe 2020 target is reached when this value reaches the level of 20%. Last Updated Date: 03.02.2020.

Source: Eurostat. Last updated date: 03.02.2020.

TABLE 8
EARLY EDUCATION LEAVERS' PERCENTAGE OF TOTAL POPULATION FROM 18 TO 24 YEARS (eda_{t,i}).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	10,2	8,8	8,3	8,5	7,8	7,5	7,0	7,3	6,9	7,4	7,3	9,5	
Belgium	12,0	11,1	11,9	12,3	12,0	11,0	9,8	10,1	8,8	8,9	8,6	9,5	
Bulgaria	14,8	14,7	12,6	11,8	12,5	12,5	12,9	13,4	13,8	12,7	12,7	11,0	
Croatia						4,5	2,8	2,8	2,8	3,1	3,3	4,0	
Cyprus	13,7	11,7	12,7	11,3	11,4	9,1	6,8	5,2	7,6	8,5	7,8	10,0	
Czechia	5,6	5,4	4,9	4,9	5,5	5,4	5,5	6,2	6,6	6,7	6,2	5,5	
Denmark	12,7	11,5	11,5	10,3	9,6	8,2	8,1	8,1	7,5	8,8	10,4	10,0	
Estonia	14,0	13,5	11,0	10,6	10,3	9,7	12,0	12,2	10,9	10,8	11,3	9,5	
Finland	9,8	9,9	10,3	9,8	8,9	9,3	9,5	9,2	7,9	8,2	8,3	8,0	
France	11,8	12,4	12,7	12,3	11,8	9,7	8,8	9,2	8,8	8,9	8,9	9,5	
Germany	11,8	11,1	11,8	11,6	10,5	9,8	9,5	10,1	10,3	10,1	10,3	10,0	(Actually < 10%)
Greece	14,4	14,2	13,5	12,9	11,3	10,1	9,0	7,9	6,2	6,0	4,7	10,0	(Actually < 10%)
Hungary	11,7	11,5	10,8	11,4	11,8	11,9	11,4	11,6	12,4	12,5	12,5	10,0	
Ireland	11,7	11,8	11,9	11,1	9,9	8,7	6,7	6,8	6,0	5,0	5,0	8,0	
Italy	19,6	19,1	18,6	17,8	17,3	16,8	15,0	14,7	13,8	14,0	14,5	16,0	
Latvia	15,5	14,3	12,9	11,6	10,6	9,8	8,5	9,9	10,0	8,6	8,3	10,0	
Lithuania	7,5	8,7	7,9	7,4	6,5	6,3	5,9	5,5	4,8	5,4	4,6	9,0	(Actually < 9%)
Luxembourg	13,4	7,7	7,1	6,2	8,1	6,1	6,1	9,3	5,5	7,3	6,3	10,0	(Actually < 10%)
Malta	27,2	25,7	23,8	22,7	21,7	20,8	20,9	20,2	19,2	17,7	17,4	10,0	
Netherlands	11,4	11,3	10,1	9,2	8,9	9,3	8,7	8,2	8,0	7,1	7,3	8,0	
Poland	5,0	5,3	5,4	5,6	5,7	5,6	5,4	5,3	5,2	5,0	4,8	4,5	
Portugal	34,9	30,9	28,3	23,0	20,5	18,9	17,4	13,7	14,0	12,6	11,8	10,0	
Romania	15,9	16,6	19,3	18,1	17,8	17,3	18,1	19,1	18,5	18,1	16,4	11,3	
Slovakia	6,0	4,9	4,7	5,1	5,3	6,4	6,7	6,9	7,4	9,3	8,6	6,0	
Slovenia	5,1	5,3	5,0	4,2	4,4	3,9	4,4	5,0	4,9	4,3	4,2	5,0	
Spain	31,7	30,9	28,2	26,3	24,7	23,6	21,9	20,0	19,0	18,3	17,9	15,0	
Sweden	7,9	7,0	6,5	6,6	7,5	7,1	6,7	7,0	7,4	7,7	7,5	7,0	(Actually < 7%)
Un. Kingdom	16,9	15,7	14,8	14,9	13,4	12,4	11,8	10,8	11,2	10,6	10,7	-	(Not specified)
European	14,7	14,2	13,9	13,4	12,7	11,9	11,2	11,0	10,7	10,6	10,5	10,0	

The indicator is defined as the percentage of the population aged 18-24 with at most lower secondary education and who were not in further education or training during the last four weeks preceding the survey. Lower secondary education refers to ISCED (International Standard Classification of Education) 2011 level 0-2 for data from 2014 onwards and to ISCED 1997 level 0-3C short for data up to 2013. The indicator is based on the EU Labour Force Survey. Last Updated Date: 14.02.2020.

Source: Eurostat. Last updated date: 14.02.2020.

TABLE 9
PERCENTAGE OF TOTAL POPULATION FROM 30 TO 34 YEARS HAVING COMPLETED TERTIARY EDUCATION (edb_{i,t}).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	21,9	23,4	23,4	23,6	26,1	27,1	40,0	38,7	40,1	40,8	40,7	38,0	
Belgium	42,9	42,0	44,4	42,6	43,9	42,7	43,8	42,7	45,6	45,9	47,6	47,0	
Bulgaria	27,1	27,9	28,0	27,3	26,9	29,4	30,9	32,1	33,8	32,8	33,7	36,0	
Croatia						25,6	32,1	30,8	29,3	28,7	34,1	35,0	
Cyprus	47,1	45,0	45,3	46,2	49,9	47,8	52,5	54,5	53,4	55,9	57,1	46,0	
Czechia	15,4	17,5	20,4	23,7	25,6	26,7	28,2	30,1	32,8	34,2	33,7	32,0	(Actually > 40%)
Denmark	38,9	40,4	41,1	41,3	43,2	43,4	43,6	45,7	46,5	48,2	48,4	40,0	(Exc. former tertiary
Estonia	34,4	36,3	40,2	40,2	39,5	42,5	43,2	45,3	45,4	48,4	47,2	40,0	(Age group 17 - 33)
Finland	45,7	45,9	45,7	46,0	45,8	45,1	45,3	45,5	46,1	44,6	44,2	42,0	(ISCED 2011 level 4 -
France	41,0	43,0	43,2	43,1	43,3	44,0	43,7	45,0	43,6	44,3	46,2	50,0	
Germany	27,7	29,4	29,7	30,6	31,8	32,9	31,4	32,3	33,2	34,0	34,9	42,0	
Greece	25,7	26,6	28,6	29,1	31,2	34,9	37,2	40,4	42,7	43,7	44,3	32,0	
Hungary	22,8	24,0	26,1	28,2	29,8	32,3	34,1	34,3	33,0	32,1	33,7	34,0	
Ireland	47,9	50,4	51,4	51,0	52,2	53,6	54,6	53,8	54,6	54,5	56,3	60,0	
Italy	19,2	19,0	19,9	20,4	21,9	22,5	23,9	25,3	26,2	26,9	27,8	26,0	(Actually 26% - 27%)
Latvia	26,3	30,5	32,6	35,9	37,2	40,7	39,9	41,3	42,8	43,8	42,7	34,0	(Actually 34% - 36%)
Lithuania	39,9	40,4	43,8	45,7	48,6	51,3	53,3	57,6	58,7	58,0	57,6	48,7	
Luxembourg	39,8	46,6	46,1	48,2	49,6	52,5	52,7	52,3	54,6	52,7	56,2	66,0	
Malta	21,0	21,9	22,1	23,4	26,3	28,7	28,6	29,1	32,0	33,5	34,7	33,0	
Netherlands	38,0	38,3	41,4	41,2	42,2	43,2	44,8	46,3	45,7	47,9	49,4	40,0	(Actually > 40%)
Poland	29,7	32,8	34,8	36,5	39,1	40,5	42,1	43,4	44,6	45,7	45,7	45,0	
Portugal	21,6	21,3	24,0	26,7	27,8	30,0	31,3	31,9	34,6	33,5	33,5	40,0	
Romania	16,0	16,8	18,3	20,3	21,7	22,9	25,0	25,6	25,6	26,3	24,6	26,7	
Slovakia	15,8	17,6	22,1	23,2	23,7	26,9	26,9	28,4	31,5	34,3	37,7	40,0	
Slovenia	30,9	31,6	34,8	37,9	39,2	40,1	41,0	43,4	44,2	46,4	42,7	40,0	
Spain	41,3	40,7	42,0	41,9	41,5	42,3	42,3	40,9	40,1	41,2	42,4	44,0	
Sweden	42,0	43,9	45,3	46,8	47,9	48,3	49,9	50,2	51,0	51,3	51,8	45,0	(Actually 45% - 50%)
Un. Kingdom	39,5	41,4	43,1	45,5	46,9	47,4	47,7	47,8	48,1	48,2	48,8	-	(Not specified)
European	31,1	32,3	33,8	34,8	36,0	37,1	37,9	38,7	39,1	39,9	40,7	40,0	

The indicator is defined as the percentage of the population aged 30-34 who have successfully completed tertiary studies (e.g. university, higher technical institution, etc.). This educational attainment refers to ISCED (International Standard Classification of Education) 2011 level 5-8 for data from 2014 onwards and to ISCED 1997 level 5-6 for data up to 2013. The indicator is based on the EU Labour Force Survey. Last Updated Date: 14.02.2020.

Source: Eurostat. Last updated date: 14.02.2020.

TABLE 10
PEOPLE AT RISK OF POVERTY OR SOCIAL EXCLUSION, IN THOUSANDS (pov_{i,t}).

Country Name	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Targets	Notes
Austria	1.699,0	1.577,0	1.566,0	1.593,0	1.542,0	1.572,0	1.609,0	1.551,0	1.542,0	1.563,0	1.512,0	1.464,00	1
Belgium	2.194,0	2.145,0	2.235,0	2.271,0	2.356,0	2.286,0	2.339,0	2.336,0	2.330,0	2.300,0	2.247,0	1.814,00	2
Bulgaria	1.632,0	1.657,0	1.564,0	1.672,0	1.559,0	1.528,0	1.578,0	1.586,0	1.639,0	1.665,0	1.551,0	1.372,00	3
Croatia			1.322,0	1.384,0	1.384,0	1.271,0	1.243,0	1.216,0	1.159,0	1.085,0	1.008,0	1.220,00	4
Cyprus	181,0	188,0	202,0	207,0	234,0	240,0	234,0	244,0	234,0	215,0	206,0	154,00	5
Czechia	1.566,0	1.448,0	1.495,0	1.598,0	1.580,0	1.508,0	1.532,0	1.444,0	1.375,0	1.267,0	1.264,0	1.466,00	6
Denmark	347,0	360,0	433,0	432,0	415,0	484,0	495,0	470,0	437,0	409,0	459,0	325,00	7
Estonia	19,5	19,7	15,8	17,5	17,5	18,6	21,8	21,6	21,7	21,0	21,9	15,00	8
Finland	910,0	886,0	890,0	949,0	916,0	854,0	927,0	904,0	896,0	849,0	894,0	770,00	9
France	11.150,0	11.200,0	11.712,0	11.840,0	11.760,0	11.245,0	11.540,0	11.048,0	11.463,0	10.717,0	11.045,0	9.482,00	10
Germany	1.626,0	1.450,0	1.333,0	1.141,0	1.003,0	968,0	919,0	851,0	723,0	675,0	601,0	1.306,00	11
Greece	3.046,0	3.007,0	3.031,0	3.403,0	3.795,0	3.904,0	3.885,0	3.829,0	3.789,0	3.702,0	3.349,0	2.596,00	12
Hungary	2.794,0	2.924,0	2.948,0	3.093,0	3.272,0	3.398,0	3.097,0	2.735,0	2.541,0	2.465,0	1.887,0	2.344,00	13
Ireland	1.050,0	1.150,0	1.220,0	1.319,0	1.382,0	1.377,0	1.279,0	1.230,0	1.160,0	1.088,0	1.026,0	850,00	14
Italy	15.082,0	14.799,0	14.891,0	16.858,0	17.975,0	17.229,0	17.146,0	17.469,0	18.137,0	17.407,0	16.441,0	12.882,00	15
Latvia	740,0	808,0	798,0	821,0	731,0	702,0	645,0	606,0	554,0	544,0	543,0	619,00	16
Lithuania	910,0	943,0	1.068,0	1.011,0	975,0	917,0	804,0	857,0	871,0	843,0	794,0	814,00	17
Luxembourg	72,0	85,0	83,0	84,0	95,0	96,0	96,0	95,0	114,0	126,0	126,0	66,00	18
Malta	81,0	82,0	86,0	90,0	94,0	102,0	101,0	99,0	90,0	87,0	89,0	74,44	19
Netherlands	1.053,0	1.083,0	1.068,0	1.128,0	1.133,0	1.183,0	1.295,0	1.298,0	1.210,0	1.190,0	1.073,0	953,00	20
Poland	11.491,0	10.454,0	10.409,0	10.196,0	10.128,0	9.748,0	9.337,0	8.761,0	8.221,0	7.273,0	6.976,0	9.991,00	21
Portugal	2.757,0	2.648,0	2.693,0	2.601,0	2.667,0	2.879,0	2.863,0	2.765,0	2.595,0	2.399,0	2.223,0	2.557,00	22
Romania	9.115,0	8.795,0	8.425,0	8.265,0	8.673,0	8.392,0	8.043,0	7.435,0	7.694,0	7.040,0	6.360,0	8.535,00	23
Slovakia	20,6	19,6	20,6	20,6	20,5	19,8	18,4	18,4	18,1	16,3	16,3	17,20	24
Slovenia	361,0	339,0	366,0	386,0	392,0	410,0	410,0	385,0	371,0	345,0	326,0	321,00	25
Spain	10.786,0	11.336,0	12.029,0	12.363,0	12.628,0	12.630,0	13.402,0	13.175,0	12.827,0	12.236,0	12.047,0	9.386,00	26
Sweden	16,7	17,8	17,7	18,5	17,7	18,3	18,2	18,6	18,3	17,7	18,0	14,00	27
Un. Kingdom	14.069,0	13.389,0	14.211,0	14.044,0	15.099,0	15.586,0	15.271,0	14.997,0	14.359,0	14.325,0	15.465,0	-	28
European	116.070,0	114.390,0	117.907,0	120.858,0	123.774,0	122.852,0	122.026,0	119.077,0	118.060,0	112.930,0	110.235,0	96.200,00	

Source: Eurostat. Last updated date:25.03.2020.

Notes on State's Targets

1. (People at risk of poverty or social exclusion - Thousands)
2. (People at risk of poverty or social exclusion - Thousands)
3. Reduce by 260,000 the number of persons living in monetary poverty (used: People at risk of poverty after social transfers - Thousands)
4. (People at risk of poverty or social exclusion - Thousands)
5. (People at risk of poverty or social exclusion - Thousands)
6. (People at risk of poverty or social exclusion - Thousands)
7. Reduce by 22 000 the number of persons living in households with very low work intensity (used: People living in households with very low work intensity)
8. Reduce to a rate of 15 % the number of persons living at risk of poverty after social transfers (compared to 17.5 % in 2010) (used: People at risk of poverty after social transfers - Percentage)
9. (People at risk of poverty or social exclusion - Thousands)
10. (People at risk of poverty or social exclusion - Thousands)
11. Reduce by 20 % the number of long-term unemployed (for more than one year) compared to 2008. (equalling to a reduction of 320 000 long-term unemployed persons) (used: Long-term unemployment)
12. (People at risk of poverty or social exclusion - Thousands)
13. (People at risk of poverty or social exclusion - Thousands)
14. (People at risk of poverty or social exclusion - Thousands)
15. (People at risk of poverty or social exclusion - Thousands)
16. Reduce by 121 000 the number of persons living at risk of poverty after social transfers and/or in households with very low work intensity (used: People at risk of poverty or social exclusion - Thousands)
17. (People at risk of poverty or social exclusion - Thousands)
18. (People at risk of poverty or social exclusion - Thousands)
19. (People at risk of poverty or social exclusion - Thousands)
20. Reduce by 100 000 the number of persons (aged 0-64) living in a jobless household (compared to 2008) (used: People living in households with very low work intensity)
21. (People at risk of poverty or social exclusion - Thousands)
22. (People at risk of poverty or social exclusion - Thousands)
23. (People at risk of poverty or social exclusion - Thousands)
24. Reduce to a rate of 17.2 % the number of persons living in poverty or social exclusion (compared to 20.6% in 2008) (used: People at risk of poverty or social exclusion - Percentage)
25. (People at risk of poverty or social exclusion - Thousands)
26. (People at risk of poverty or social exclusion - Thousands)
27. Reduce to well below 14 the percentage of aged 20-64 who are not in the labour force (except full-time students), long-term unemployed or on long-term sick leave (used: People at risk of poverty or s.e. - %)
28. (Not specified)

The Europe 2020 strategy promotes social inclusion, in particular through the reduction of poverty, by aiming to lift at least 20 million people out of the risk of poverty and social exclusion. This indicator corresponds to the sum of persons who are: at risk of poverty or severely materially deprived or living in households with very low work intensity. Persons are only counted once even if they are present in several sub-indicators. At risk-of-poverty are persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers). Material deprivation covers indicators relating to economic strain and durables. Severely materially deprived persons have living conditions severely constrained by a lack of resources, they experience at least 4 out of 9 following deprivations items: cannot afford i) to pay rent or utility bills, ii) keep home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) a week holiday away from home, vi) a car, vii) a washing machine, viii) a colour TV, or ix) a telephone. People living in households with very low work intensity are those aged 0-59 living in households where the adults (aged 18-59) work 20% or less of their total work potential during the past year. Last Updated Date: 25.03.2020.