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European Futures for Energy Efficiency

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European Futures for Energy Efficiency

Synergies and trade-offs between energy efficiency and sustainability indicators: The EU-28 study of sustainable energy use

WP2 Deliverable D2.2

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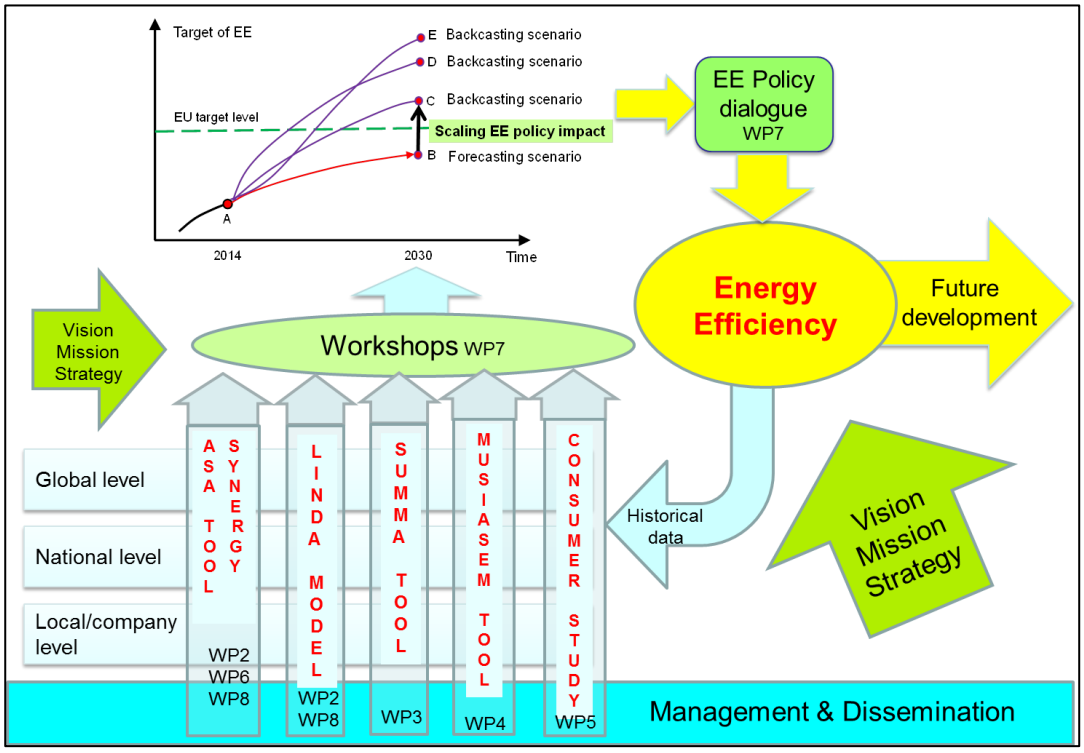
The EUFORIE project

The strategic goal of the EUFORIE project is to provide useful and accurate information and knowledge in the field of energy efficiency for the EU Commission and stakeholders in the Member States. The tangible objectives are the following:

1. To provide energy and energy efficiency trends and their drivers, synergies and trade-offs between energy efficiency related policies, as well as energy efficiency scenarios (WP2).
2. To provide data about implementation of energy efficiency in specific processes, sectors and entire systems, in order to understand bottlenecks/efficiency drops and suggest improvements (WP3).
3. To carry out analyses of efficiency of provision, from making useful energy carriers from primary energy sources, and from conversion of energy carriers to end uses across macro-economic sectors (WP4).
4. To identify policy instruments and other measures leading to significant reduction in the energy consumption of households (WP5).
5. To analyse the relationship between investments and change in energy efficiency, and to develop indicators to describe changing energy efficiency at the company level (WP6).
6. To carry out participatory foresight for European stakeholders of energy efficiency with a target of providing ideas for the energy efficiency vision and strategy in the European Union (WP7).
7. To compare energy efficiency policy instruments and measures and their impacts in China and the European Union (WP8).

The EUFORIE Work Packages relate to each other. The project applies different quantitative and qualitative analysis methods to energy efficiency in the EU and its Member States at different levels and from different perspectives. These analyses provide input for foresight activities, which serve European energy efficiency vision and strategy process by generating useful information. Management (WP1) and dissemination (WP9) run in parallel with the research and innovation activities.



Executive summary

The purpose of this deliverable is to analyse if similar or opposite developments can be found in the European Union Member States between energy-related and sustainability-related indicators and change in their values over time. This will be used by applying an empirical synergy/trade-off analysis, developed in University of Turku, Finland Futures Research Centre, for a set of energy-related indicators and other indicators. The energy-related indicators include gross inland consumption of energy, electricity consumption, energy intensity (Gross inland consumption/GDP), primary energy intensity, and carbon intensity of the economy (CO_2 emissions/GDP). The other indicators include two set of indicators. The first one includes three key indicators, namely value added, amount of population and amount of urban population. The second one includes the indicators used in the Sustainability Society Index (SSI). There are 21 different indicators describing seven different themes regarding sustainability, i.e. the basic needs, health, social development, natural resources, climate change, transition processes and the economy. There are a few individual indicators under each of these themes.

The data used in the analysis is taken from two data sources. The energy-related indicators and the three key indicators are analysed for the years 1985-2014, and the data is publicly available in the Eurostat database. The data for indicators of the Sustainable Society Index are analysed for the years 2006-2014, and the data is publicly available in the Sustainable Society Foundation website.

The empirical synergy/trade-off analysis is based on the ratio between relative changes over time in the observed values of each pair of analysed indicators. The relationship can be presented simply as follows:

$$Synergy = \frac{Smaller\ change}{Larger\ change}$$

The nature of the relationship is synergy, and it can get either positive or negative values between -1 and +1. For calculating the relationship, the self-values of the relative changes determine which one will be the numerator and which one the denominator. The relative change must be presented either in percentage calculated from the base year value, or a difference between indexed values of the base and target years. The base year can be a fixed (constant) one or a moving one. If it is fixed, we can speak about *stabilized synergy calculation*. If the base year is a moving one (e.g. annual or biannual changes), then we can speak about *dynamic synergy calculation*. The stabilized synergy analysis tells about the long-term synergy/trade-off trends, and the dynamic synergy analysis takes the annual or other shorter-term changes better into account. The latter analysis may e.g. reveal a possible cyclical nature of the relationship between changes in the analysed indicator pair.

In this report, stabilized synergy analysis is carried out for the EU-28 Member States using all pairs of the above mentioned energy-related indicators vs. the selected key indicators (value added, population and urban population) in the years 1985-2014, and using all pairs of energy intensity vs. the 21 Sustainable Society Index (SSI) indicators in the years 2006-2014. The dynamic analysis is carried out only for the indicators of the latter pairs, and the results are presented as an average of the annual results in the figures in Chapter 5. The annual results are not analysed, so conclusions about the possible cycles are not drawn. The annual results, are, however available in Annex 1 of this report.

The report includes a large set of empirical results, which are especially of academic interest. However, the results may give ideas also for policy makers and other stakeholder groups such as NGOs/citizens and energy industry/companies about interesting observations in relation to the synergies and trade-offs between energy-related and sustainability-related indicators.

Tasks of this deliverable related to WP2

This deliverable D2.2 covers the following task in EUFORIE WP2 (Macroeconomic ASA analyses of Energy Efficiency):

- Task 2.2 Synergies and trade-offs: energy efficiency and sustainability.

Table of contents

List of Tables

List of Figures

Abbreviations

Abbreviation	Explanation
CO_2	Carbon dioxide (emissions)
DG	Directorate- General
EEA	European Environment Agency
EU	European Union
EUFORIE	European Futures for Energy Efficiency
kg CO_2/toe	Carbon intensity, kilograms of carbon dioxide per tonne of oil equivalent
kWh	kilowatt-hour (energy unit)
kWh/cap	kilowatt-hours per capita (per person)
ktoe	kilotonnes of oil equivalent (1000 toe)
ktoe/cap	kilotonnes of oil equivalent (1000 toe) per capita/person
Mtoe	million tonnes of oil equivalent (million toe)
toe	ton of oil equivalent (energy unit)
SSI	Sustainable Society Index
toe/Meuros	Energy intensity, tonnes of oil equivalent per million euros of GDP
UNFCCC	United Nations Framework Convention on Climate Change

1. Introduction

This report provides information about synergy and trade-offs between key energy indicators and key drivers of EU-28 Member States, which include value added, population, and urban population. Synergy and trade-off-analyses with these key variables provide useful perspective to energy policy challenges in the EU-28 Member States. The analysis reveals many interesting issues for policy-makers and for other Quartet Helix stakeholder groups in the EU-Member States.

The pursuit of sustainable development as an adaptive process of learning-by-doing can benefit from using statistical and sustainability indicators. This report can be seen as a part of such adaptive governance process in the European Union.

The report is divided into six chapters. Chapter 2 explains key issues of methodology and data management to measure synergy. Chapter 3 reports key trends of the used data. Chapter 4 reports the results from synergy analyses between the key drivers and various energy variables. Chapter 5 focuses on analysing synergy between the sustainability indicators and energy intensity, which is one key variable of energy use in the EU-28 Member States and closely related to energy efficiency. In Chapter 6, a summary and conclusions of results are presented.

2. Methodology and data

2.1 Synergy, trade-off and de-linking

Development of sustainability policies and strategies in isolation without considering possible linkages across various key variables have been observed as one of the main drawbacks of earlier sustainable development approaches. Understanding the linkages among the multiple targets and sustainable society indicators may help in integrating various sectors programme and developing more coherent sustainability policy across sectors and policy arenas. This report focus on this this sustainability challenge in the EU-28 region.

Synergy is an important issue in social interaction. It is one of key issues in integration studies, because successful integration process requires understanding possible synergies. We can claim that smart integration policy requires better understanding of synergy phenomenon. Especially, in networked economies synergy matters and plays an important strategic role (Mirc 2012). If we want to identify possible win-win-strategies in economic and social interaction, we need to understand synergy phenomenon (Howe et al. 2014). For example, in the field ecosystem services development of this kind of synergy approach was found to be very useful for policy planning and management (Wunder 2001; Jia et al. 2014).

Methodologically, the analysis is based on a new assessment tool developed for the analysis of synergies and trade-offs between selected development trends. Understanding trade-offs and synergies is needed in smart management and decision-making (see .e.g. Luukkanen et al. 2012; Kaivo-oja et al. 2014). The synergy tool is developed to analyse the synergy between two different trends, but it can be used to analyse simultaneously the synergy between many variables (see Mainali, Luukkanen, Silveira & Kaivo-oja 2016, Luukkanen et al. 2012; see also Rothman 1976).

A concept related to synergy is statistical interaction. Interaction can be specified in several ways, according to the statistical model under study. The conventional definition of interaction states simply that it is the product of two independent variables *Xi* and *Xj*, i.e. *XiXj* (Southwood 1978; see also Cortina-Borja et al. 2009). This is often accompanied by a coefficient to denote the sign and the extent of the interaction. Furthermore, the statistical significance of an interaction can be tested. The term synergy refers to an interaction that is mathematically defined in this conventional way, although there is no statistical test provided to test its significance yet. Instead, synergy ranges from −1 to 1, enabling the comparisons of intensities between the different combinations of variables. The concept of elasticity is different from the concept of synergy determined here. Elasticity can have values from zero to infinity while synergy can vary between −1 and +1.

As a result, the method provided here is more explorative than a strictly statistical tool. The synergy measure defined in this context is different from the concept of correlation. The familiar measure of dependence between two quantities used in statistics is the Pearson product–moment correlation coefficient, called usually “Pearson's correlation”. It is obtained by dividing the covariance of the two variables by the product of their standard deviations The correlation reflects the noisiness and direction of a linear relationship, but not the slope of that relationship, nor many aspects of non-linear relationships. In a case where the variance of either *X* or *Y* is zero, the slope between two variables is zero and the correlation coefficient is undefined as are many aspects of non-linear relationships.

This deliverable is linked to the main themes of European integration studies. This study evaluates aspects of the European integration process. The focus of the report is on sustainable development and energy policy perspectives. Seeing sustainable development as process of learning-by-doing resonates with ongoing debates on uncertainty and complexity that have found their way into planning and policy sciences (De Roo and Silva 2012, Pupphacai & Zuidema 2017). If decision-makers are informed about positive and negative synergies of key sustainability policy variables, they become aware of many risks and complex relationships. This is one starting point of this deliverable.

Instead of being considered as a static long-term goal to be pursued in a linear fashion, sustainable development was proposed as a more general direction for inspiring change via a adaptive process of learning-by-doing (Ahern 2012). Synergy and trade-off analyses can be a fruitful part of societal learning processes.

2.2. Synergy analysis

In order to explore synergies and trade-offs between different trends we need to provide empirical definitions for the terms. We can say that there is synergy between two factors, when their combined effect is greater (or smaller) than the sum of their separate effects. Trade-off can be defined as a balance achieved between two desirable but incompatible features or as a situation where the selection of one feature results in the loss of another feature. In addition to synergy and trade-off also de-linking can describe the situation between the variables and in this case the increase or decrease of one variable does not have an effect on the other variable. The mathematical definitions of synergy, trade-off and delinking are given in the following way.

We can define that there exists synergy between two variables when their combined effect is greater or smaller than the sum of their separate effects. In mathematical form, this can be expressed with the following Equation (1):

$$z = ax + by + cxy + d \quad (1)$$

Where *x*, *y* and *z* are variables and coefficients *a*, *b*, *c* and *d* are parameters that determine how the output z depends on inputs x and y. In this case, we assume a time-invariant system, where the parameters stay constant. If variable *y* is zero, the output is determined by variable *x* and the parameters *a* and *d*. Parameters *a*, *b* and *d* determine the impact of the single inputs on the output. The synergy of the inputs *x* and *y* is determined by the component *cxy*, i.e. the co-effect of both the inputs. The idea of synergy indicates choosing variables *x* and *y* in a way that increase in the value of both variables *x* and *y* is desirable and refers to a commonly accepted direction of sustainable development.

If we look at a change from A to B in the Figure 2.1 (from the original state x_0y_0 to x_1y_1) we can determine the change in the area (Δz) to be

$$\Delta z = a\Delta x + b\Delta y + c\Delta x\Delta y = y_0\Delta x + x_0\Delta y + \Delta x\Delta y \quad (2)$$

We can interpret the synergy of the inputs to be determined by the shaded area in Figure 1, which equals to $\Delta x\Delta y$.

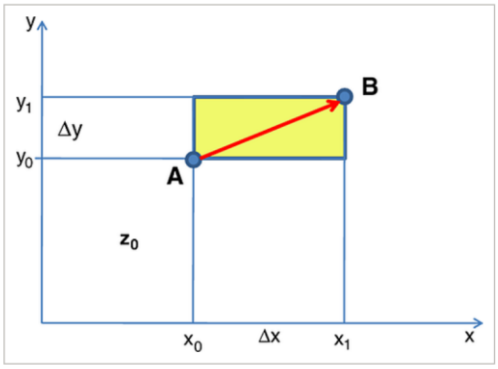


Figure 2.1. Synergy between two variables x and y determined by their changes ΔxΔy.

The synergy can also be negative as is shown in the Figure 2.2 where the change in *y* is negative and *ΔxΔy* becomes negative. This is a trade-off situation: when one factor increases the other factor decreases.

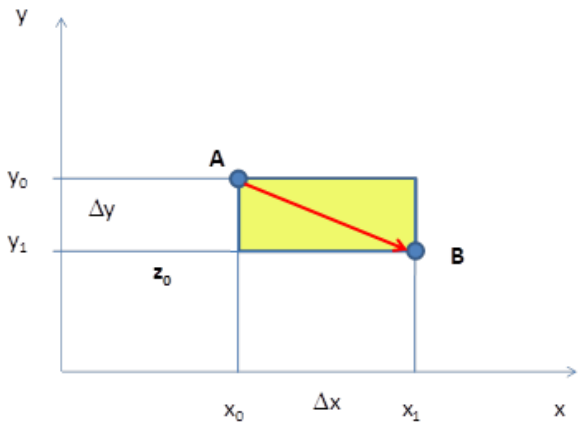


Figure 2.2. Negative synergy (or trade-off) between x and y in the case where Δy is negative.

Figure 2.3 shows a case where synergy equals zero in a case where *Δy* is zero. This is de-linking situation between the variables: the change in one variable does not have any impact on the other variable at all.

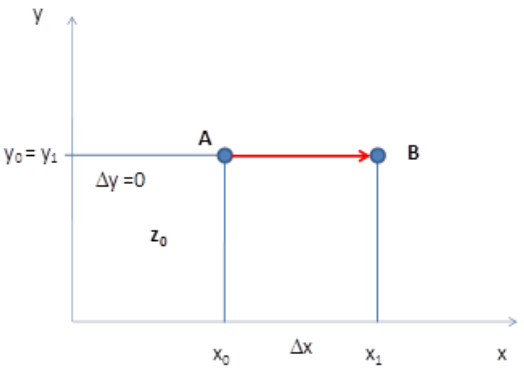


Figure 2.3. Synergy between x and y equals zero, which is a de-linking situation.

This type of calculation of synergy (or trade-off) does not imply a causal relationship between the variables. The calculation results only indicate a possible (or potential) causality between the indicators.

The synergy values can be calculated as the relationship between the relative changes in both analysed variables (Equation 3):

$$Synergy = \frac{Smaller\ change}{Larger\ change} \quad (3)$$

Maximum synergy can be obtained when relative changes *Δx* and *Δy* are equal. The used data is normalised, i.e. indexed by setting the first year value to e.g. 1 or 100, and *Δx* and *Δy* are calculated from the indexed values. The data can also be presented in relative changes in percentage (%). This means that synergy can receive values in a range between -1 and +1. By using the variables *x* and *y*, the one with a larger self-value of the normalised *Δx* and *Δy* values must be placed into numerator and the smaller value must be placed

into denominator in Equation (3). This is how the synergy values between all the selected indicators have been calculated in the empirical part of this deliverable.

The following example shows how the synergy calculations have been made (Table 2.1). In addition, there are two types of synergy analyses of time series with more than two time moments. The first one uses a fixed base year, and the second uses a moving base year. In both types, indexing must be made in relation to the used base year, or the change presented as percentage (%, which gives the same result, see Table 2.1). The analysis using a fixed base year is called a *stabilised synergy analysis*, and the analysis using a moving base year is called as *dynamic synergy analysis*. The previous one gives information about long-run trend of the synergy, and the latter takes annual changes better into account, revealing a possible cyclical nature of synergy.

In Chapter 4 the analysis between selected energy indicators and the key indicators (value added, population and urban population) are made for the time period 1985-2014 only. In Chapter 5, synergy analyses for energy intensity and the 21 Sustainable Society Index (SSI) indicators are made with both types of analysis. Results of the dynamic synergy analysis are presented as an average of the biannual results between the studied time period 2006-2014. Stabilised synergy analysis is made for this period only.

Table 2.1. Example of synergy calculation

	Variable x	**Variable y**	**Synergy**
Original value in the first year	3540	1.68	
Original value in the last year	3658	1.44	
Indexed value in the first year	100	100	
Indexed value in the last year	100*3658/3540= 103.33	100*1.44/1.68= 85.71	
Difference between indexed values	103.33-100= 3.33	85.71-100= -14.29	3.33/-14.29= -0.233
Change in percentage	100*(3658-3540)/3540 =3.33%	100*(1.44-1.68)/1.68 =-14,29%	3.33/-14.29=-0.233

2.3. Data sources

This study is based mostly on data available at the Eurostat database. Population data is taken from the World Bank database. Data of the 21 different Sustainable Society Indicators (SSI) is taken from the Sustainable Society Foundation database (for the individual indicators, see Chapter 5). The data sources are presented in Table 2.2.

Table 2.2. Data sources of the study.

Data	**Sources**
Population (number, first of January)	Word Bank Database 2016: http://databank.worldbank.org/data/reports.aspx?source=2&series=SP.URB.TOTL&country
Value added gross, in current prices, million Euros)	Eurostat Database 2016: http://ec.europa.eu/eurostat/statistics-explained/index.php/National_accounts_and_GDP
Urban population (number)	Word Bank Database 2016: http://databank.worldbank.org/data/reports.aspx?source=2&series=SP.URB.TOTL&country
Energy saving data, final energy consumption, million tonnes oil equivalent (Mtoe)	Energy saving - annual data[nrg_ind_334a] Last update: 04-02-2016: http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do

	See also: http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_saving_statistics
Energy intensity, (toe/million Euros)	Eurostat, DG Economic and Financial Affairs, May 2015: http://ec.europa.eu/energy/sites/ener/files/documents/PocketBook_ENERGY_2015%20PDF%20final.pdf
Energy consumption per capita, (kgoe per capita)	
Final electricity consumption per capita, (kWh per capita)	
Primary energy intensity, (toe/million Euros, 2010)	
Carbon intensity, (kg CO_2/toe)	EEA/UNFCC, June 2016, Eurostat: http://ec.europa.eu/energy/sites/ener/files/documents/PocketBook_ENERGY_2015%20PDF%20final.pdf
21 Sustainable society Indicators (SSI; see Chapter 5)	Sustainable Society Foundation 2016: http://www.ssfindex.com/

3. Data descriptions in the EU-28 region

In this section 3 we first report basic indicators, which are used in synergy analyses. They provide background for further analyses, which are presented in this report. The data sources were explained above. In Chapter 4 we shall report synergy and trade-off analyses.

3.1. Final energy intensity

In Figure 3.1 we have reported final energy intensity development in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014. The statistical data is from the Eurostat. We can observe big final energy intensities in Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia. Low final energy intensity can be observed in Denmark, Ireland, Italy, Luxembourg, Austria, Sweden and United Kingdom.

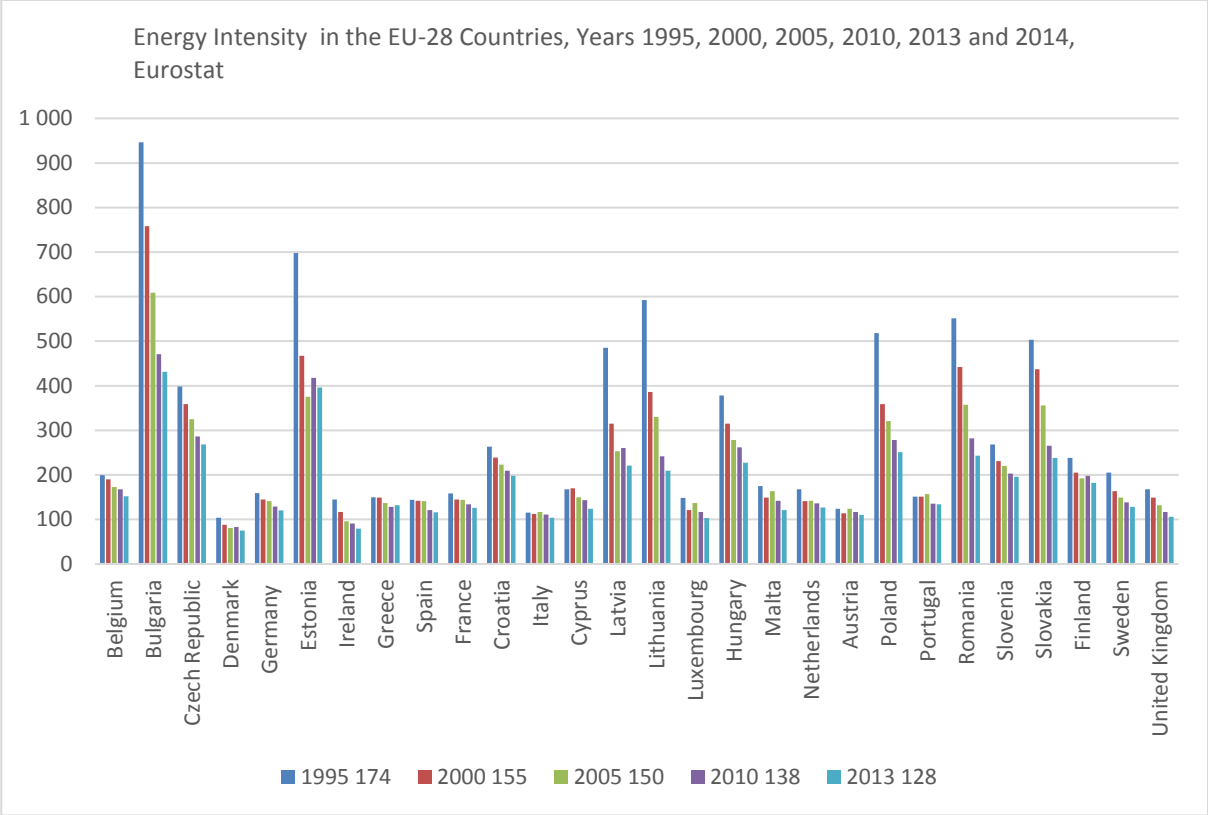


Figure 3.1. Energy intensity in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, Eurostat.

Fig. 3.2 reports changes in energy intensity in the EU-28 Member States. This figure reveals that in most EU-28 Member States energy intensity has gone down in the period of 1995-2014. Especially Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia have been very successful in this special field of energy policy. In these Member States energy policy transformation has been considerable and radical changes have happened. Some Member States, like Estonia, Greece, Italy, Latvia, Luxembourg, Malta, Austria, Portugal and Finland have had some minor problems to decrease energy intensity. After all, this trend has been positive in the EU in this energy policy area. If we measure energy efficiency with this indicator, we can conclude that energy efficiency has improved in the EU-region.

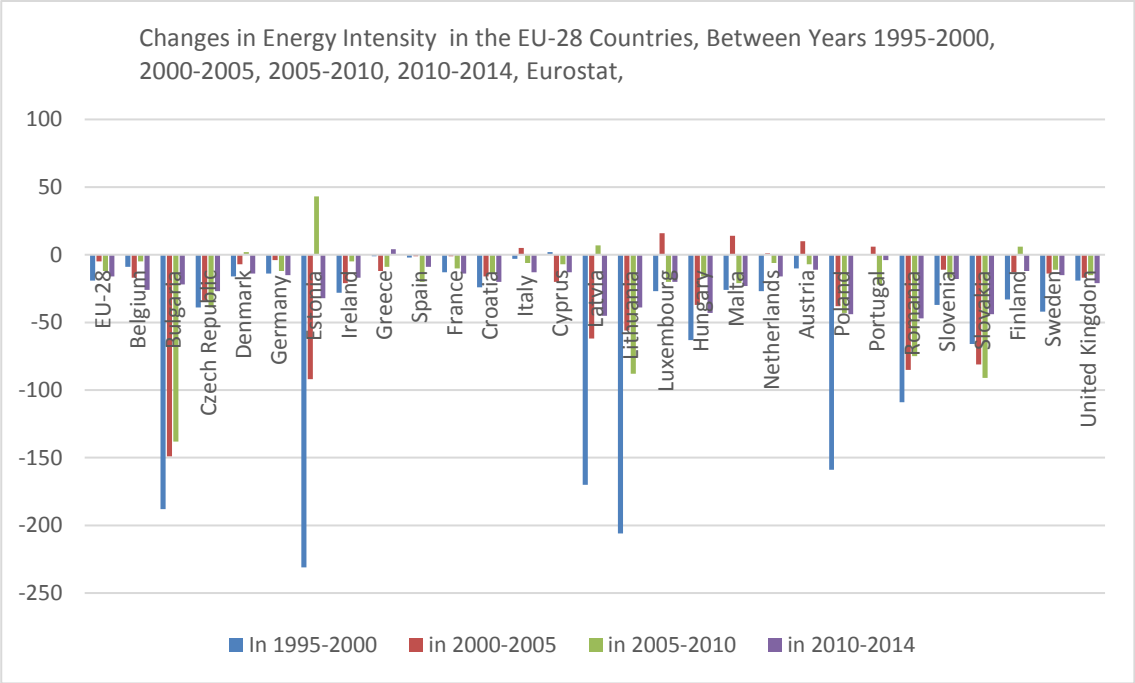


Figure 3.2. Changes in energy intensity in the EU-28 Member States, Years 1995-2000, 2005-2010, 2010-2014, Eurostat.

Figure 3.3 informs about total changes in energy intensity in the EU-28 Member States. Especially Bulgaria, Lithuania, Estonia, Latvia, Poland, Romania and Slovenia have decreased their energy intensity levels. All EU-28 Member States have made some progress in this important energy policy field of energy economy

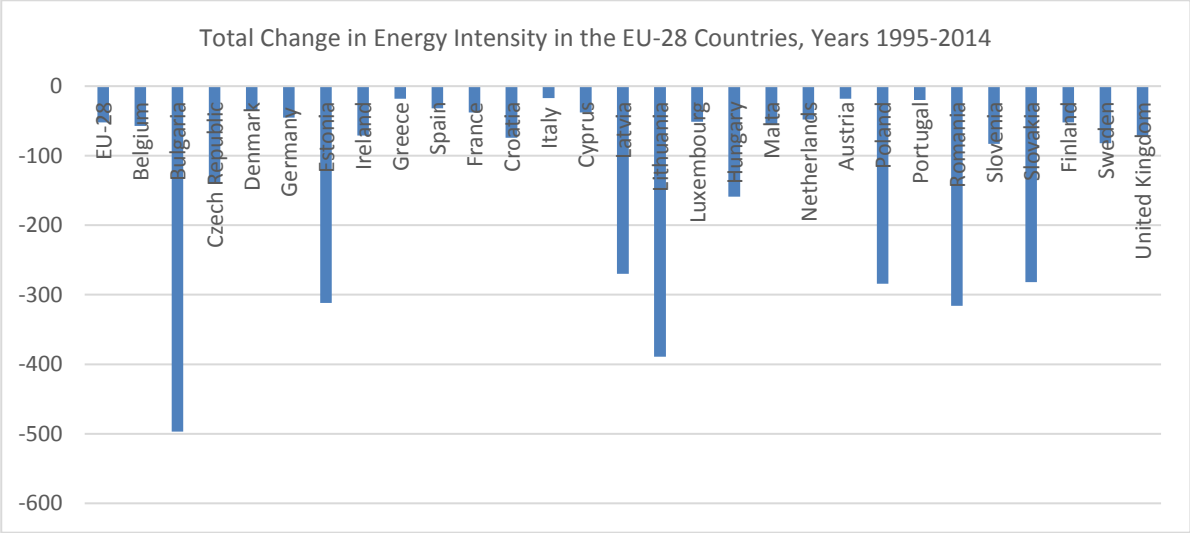


Figure 3.3. Total changes in energy intensity in the EU-28 Member States, Years 1995-2014, Eurostat.

Figure 3.3 verifies a conclusion that the direction of energy saving and energy efficiency policies in the EU-28 have been right and some considerable results towards sustainability have been reached.

3.2. Final energy consumption per capita

In Figure 3.4 energy consumption per capita in the EU-28 Member States have been reported in 1995, 2000, 2005, 2010 and 2014. This figure reveals that quite many EU-Member States have been successful and some other EU-Member States have not been so successful in decreasing energy consumption per capita. There are many Member States which have decreased energy consumption per capita. On very small number of EU-28 Member States have not been very successful in this field of energy policy. Such Member States are Estonia, Finland, Luxembourg and the Netherlands. Also among these Member States some positive changes have happened in recent years.

There are many Member States where energy consumption has increased in 1995-2005, but later, in 2005-2014, it has decreased. We can conclude that there is a kind of turning point in European energy policy, if we measure energy policy progress by energy consumption per capita.

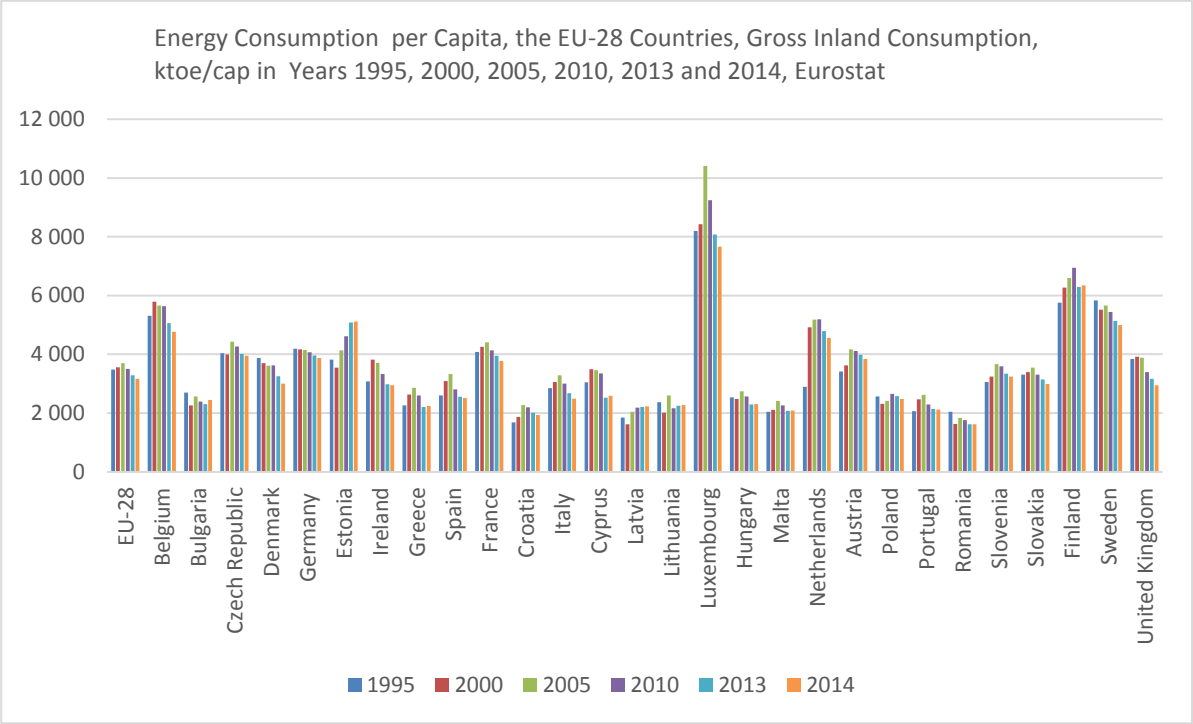


Figure 3.4. Final energy consumption per capita (all Fuels, kWh/cap) in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, Eurostat.

Figure 3.5 reports **c**hanges in final energy consumption per capita (all Fuels, kWh/cap) in the EU-28 Member States. This figure reveals that in most EU-28 Member States energy consumption per capita increased in 1995-2010, but in 2010-2014 it started to decrease in considerable way in many EU-28 Member States.

We can explain this detectable change in final energy consumption per capita by the global financial crisis, but in any case, these changes in 2010-2014 are positive from the perspectives of global climate change policy and sustainable development.

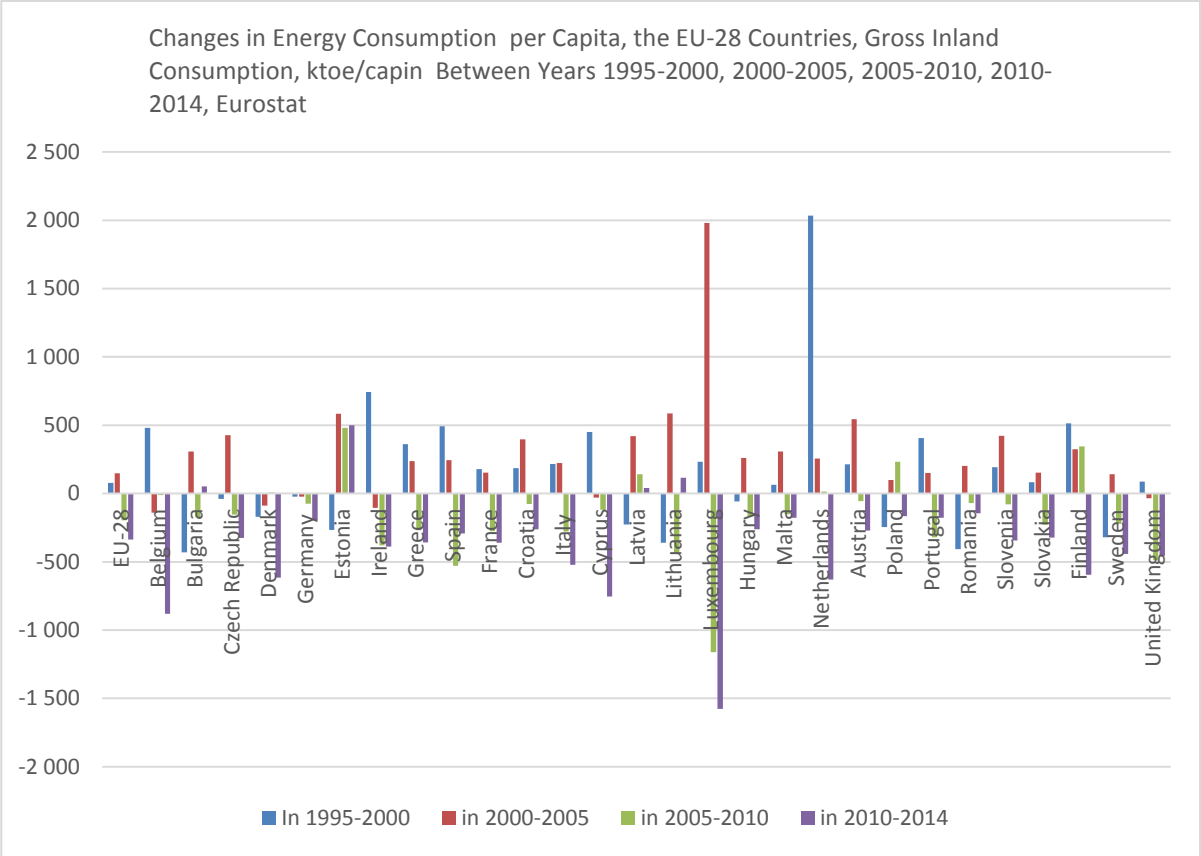


Figure 3.5. Changes in final energy consumption per capita (all Fuels, kWh/cap) in the EU-28 Member States, Years 1995-2000, 2005-2010, 2010-2014, Eurostat.

To get a better big picture, in Fig. 3.6, we have reported total changes in final energy consumption in the EU-28 Member States. This figure reveals that many Member States have decreased final energy consumption in capita in 1995-2014. Especially Czech Republic, Denmark, Luxembourg and Sweden have very successful Member States in this energy policy field. Most EU-28 Member States show decreases in this key variable of energy policy. Biggest problems to decrease energy consumption per capita in in this period 1995-2014 have had the Luxembourg, Estonia, Finland, Austria and Latvia.

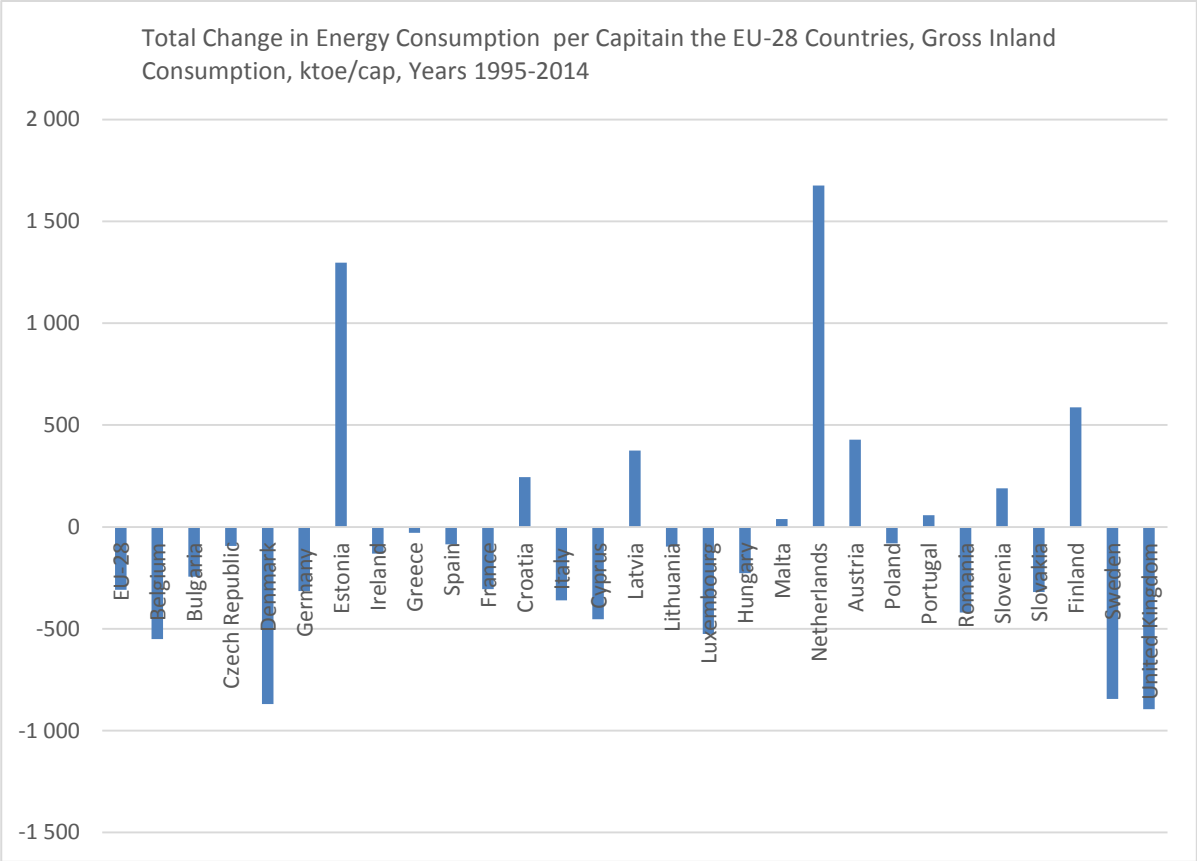


Figure 3.6. Total changes in final energy consumption per capita (all Fuels, kWh/cap) in the EU-28 Member States, Years 1995-2014, Eurostat.

3.3. Primary energy intensity

In Figure 3.7 we are reporting statistical figures of primary energy intensity in the EU-28 region. The time period of statistical analysis is 1995-2014. The general trend in the EU-28 Member States has been that the primary energy intensity has fallen in most EU Member States.

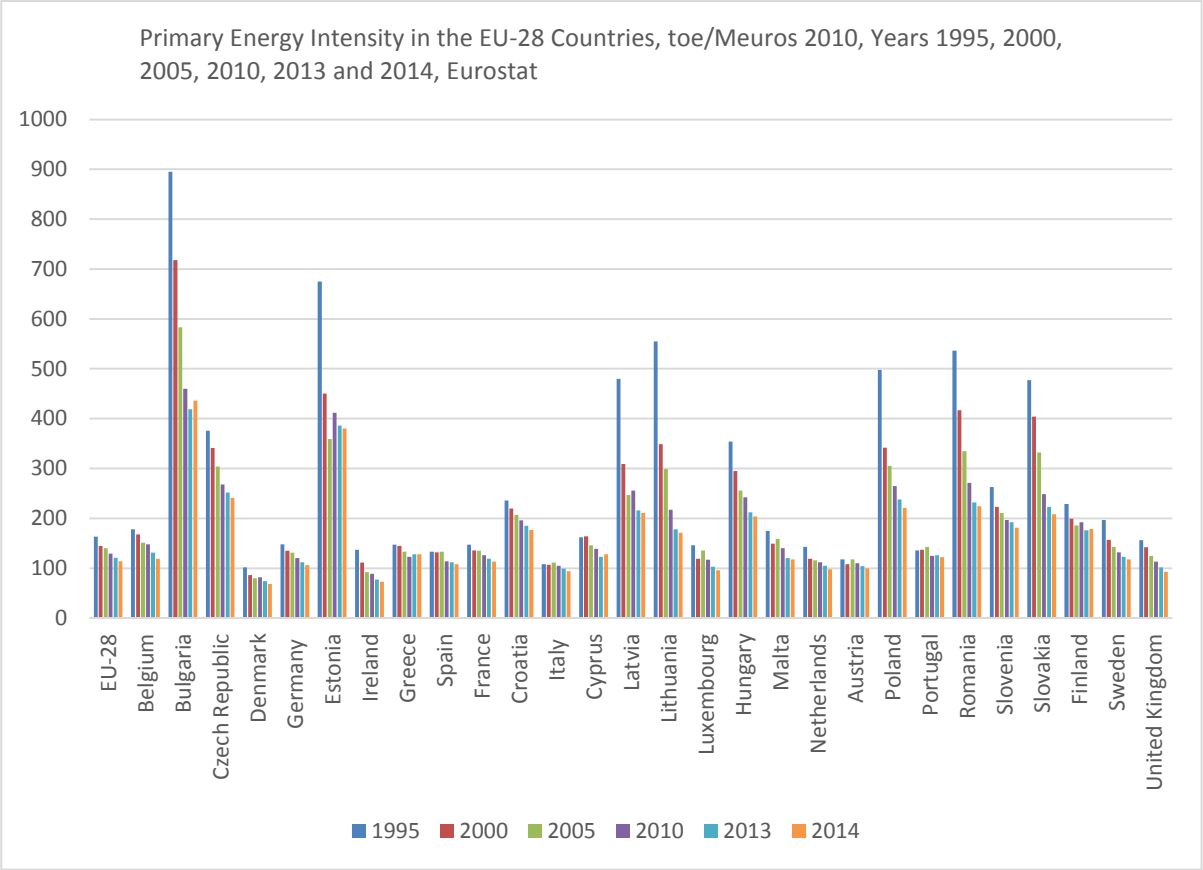


Figure 3.7. Primary energy intensity (toe/Meuros) in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, Eurostat.

In Figure 3.8 we report changes in primary energy intensity in the EU-28 Member States, (toe/Meuros 2010), in 1995-2000, 2000-2005, 2005-2010 and 2010-2014. Figure 3.8 verifies conclusion that in recent years, primary energy intensity has fallen in most EU Member States.

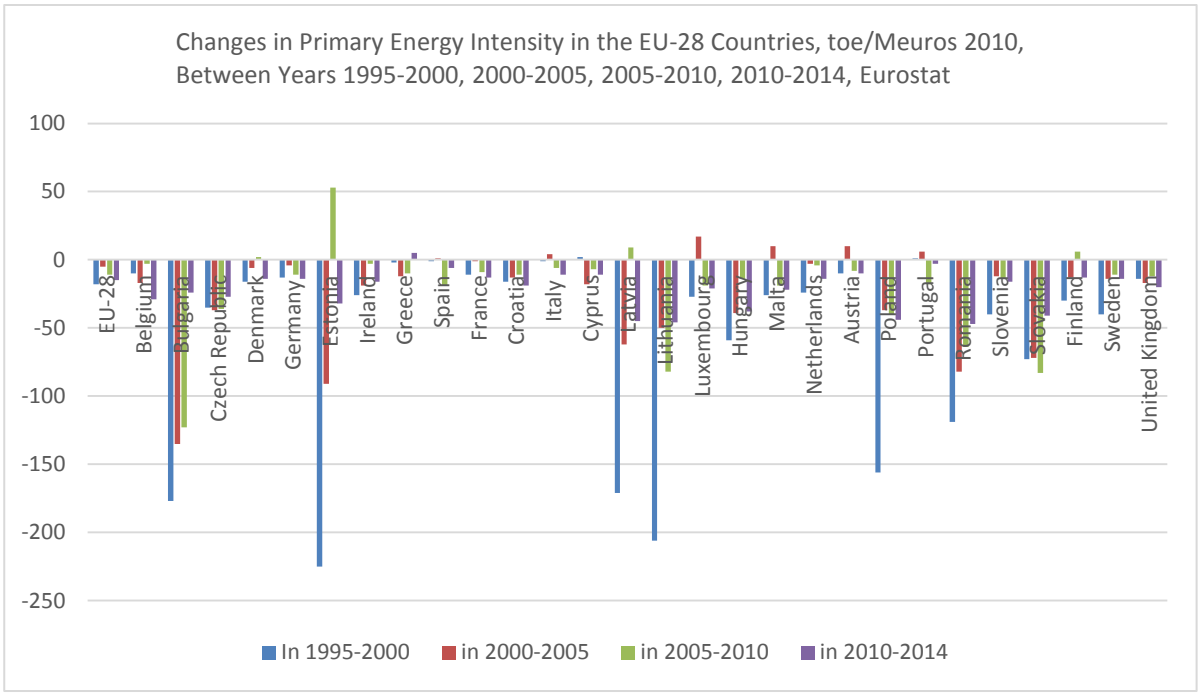


Figure 3.8. Changes in primary energy intensity (toe/Meuros) in the EU-28 Member States, years 1995-2000, 2005-2010, 2010-2014, Eurostat.

In Figure 3.9, we have reported total changes in primary energy intensity in the EU-28 Member States. This figure reveals that all EU-28 Member States have decreased primary energy intensity in capita in 1995-2014. Especially Bulgaria, Estonia, Latvia, Lithuania, Hungary, Poland, Romania and Slovakia have been very successful Member States in this energy policy field. Biggest problems to decrease primary energy intensity in this period 1995-2014 have had Mediterranean Member States like Italy, Spain, Greece and Portugal. This is understandable because in these Member States the level of energy intensity has already reached a low level.

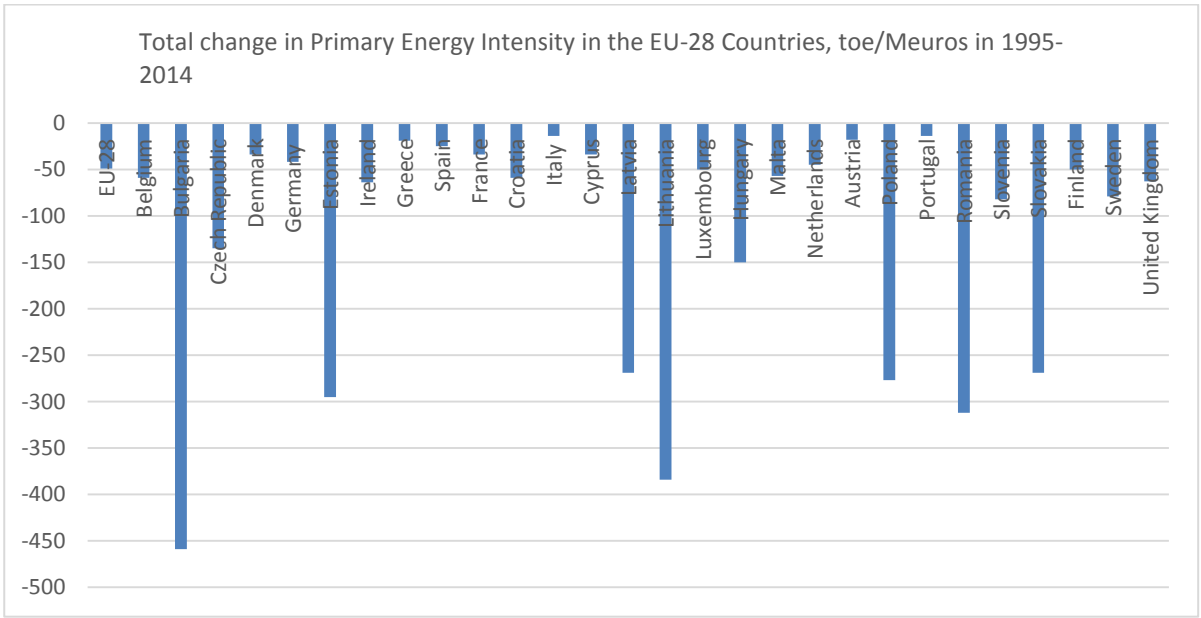


Figure 3.9. Total changes in primary energy intensity (toe/Meuros) in the EU-28 Member States, years 1995-2014, Eurostat.

To sum up, Figure 3.9 confirms that the overall primary energy intensity of all EU Member States evolved towards the desired direction.

3.4. Carbon intensity

In Figure 3.10 we have reported carbon intensity levels in the EU-28 Member States. This figure shows that development towards low carbon societies has started to some extent in the EU-28 region. Some EU-Member States seem to have problems in this field. Such Member States are Latvia, Lithuania, Cyprus and Greece. Figure reveals that Sweden is the champion of the EU-28 in this field of energy policy. France is also performing well in this field of energy policy. High carbon intensities can be observed in Greece, Poland, Malta, Ireland and Cyprus.

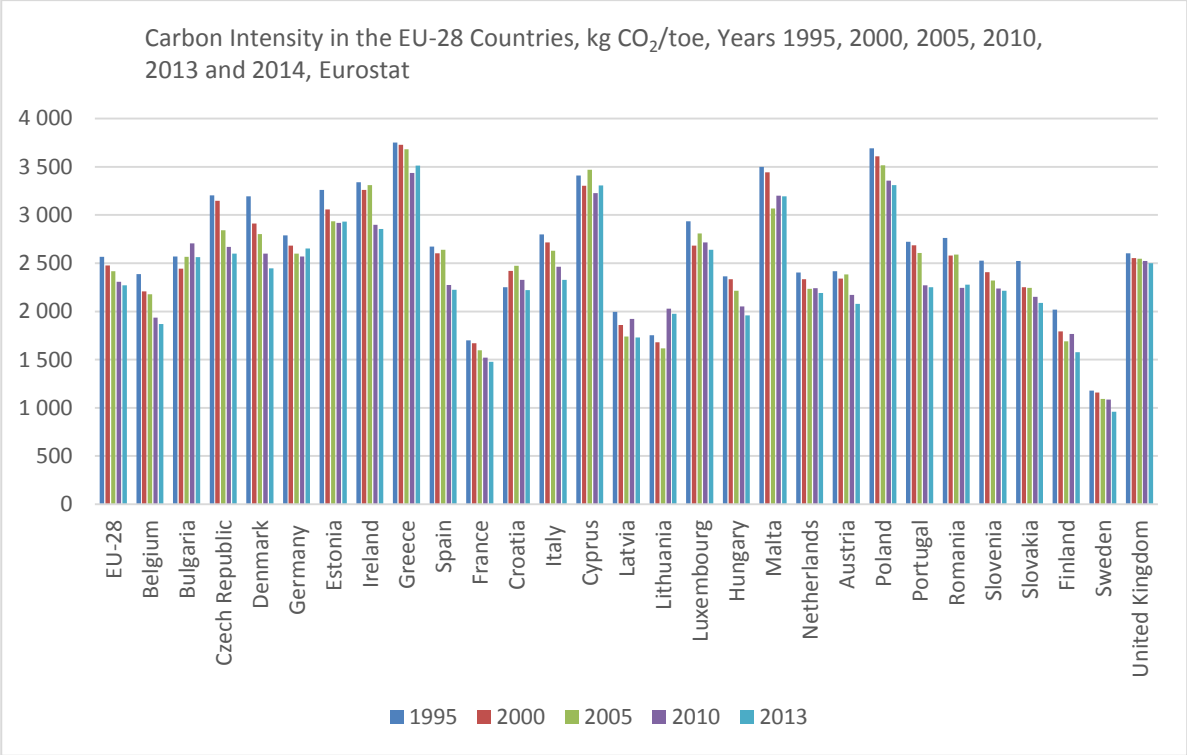


Figure 3.10. Carbon intensity (kg CO_2/toe) in the EU-28 Member States, years 1995, 2000, 2005, 2010, 2013 and 2014, Eurostat.

In Figure 3.11 we report changes in carbon intensity in the EU-28 Member States (kg CO_2/toe, changes between years 1995-2000, 2000-2005, 2005-2010 and 2010-2014. Also this figure informs us that carbon intensity in the EU-28 region is decreasing in many EU-Member States. In particular, in 2010-2014, a clear change towards lower levels of carbon intensity was observed. In this period of 2010-14, only Estonia and Slovenia increased their carbon intensity. Other EU-Member States decreased their carbon intensity.

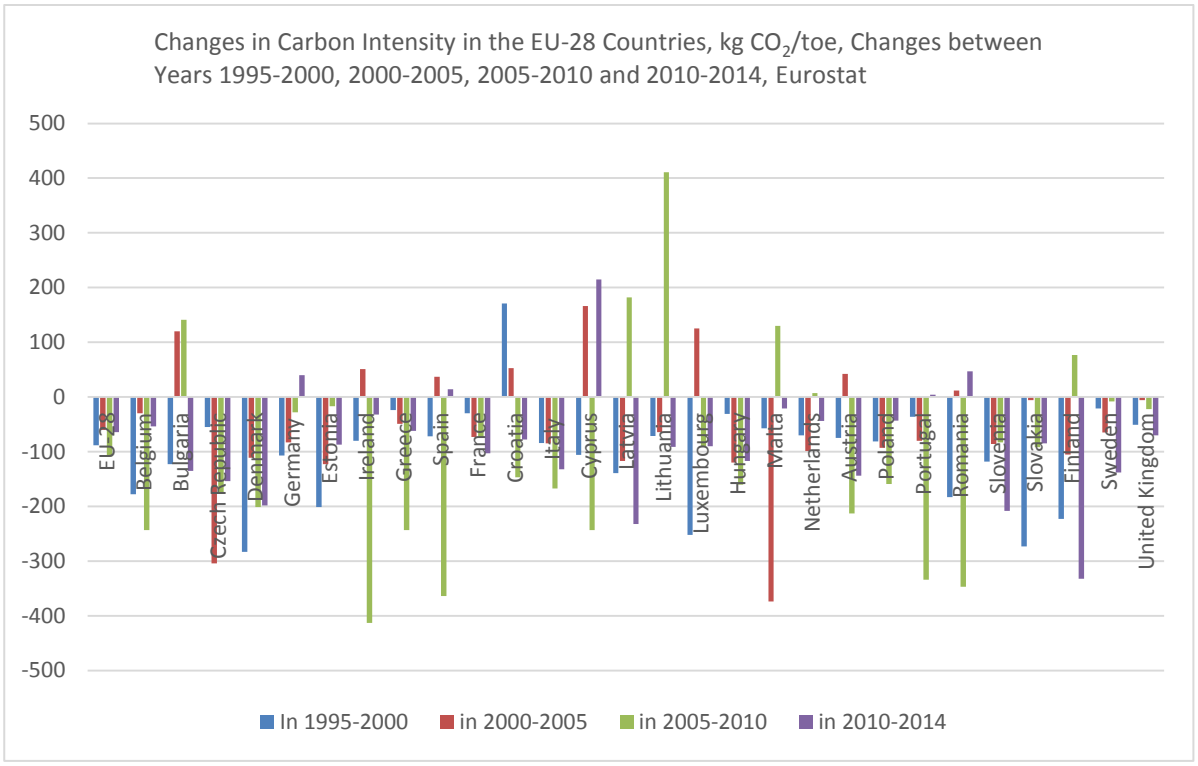


Figure 3.11. Changes in carbon intensity (kg CO_2/toe) in the EU-28 Member States, Years 1995-2000, 2000-2005, 2005-2010, 2010-2014, Eurostat.

In Figure 3.12 we report total changes in carbon Intensity (kg CO_2/toe) in the EU-28 Member States, in years 1995-2014. This figure reveals that changes towards low-carbon society are running the EU-28 area. Lithuania and Cyprus are only exceptions in relation to general trend in the EU-28 region.

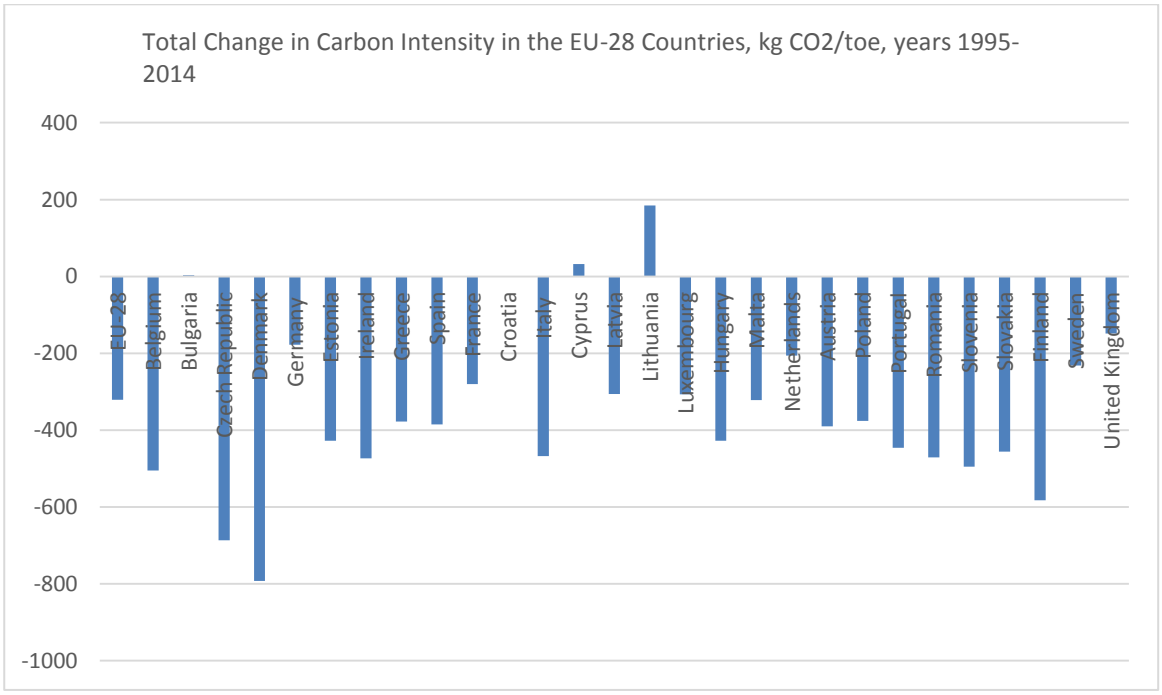


Figure 3.12. Total changes in carbon Intensity (kg CO_2/toe) in the EU-28 Member States, Years 1995-2014, Eurostat.

3.5. Population

In Figure 3.13 changes in population in the EU-28 region are reported. This figure informs us that demographic transition in EU-28 region is in stage where the forces of modernization and development has cause the beginning of decline in fertility and lower death rates, leaving little or no population growth. Of course, migration can to some extent influence the population development in Europe, but in Figure 3.13 we cannot observe very big changes in recent population trends. Studies indicate that in the long-run population size and age structure have clear effects on energy consumption.

Economic development and urbanization also contribute substantially to changes in energy consumption (see e.g. York 2007). That is why we analyses synergies with population and urban population data for EU-28. The recent demographic projections suggest that the expected decline of population growth in Europe will help curtail expansion in energy consumption.

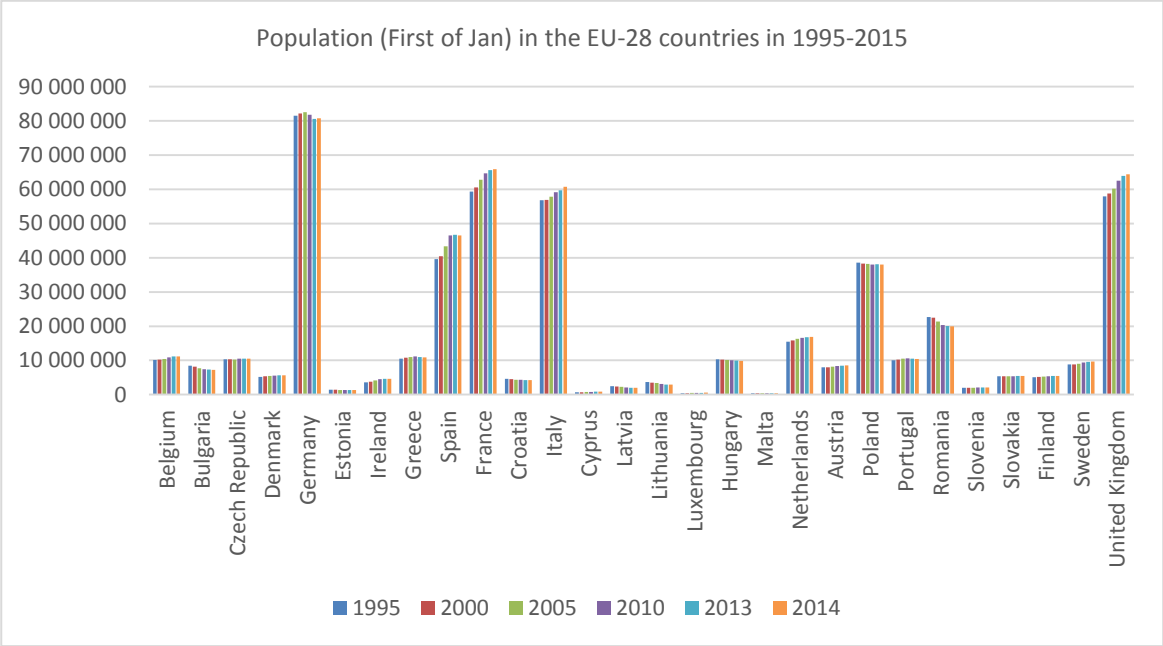


Figure 3.13. Population (First of January) in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, World Bank.

In Figure 3.14 we report changes in population in the EU-28 Member States. This figure reveals that the largest changes in the population in the EU have taken place in Spain, France, United Kingdom, Italy, the Netherland and Ireland. In many EU-Member States population has decreased. Germany has turned positive population growth in the number of population decline.

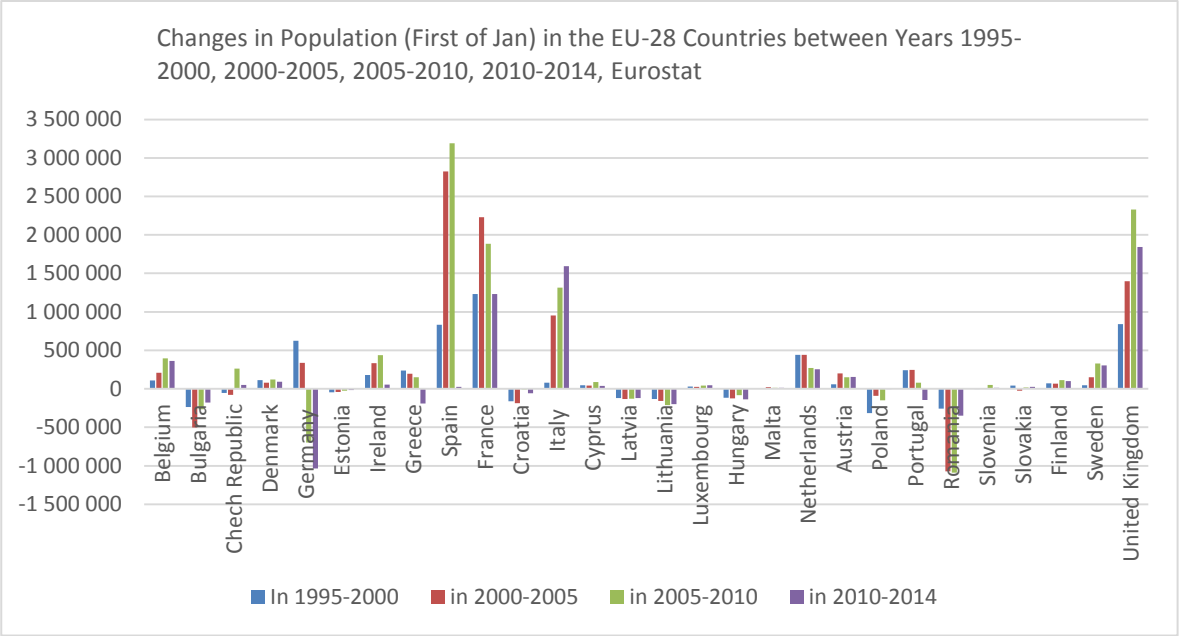


Figure 3.14. Changes in population (First of January) in the EU-28 Member States, Years 1995-2000, 2005-2010, 2010-2014, World Bank.

In Figure 3.15 total changes in population (First of Jan) in the EU-28 Member States, years 1995-2014 are reported. In the EU-28 region can we find Member States, where the population has grown and Member States in which it has fallen. Many Eastern European Member States like Poland, Bulgaria, Hungary and Baltic Member States have suffered from negative population developments. In the Spain, France, Italy Netherlands, United Kingdom the population has grown to a considerable extent.

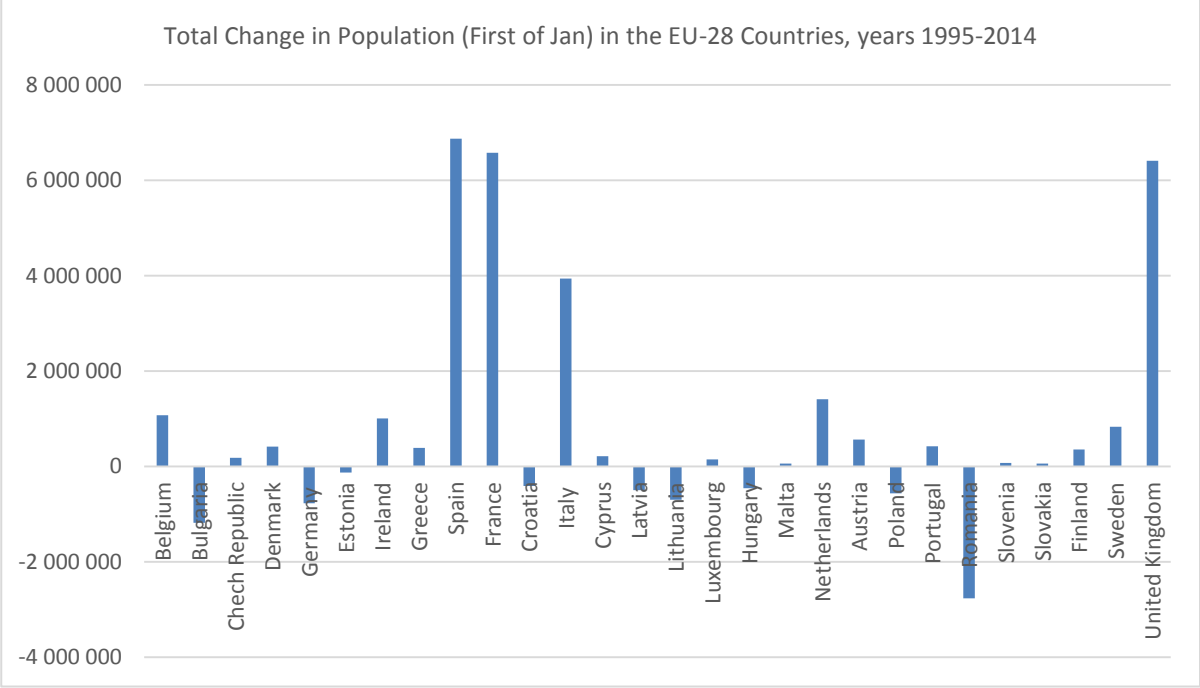


Figure 3.15. Total changes in population (First of January) in the EU-28 Member States, Years 1995-2014, World Bank.

3.6. Value added

In Figure 3.16 we have reported the development of value added in the EU-28 region. In most EU Member States, economic growth has been reasonable, especially before the financial crisis, but in some Member States (for example in Greece), economic growth has not been satisfactory during the period. As the engines of European growth have served Germany, France, United Kingdom, Italy, the Netherland and Spain.

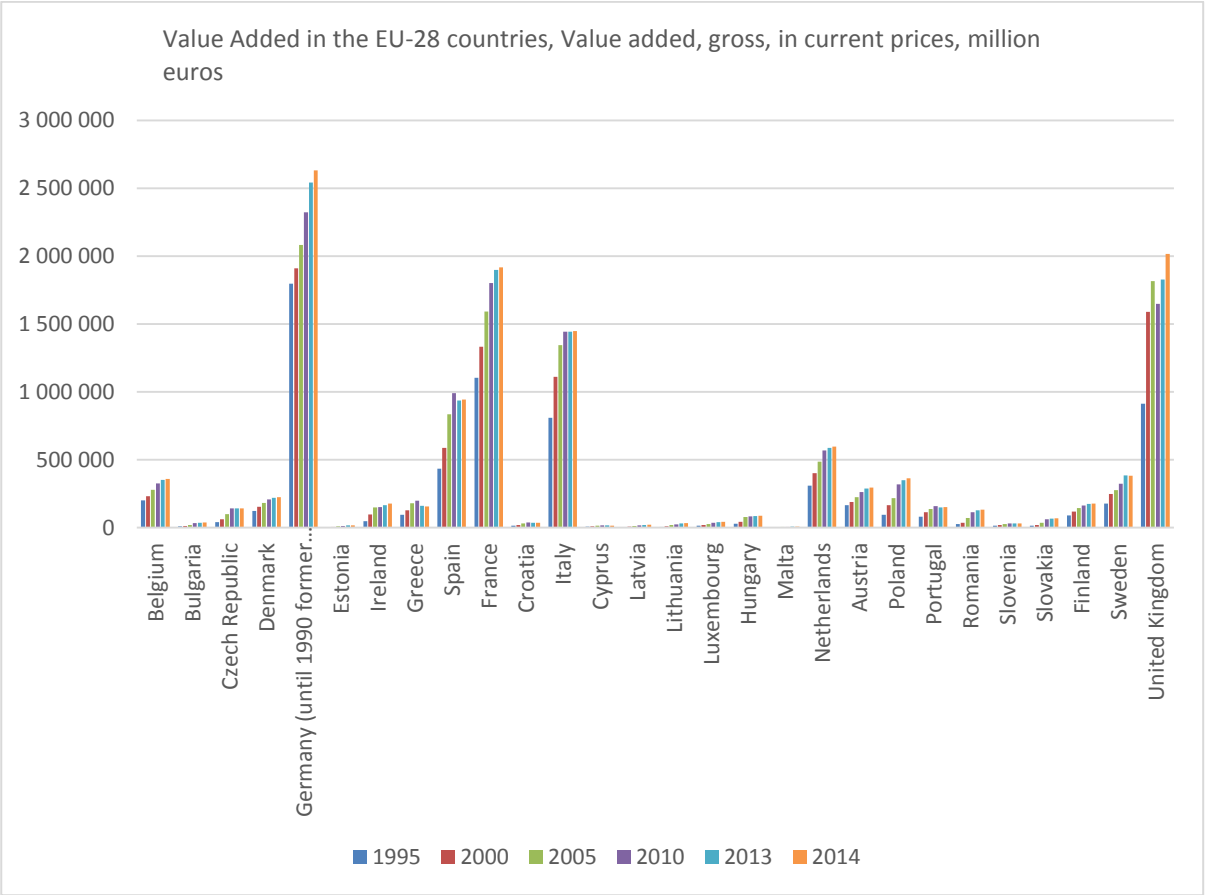


Figure 3.16. Value added, gross, in current prices (million euros) in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, Eurostat.

In Figure 3.17, changes in value added, gross, in current prices (million euros) in the EU-28 Member States are reported for years 1995-2000, 2005-2010, 2010-2014. Most EU-28 Member States have showed positive changes in the growth of value added. Greece, Spain and United Kingdom have showed negative changes in valued added. Germany has showed growing value added numbers in 1995-2014. Many EU-Member States have showed very low positive changes in value added. Economic growth has not been very satisfactory in the years of financial crisis in the EU-28 region.

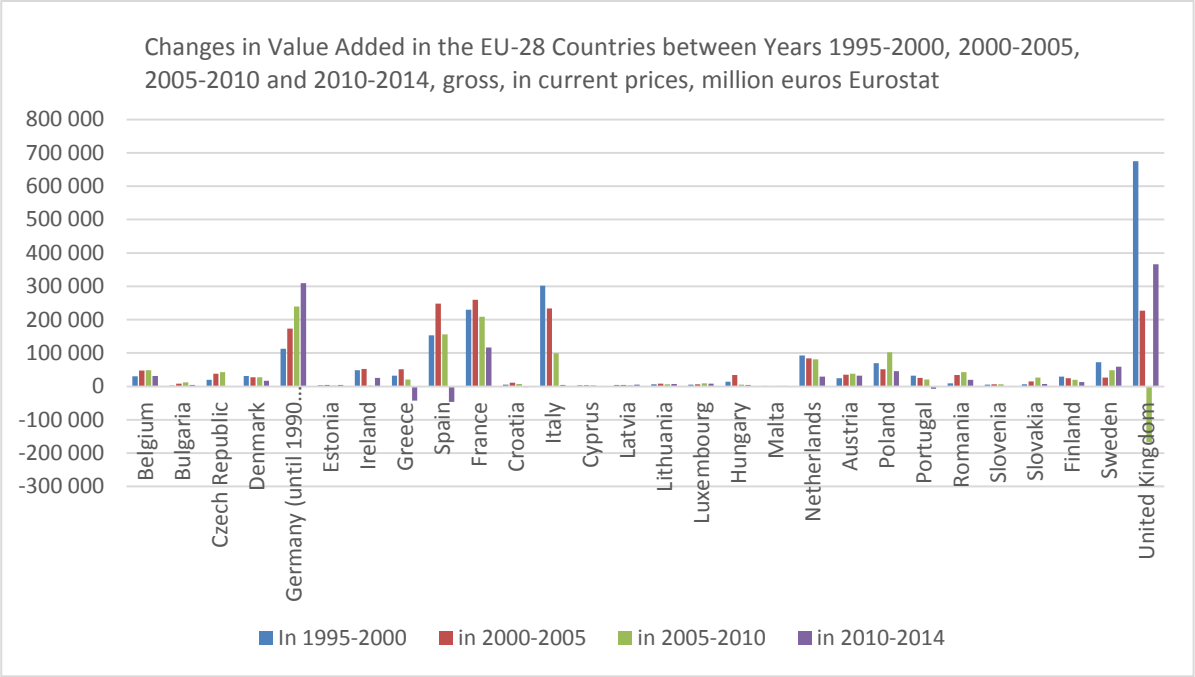


Figure 3.17. Changes in value added, gross, in current prices (million euros) in the EU-28 Member States, Years 1995-2000, 2005-2010, 2010-2014, Eurostat.

In Figure 3.18 total changes in in valued added in the period of 1995-2014 are reported. All EU-28 Member States have showed positive changes in valued added. The most successful Member States have been the United Kingdom, Germany, France, Italy, Spain, the Netherlands and Poland.

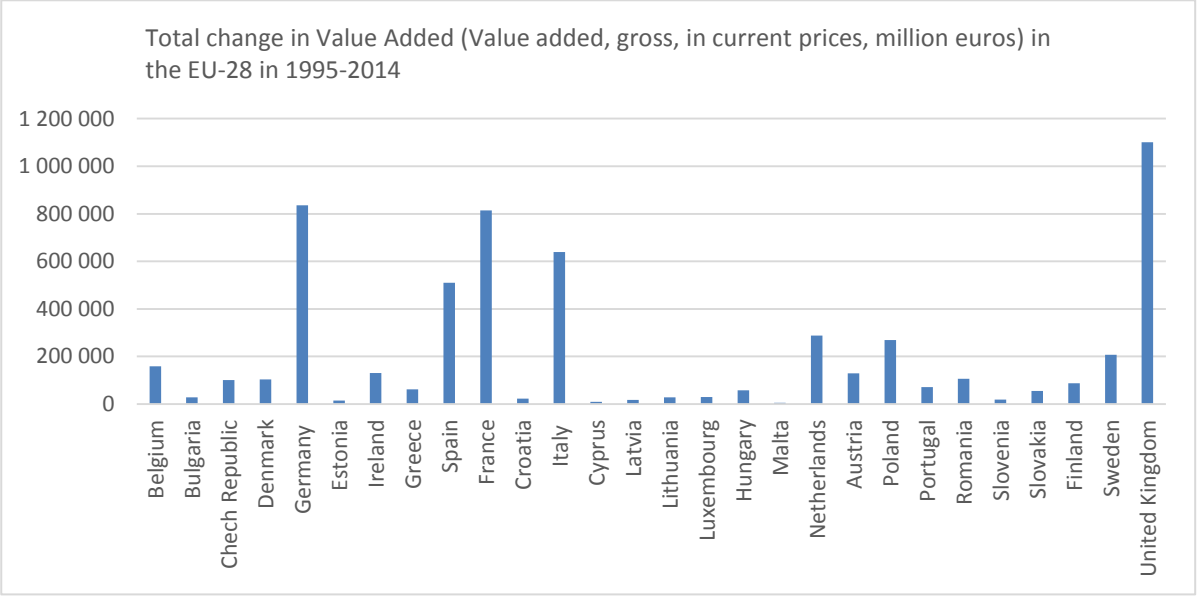


Figure 3.18. Total changes in value added, gross, in current prices (million euros) in the EU-28 Member States, Years 1995-2014, Eurostat

3.7. Urban population

Urbanisation is one key driver in the field of sustainable development. In Figure 3.19 we figure out recent trends in urban population in the EU-28 region.

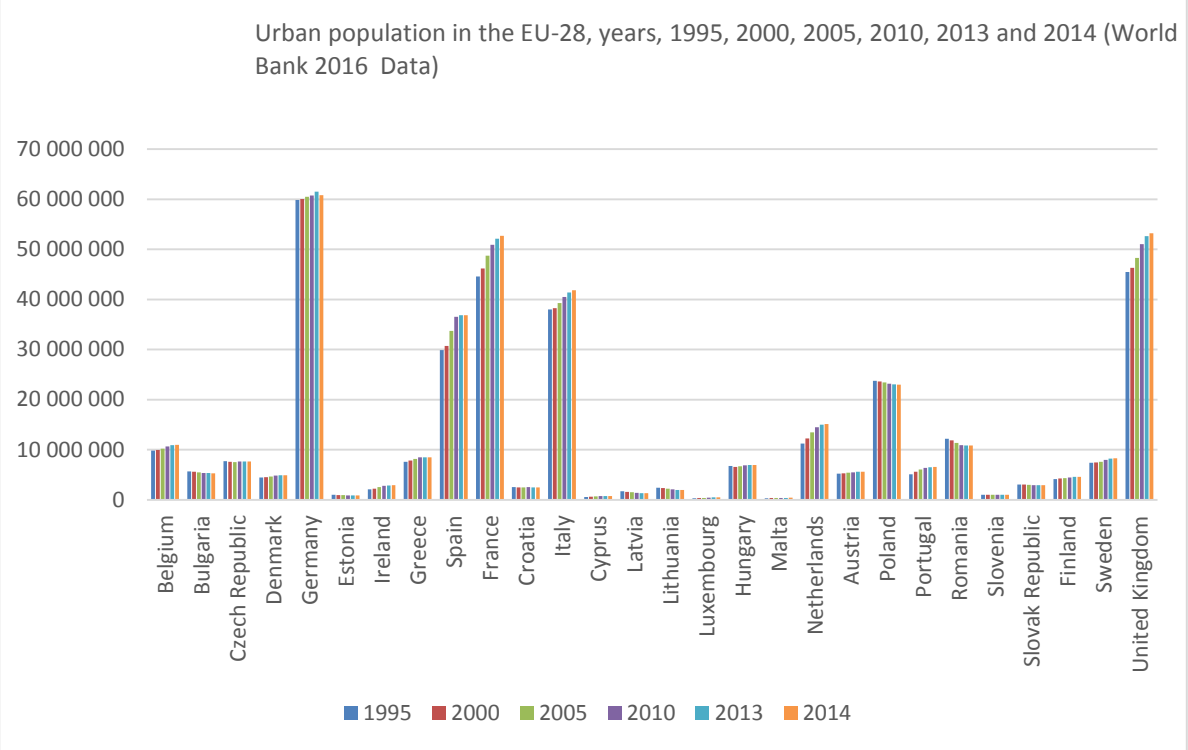


Figure 3.19. Urban population in the EU-28 Member States, Years 1995, 2000, 2005, 2010, 2013 and 2014, World Bank

Figure 3.20 reports the developments of one interesting indicator: Final Electricity Consumption per Capita/Urban population. All Fuels, kWh/cap /Urban Population.

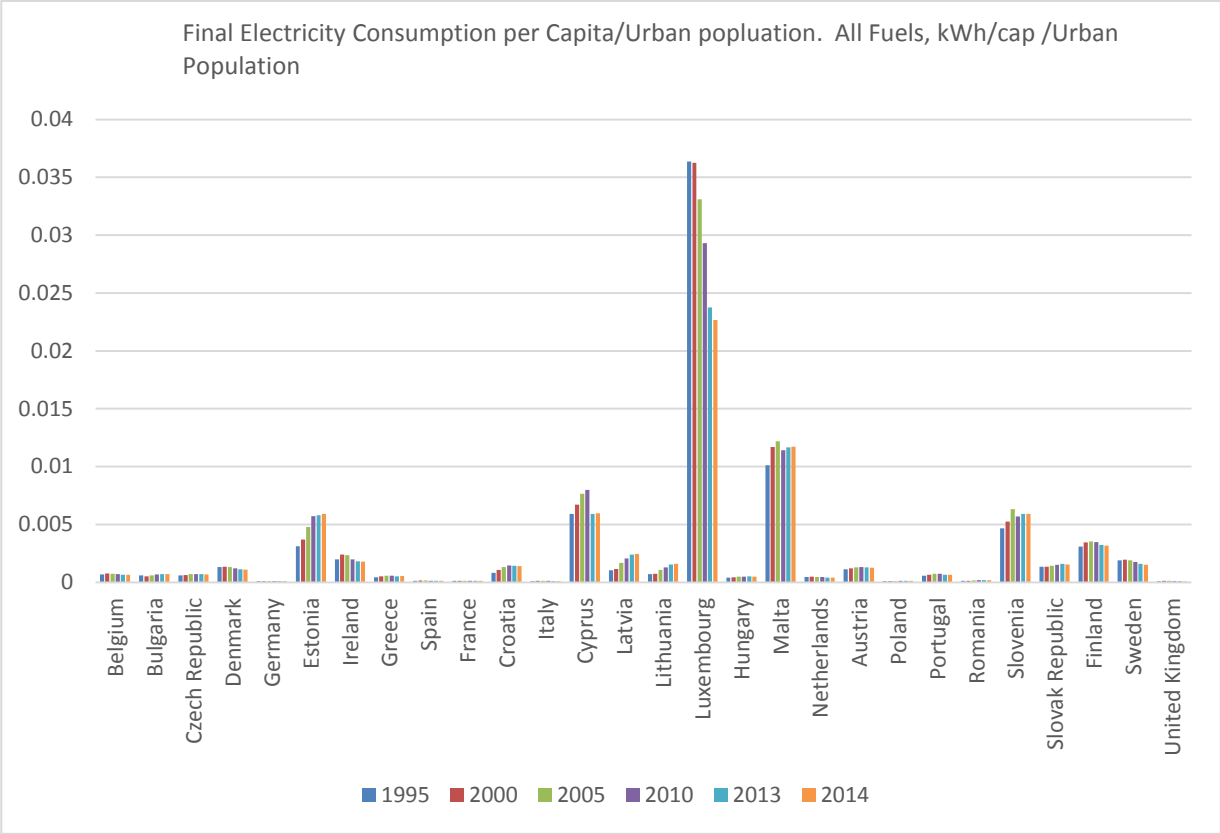


Figure 3.20. Final electricity consumption per capita/Urban population. All Fuels, kWh/cap /Urban Population.

Figure 3.20 reveals that there very large variances in this indicator in the EU-28 region. This figure reveals that although development of final electricity consumption per capita/Urban population-ratio have decreased in Luxembourg, it is very high in relation to other European Member States. There are other EU Member States where this index in very high. Such Member States are Malta, Cyprus, Estonia, Slovenia, Malta, Ireland, Latvia and Finland. The higher this index is, the more unsustainable urbanization process we can identify in the EU28 region. Of course, energy production mix of Member States matter when we evaluate this issue. This figure informs us where trend in positive and where it is negative in the EU-28 region. Many EU- Member States like Sweden, Denmark and Finland have been able turn this FEC/UrbanP -index to down.

In the UK, Germany, Spain, France, Italy, Hungary, Romania and Poland this FEC/UrbanP-indicator is very low. This empirical finding implies that European Union needs to pay more attention to the integration of urbanization and energy policy in the EU-28 region. The need of policy harmonization in European Union is evident based on this figure 3.20. By smart urban planning it is possible to decrease FEC/UrbanP -ratio.

In Figure 3.21 we have reported changes in urban population in the EU-28 Member States. We can say that the direction of urbanization is quite different to the EU-28 region. Especially in Eastern and Central Europe in many Member States have some problems in the urbanisation policy. These Member States do not follow the typical steady urbanization path. This unstable urbanization process may cause problems for the planning of urban and rural electricity infrastructures.

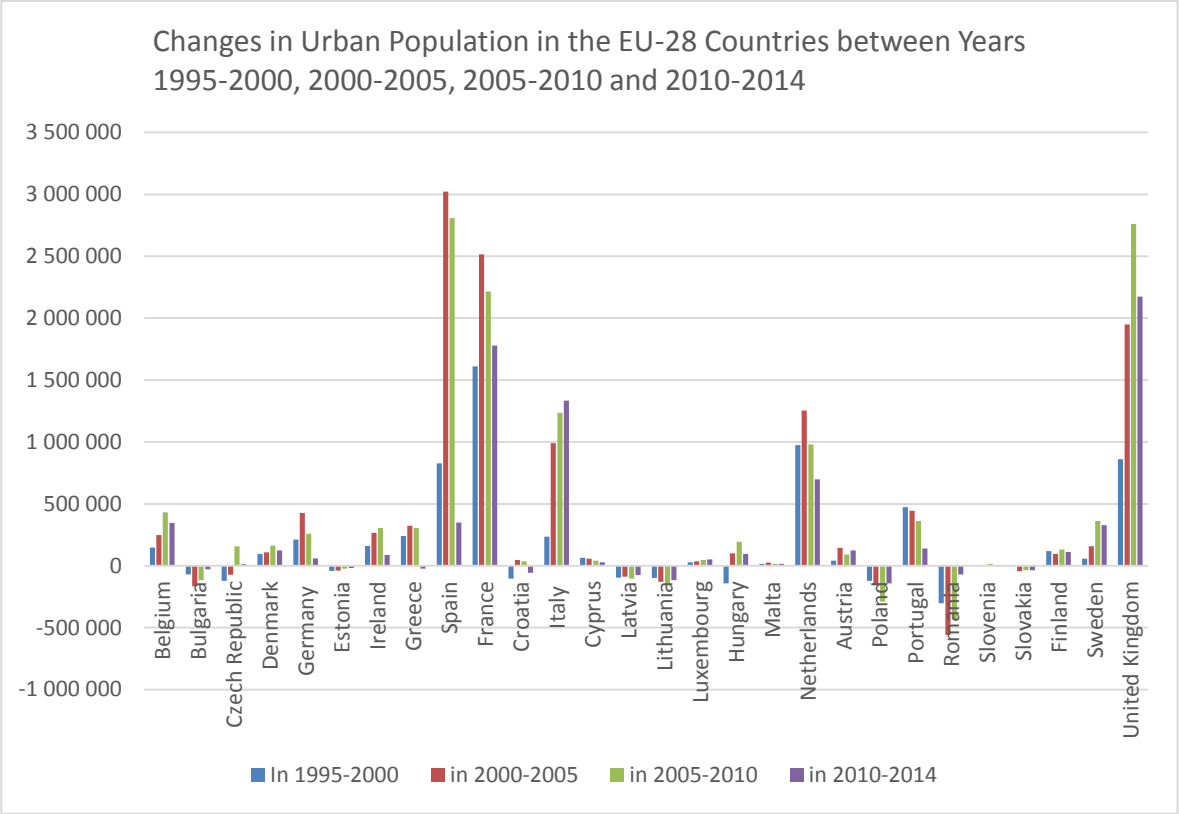


Figure 3.21. Changes in urban population in the EU-28 Member States, Years 1995-2000, 2005-2010, 2010-2014, World Bank.

In Figure 3.22 we have reported changes in urban population in the EU Member States. This figure reveals that urbanization is not following a similar paths in all EU Member States.

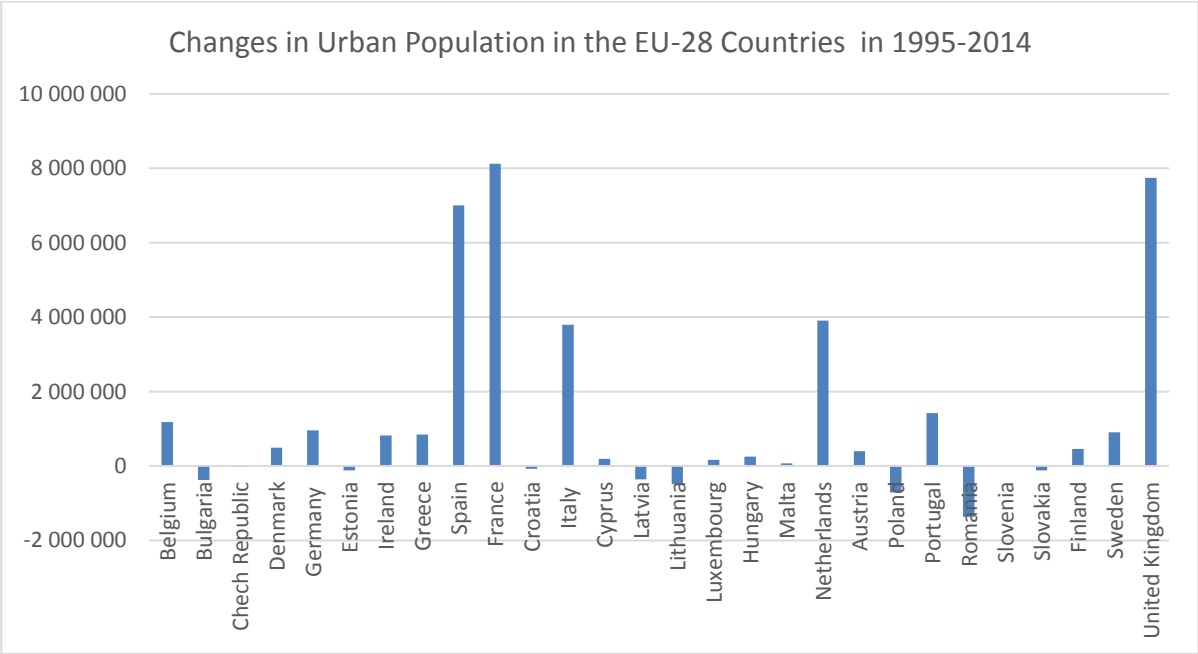


Figure 3.22. Total changes in urban population in the EU-28 Member States, Years 1995-2014, Eurostat.

3.8. Primary and final energy consumption

In Figure 3.23 we figure out primary energy consumption in the EU-28 Member States. It outlines the trends relevant for energy savings in the EU-28 Member States.

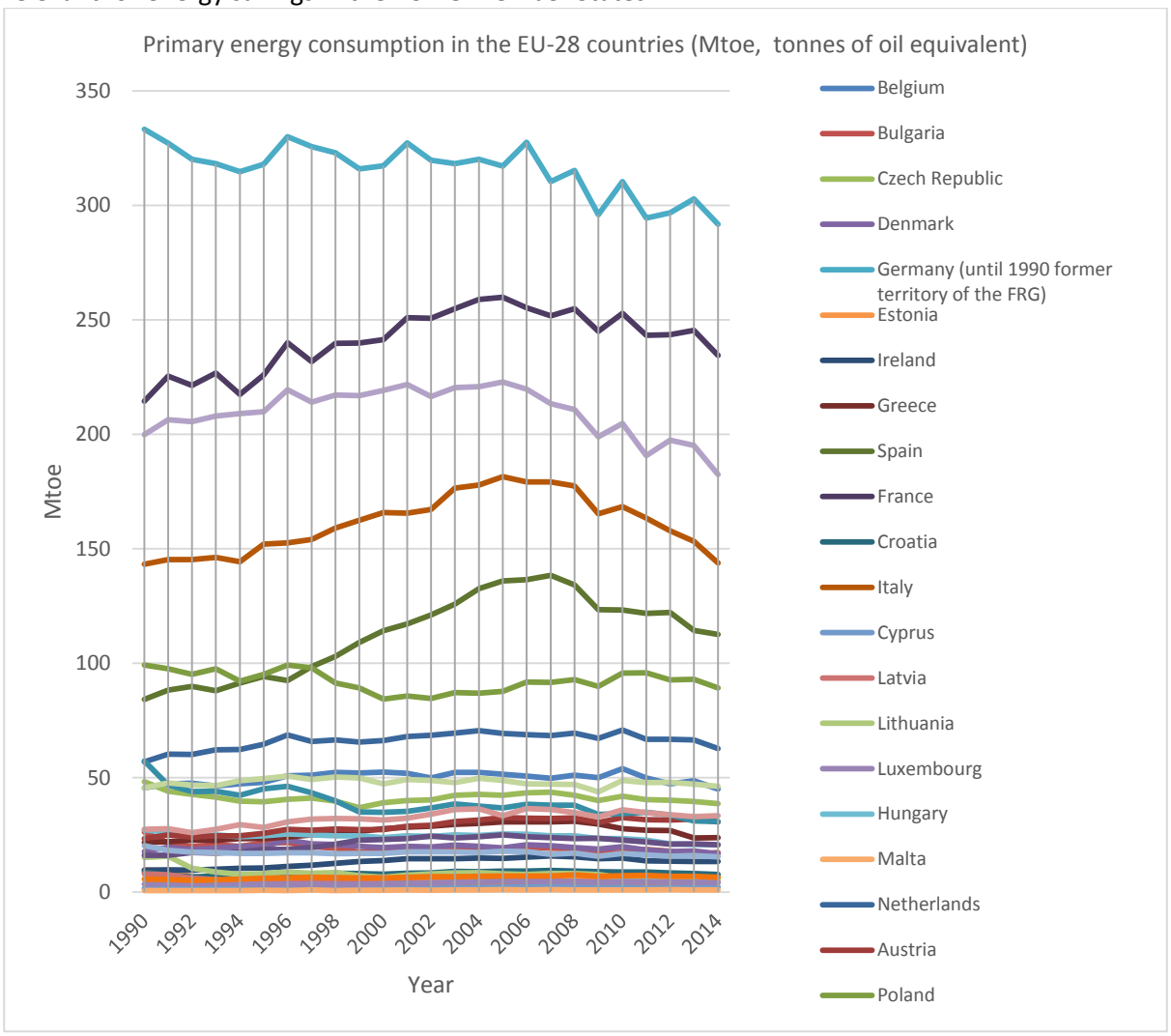


Figure 3.23. Primary energy consumption in the EU-28 Member States (Mtoe), in 1990-2014.

In Fig. 3.24 we figure out the index of primary energy consumption in the EU-28 region (Index, 2005=100).

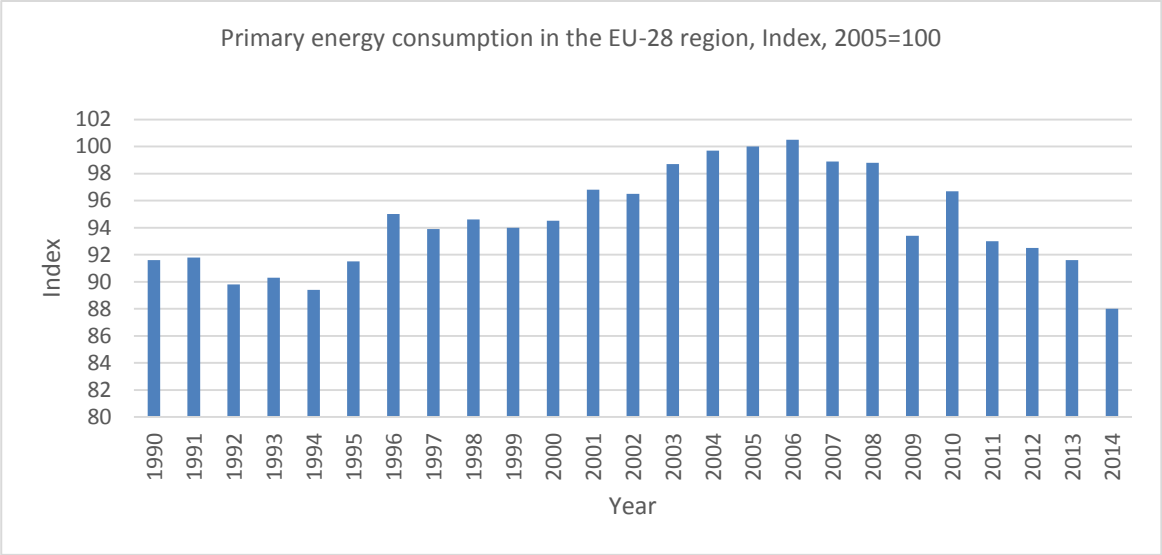


Figure 3.24. Primary energy consumption in the EU-28 region, Index, 2005=100, in 1990-2014.

Figure 3.24 informs us that there has happened change in the trend of primary energy consumption in the EU-28 region. The change in the EU-28 region happened after 2006. After 2006 we can observe downward sloping trend in primary energy consumption in the EU-28 region.

Figure 3.25 includes similar kind of observation concerning final energy consumption in the EU-region. After 2006 we can observe downward sloping trend in final energy consumption in the EU-28 region.

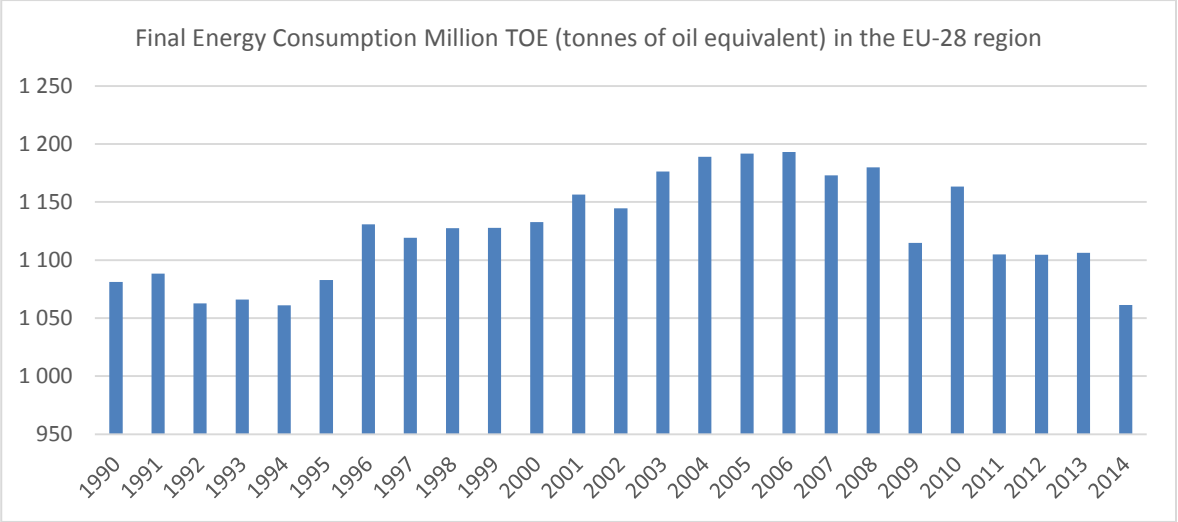


Figure 3.25. Final energy consumption in the EU-28 region (Mtoe), in 1990-2014.

In Figure 3.26 we figure out final energy consumption trends for EU-28 Member States. This figure verifies clearly the changes in many EU-Member States in trend trajectories of final energy consumption.

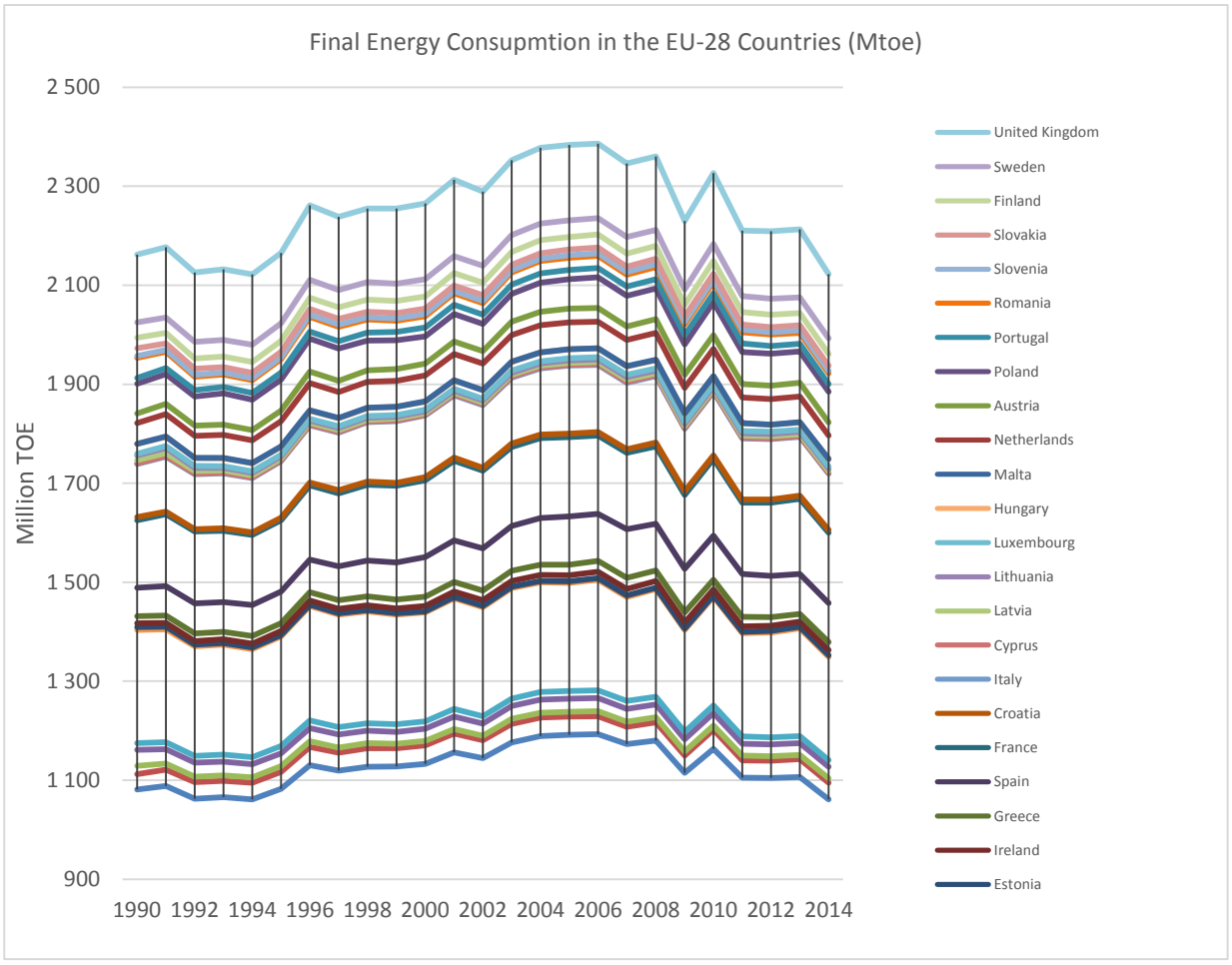


Figure 3.26. Final energy consumption in the EU-28 Member States (Mtoe), 1990-2014.

Figures 3.27 and 3.28 show us how changes in energy savings have developed gradually after 1990 in primary energy (Figure 3.27) and final energy (3.28).

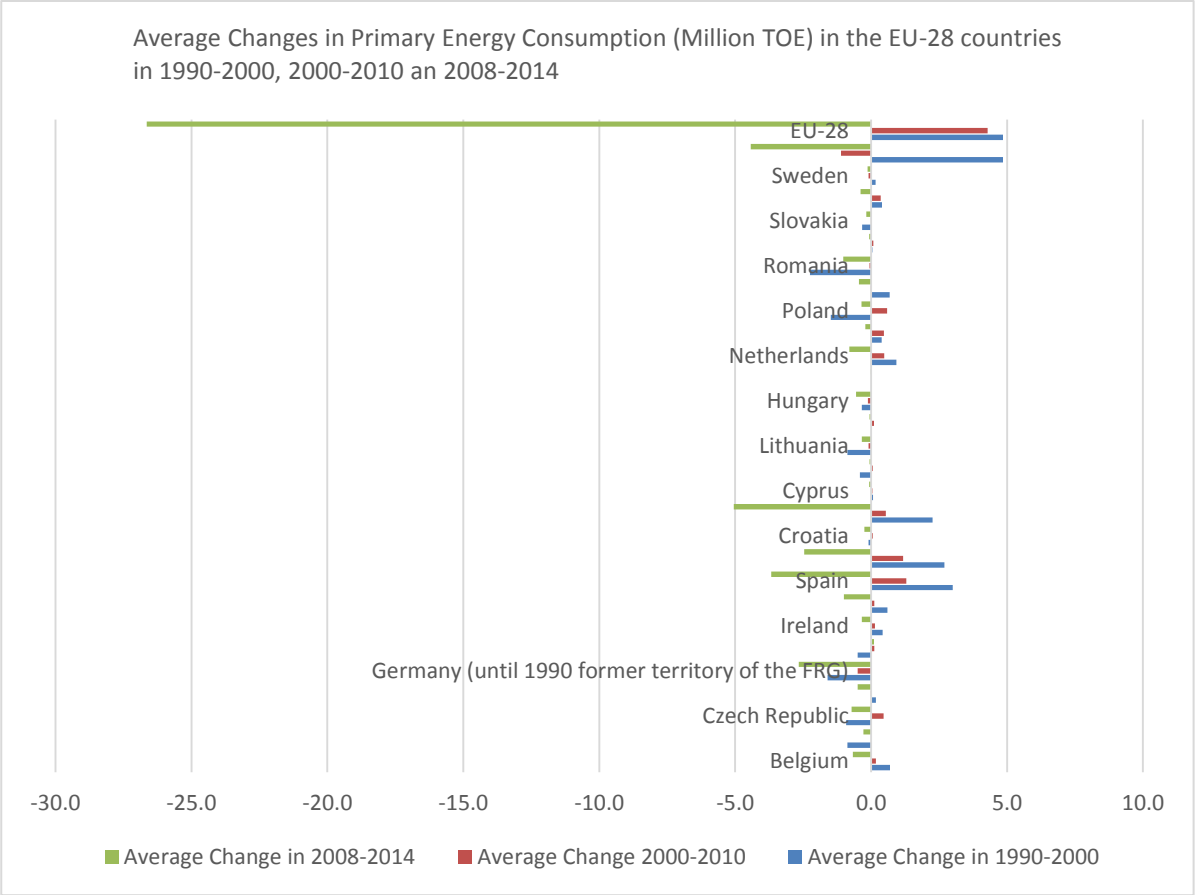


Figure 3.27. Average changes in primary energy consumption (Mtoe) in the EU-28 Member States in 1990-2000, 2000-2010 and 2008-2014.

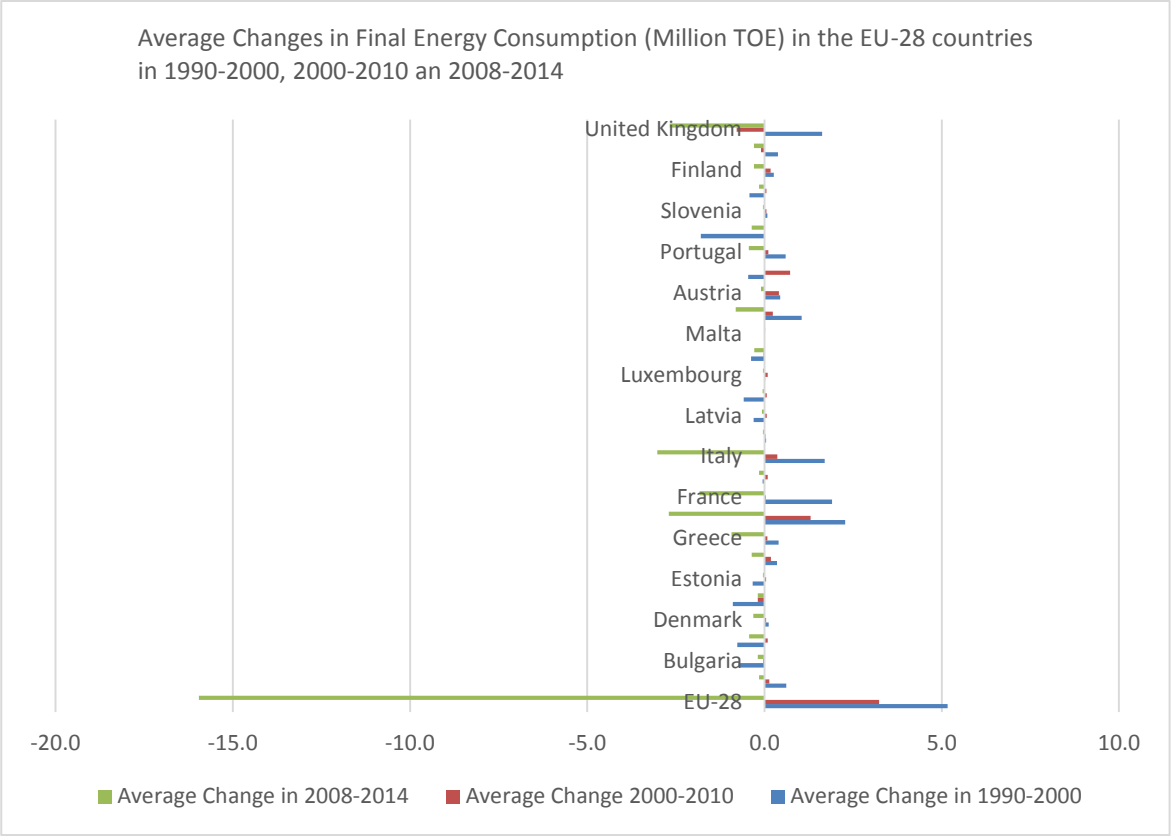


Figure 3.28. Average changes in final energy consumption (Mtoe) in the EU-28 Member States in 1990-2000, 2000-2010 and 2008-2014.

These two figures show us that in the years of financial crisis both primary and final energy consumption have decreased in many EU-28 Member States. The energy sector has gone through restructuring in the EU-28 Member States.

4. Synergy/trade-off between the key drivers and energy indicators in the EU-28 Member States

In previous Chapter 3 we presented key statistical trends, which are now analysed by the methods of synergy analysis and trade-off analyses. Key energy variables are: energy intensity, energy consumption per capita, final electricity consumption per capita, primary energy intensity and carbon intensity. Key drivers are population, valued added and urban population.

4.1. Key drivers vs. energy intensity

First, we present synergy analyses and trade-off analyses between energy intensity and key drivers, population, value added and urban population.

First synergy analysis is presented in Figure 4.1. The results are quite clear, because there is negative synergy between energy intensity and value added almost in all EU-28 Member States. There are only two exceptions, Luxembourg and Austria. This result indicates that energy intensity has mostly negative synergy with value added. This result is reasonable. Biggest negative synergy levels (over -0.5) are observed in Sweden and United Kingdom.

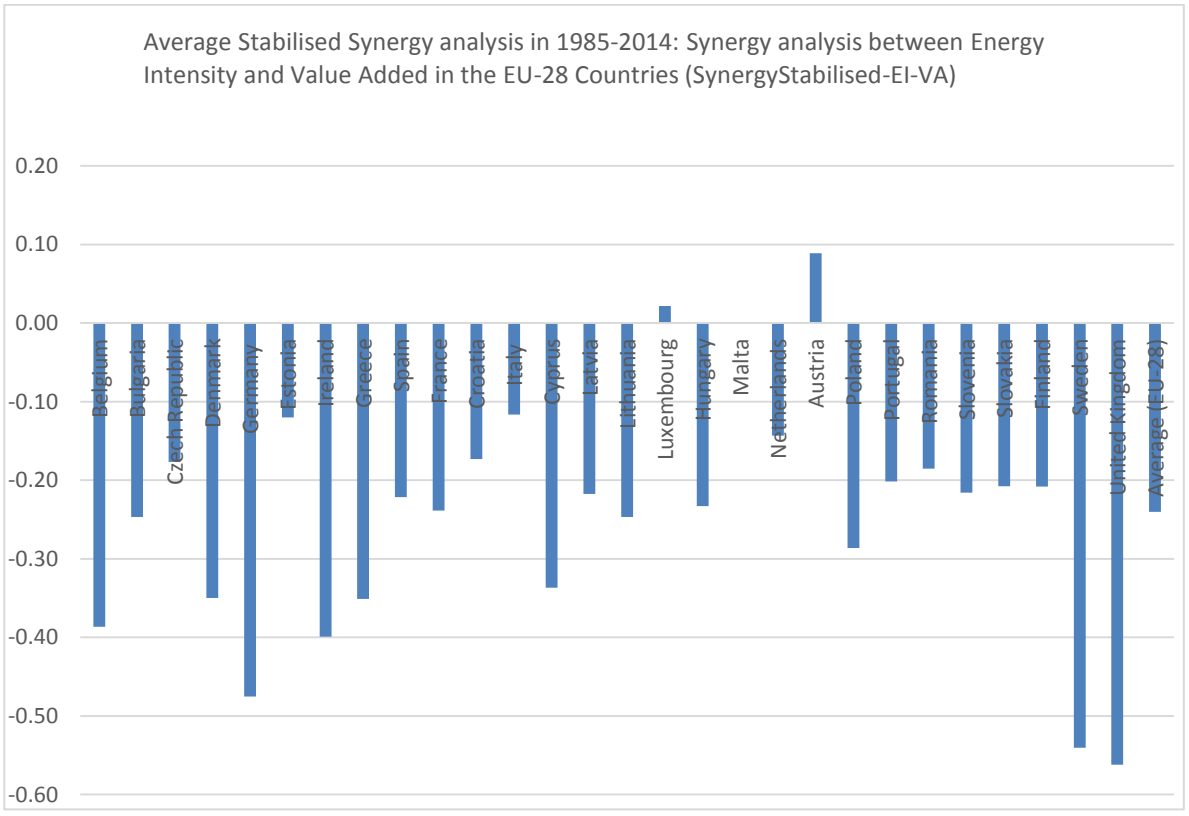


Figure 4.1. Stabilised synergy analysis in 1985-2014: Synergy analysis between energy intensity and value added in the EU-28 Member States.

In Figure 4.2 trade-off curve between energy intensity and value added in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is value-added, the lower is energy intensity.

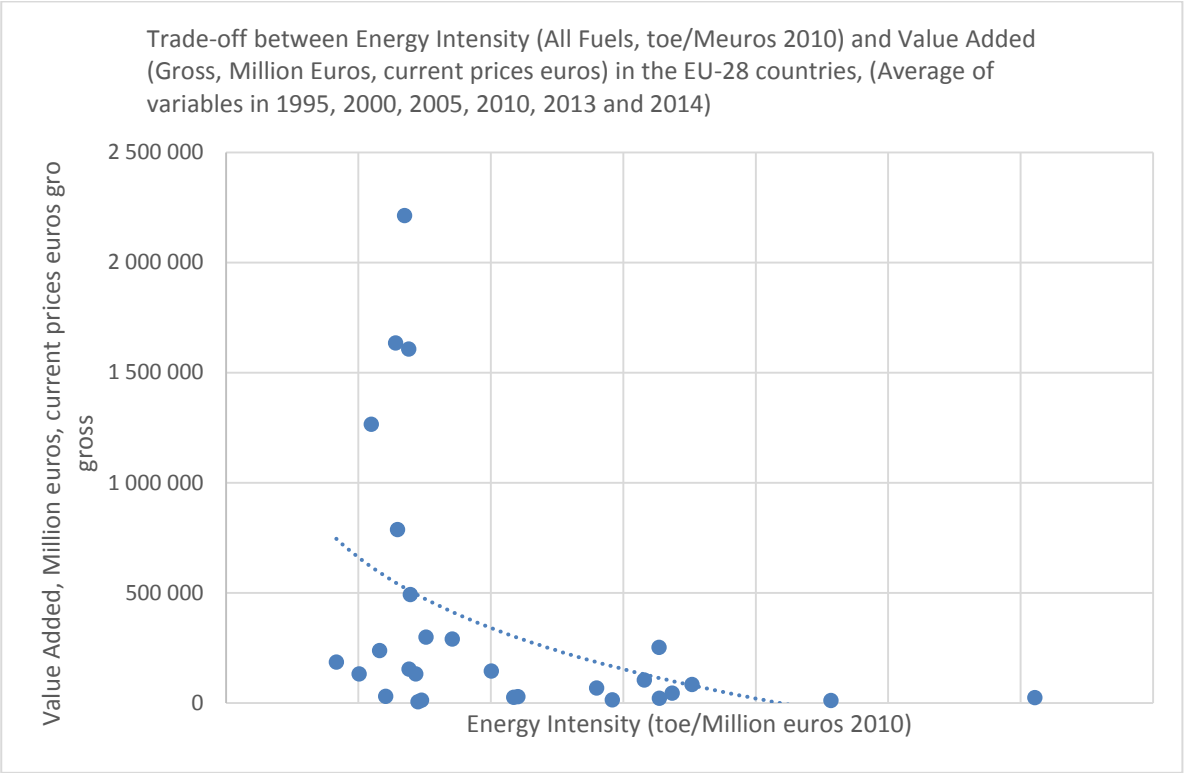


Figure 4.2. Trade-off analysis between energy intensity and value added in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.3 average energy intensity (All Fuels, toe/Meuros 2010) and average value added (Gross, Million Euros, current prices) in the EU-28 Member States are reported. Energy intensity is measured in left vertical angle and value added in measured in right vertical angle. There is no linear relationship between these two variables.

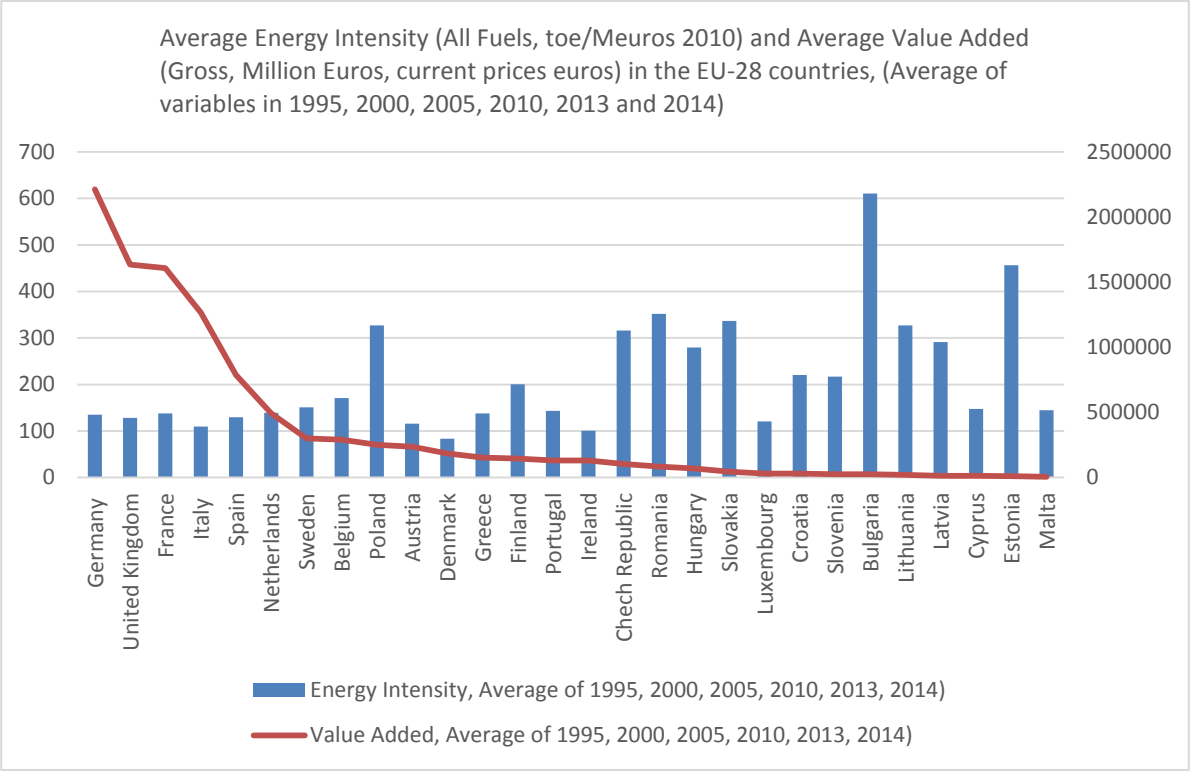


Figure 4.3. Average energy intensity (All Fuels, toe/Meuros 2010) and average value added (Gross, Million Euros, current prices) in the EU-28 Member States, (Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Second synergy analysis is presented in Figure 4.4. The results are not quite clear, because there is both negative and positive synergies between energy intensity and population in EU-28 Member States. Negative synergies were identified in Bulgaria, Czech Republic, Denmark, Ireland, Greece, Spain, France, Italy, Cyprus, Luxembourg, the Netherlands, Austria, Slovenia, Finland, Sweden, and the United Kingdom. Positive synergies were identified in Bulgaria, Germany, Estonia, Croatia, Latvia, Lithuania, Hungary, Poland, Romania and Slovakia.

If we think normatively, we would like to see negative synergy between population and energy intensity, but this is not the case in the EU-28. There are still quite many Member States which have positive synergy between population and energy intensity.

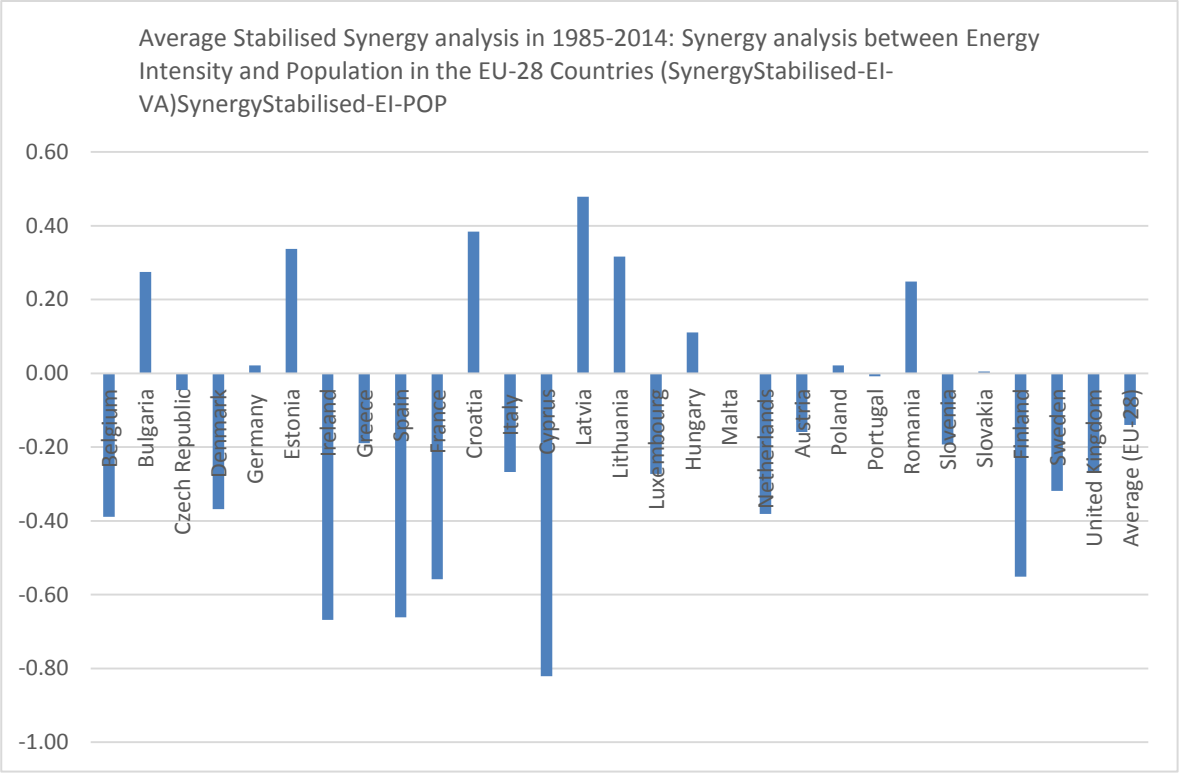


Figure 4.4. Stabilised synergy analysis in 1985-2014: Synergy analysis between energy intensity and population in the EU-28 Member States.

In Figure 4.5 trade-off curve between energy intensity and population in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the lower is population, the higher is energy intensity.

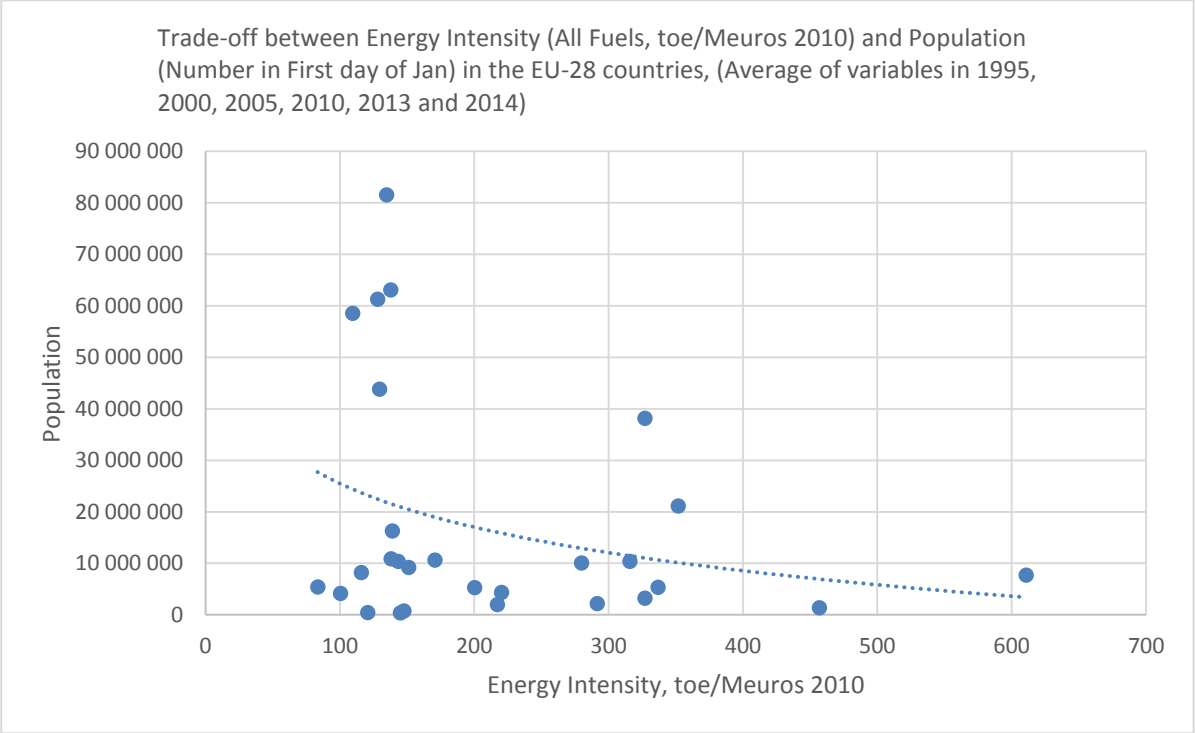


Figure 4.5. Trade-off analysis between energy intensity and population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.6 average energy intensity (All Fuels, toe/Meuros 2010) and population (First of January) in the EU-28 Member States are reported. Energy intensity is measured in left vertical angle and population in measured in right vertical angle. There is no linear relationship between these two variables. Figure 4.6 reveals that in high population Member States like in Germany, France, United Kingdom, Italy and Spain, gap between population curve and energy intensity is very high. On the other hand, negative gap between population curve and energy intensity is high in Bulgaria and in Estonia.

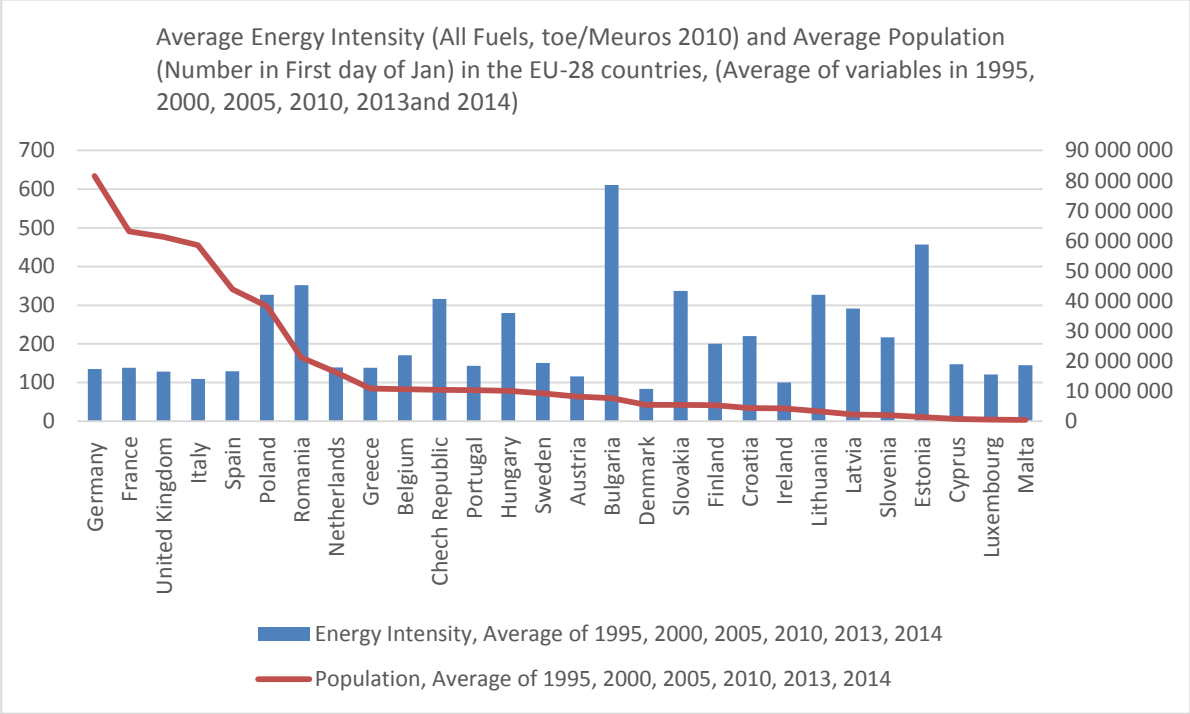


Figure 4.6. Average energy intensity (All Fuels, toe/Meuros 2010) and average population (First of January) in the EU-28 Member States, (Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Third synergy analysis is presented in Figure 4.7. The results are not quite clear, because there is both negative and negative synergies between energy intensity and urban population in EU-28 Member States. Positive synergies were identified in Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia. In other EU-28 Member States synergy between energy intensity and urban population was negative.

If we think normatively, we would like to see negative synergy between urban population and energy intensity, but this is not the case in the EU-28. There are still seven Member States with a positive synergy between urban population and energy intensity.

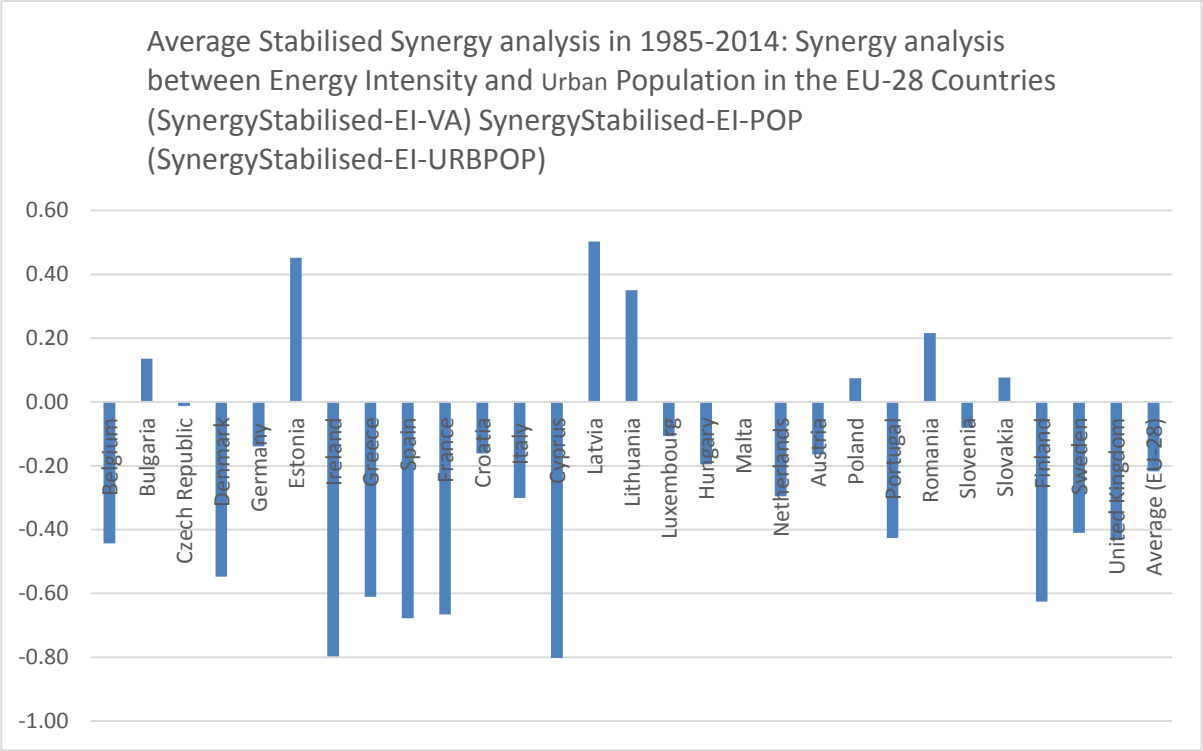


Figure 4.7. Stabilised synergy analysis in 1985-2014: Synergy analysis between energy intensity and urban population in the EU-28 Member States.

In Figure 4.8 trade-off curve between energy intensity and urban population in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the lower is urban population, the higher is energy intensity.

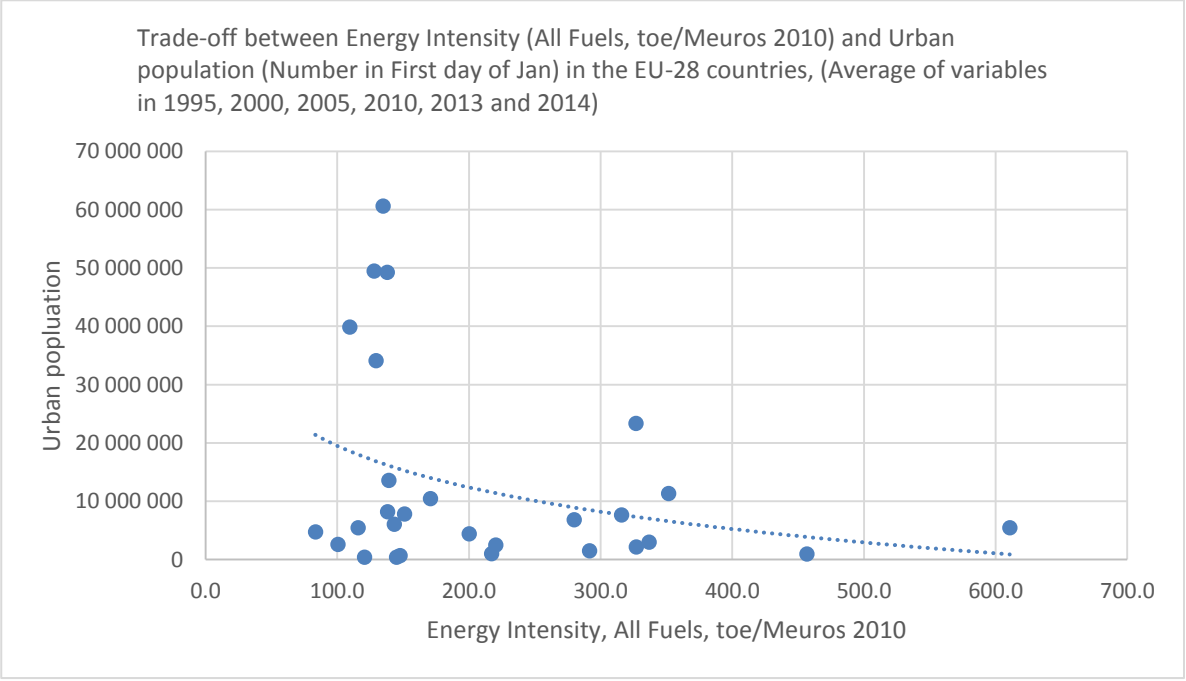


Figure 4.8. Trade-off analysis between energy intensity and urban population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.9 average energy intensity (All Fuels, toe/Meuros 2010) and urban population in the EU-28 Member States are reported. Energy intensity is measured in left vertical angle and urban population in measured in right vertical angle. There is no linear relationship between these two variables. Figure 4.8 reveals that in high urban population Member States like in Germany, France, United Kingdom, Italy and Spain, gap between urban population curve and energy intensity is very high. On the other hand, negative gap between urban population curve and energy intensity is high in Bulgaria and Estonia. In many Eastern European Member States this gap between urban population curve and energy intensity is quite high.

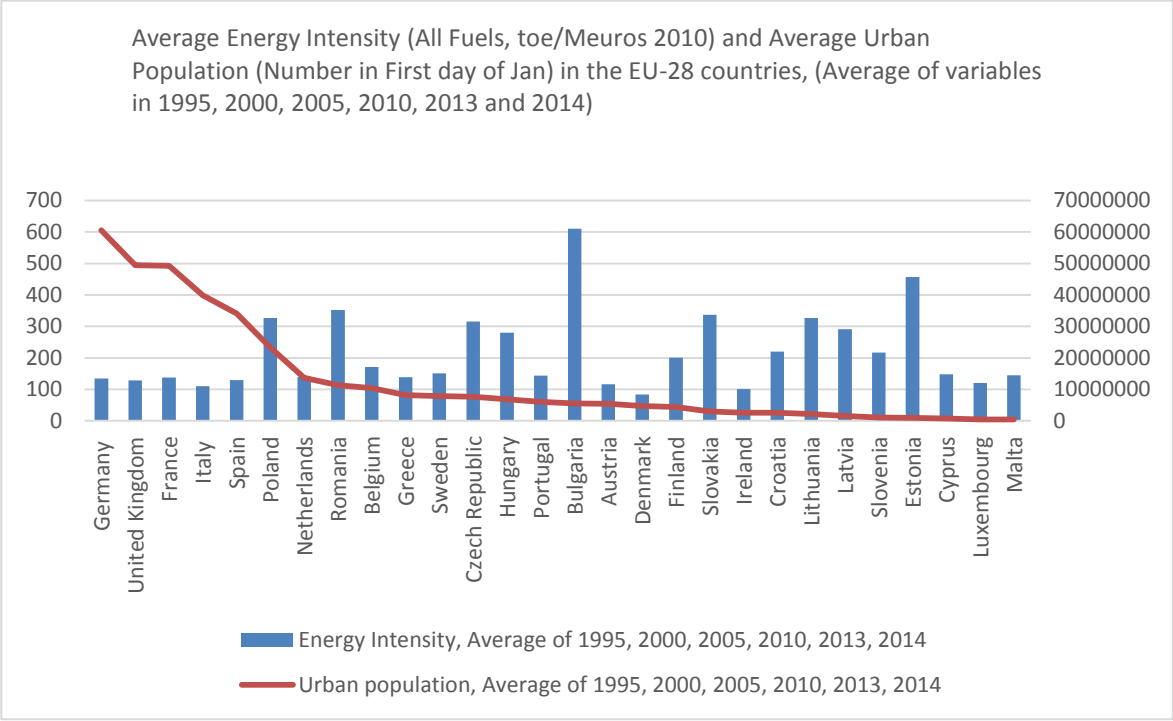


Figure 4.9. Average energy intensity (All Fuels, toe/Meuros 2010) and average urban population in the EU-28 Member States, (Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

4.2. Key drivers vs. energy consumption per capita

Secondly, we present synergy analyses and trade-off analyses between energy consumption per capita and key drivers: population, value added and urban population.

Fourth synergy analysis is presented in Figure 4.10. The results are quite clear, because there is negative synergy between energy consumption per capita and value added almost in all EU-28 Member States. There are only two exceptions, Luxembourg and Austria. This result indicates that energy consumption per capita has mostly negative synergy with value added. This result is reasonable. Biggest negative synergy levels (over -0,50) are observed in Sweden and United Kingdom.

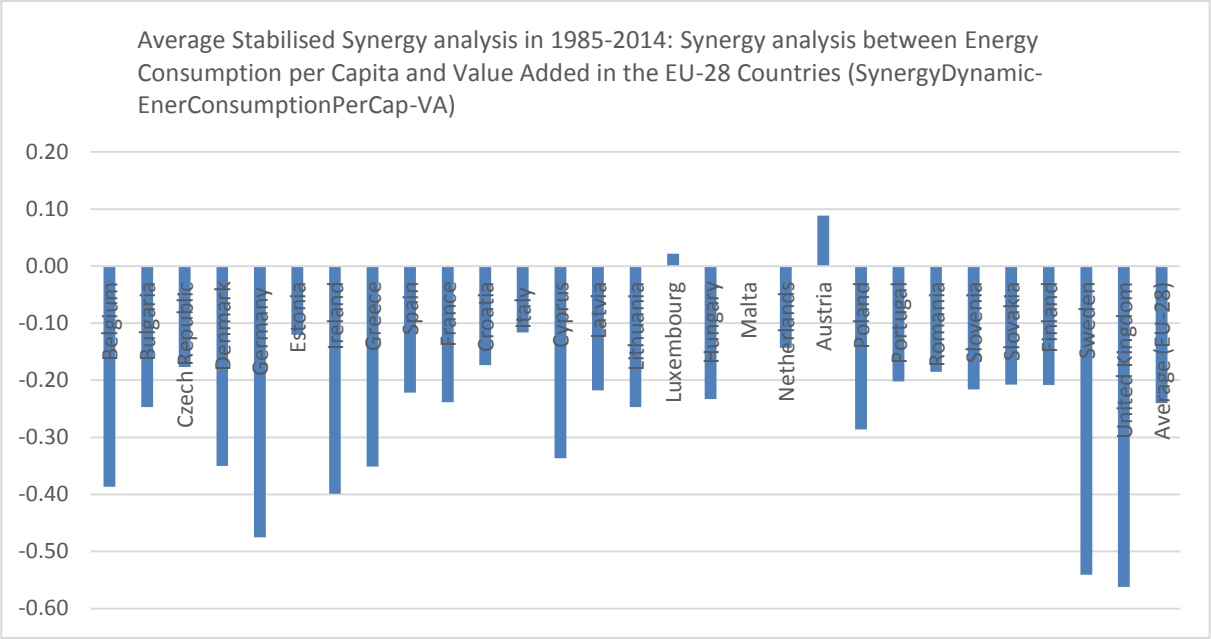


Figure 4.10. Stabilised synergy analysis in 1985-2014: Synergy analysis between average energy consumption per capita and average value added in the EU-28 Member States.

In Figure 4.11 trade-off curve between energy consumption per capita and value added in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is value-added, the lower is energy consumption per capita.

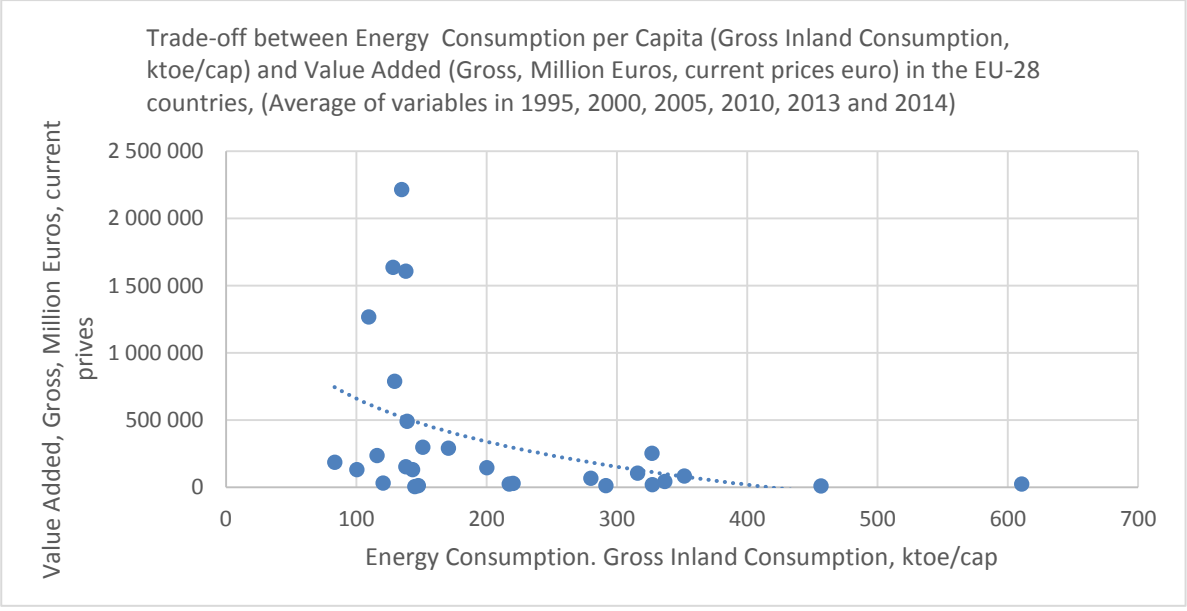


Figure 4.11. Trade-off analysis between energy consumption per capita and value added in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.12 average energy consumption per capita (Gross Inland Consumption, ktoe/cap) and value added (Gross, Million Euros, current prices euro) in the EU-28 Member States are reported. Energy consumption per capita is measured in left vertical angle and urban population in measured in right vertical

angle. There is no linear relationship between these two variables. Figure 4.12 reveals that in high urban population Member States like in Germany, France, United Kingdom, Italy and Spain, gap between urban population curve and energy intensity is very high. On the other hand, negative gap between urban population curve and energy intensity is high in Bulgaria and Estonia. In many Eastern European Member States this gap between urban population curve and energy intensity is quite high.

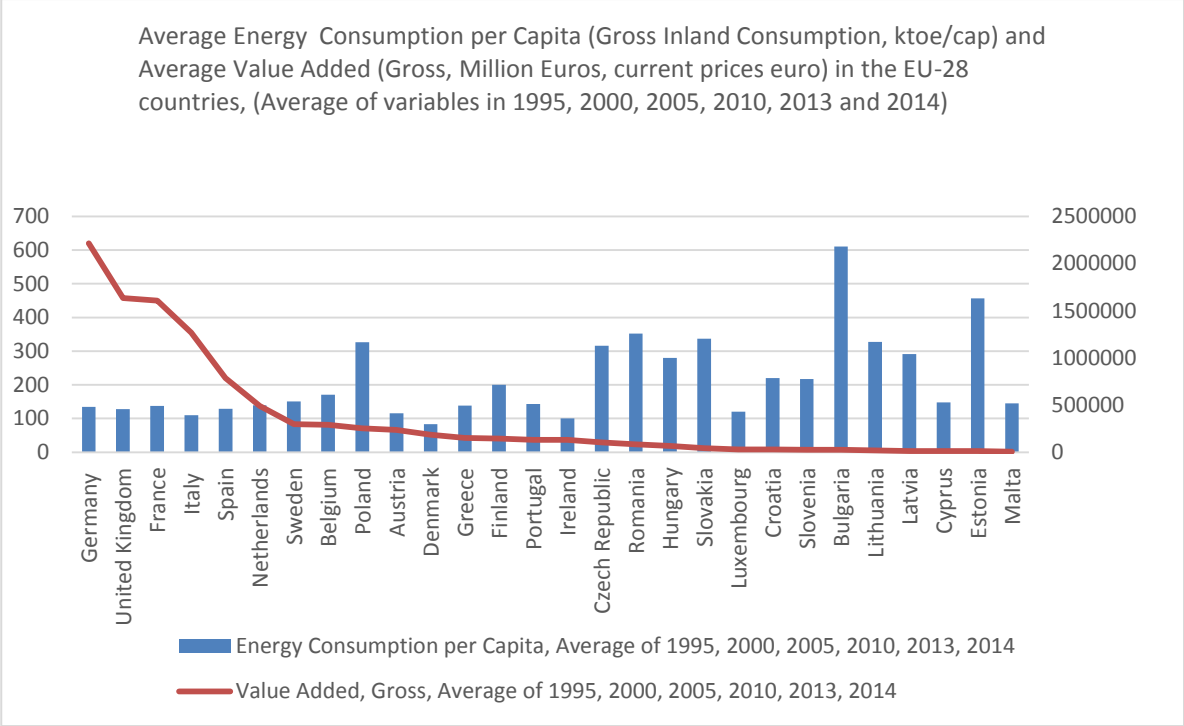


Figure 4.12. Average energy consumption per capita (Gross inland consumption, ktoe/cap) and average value added (Gross, Million Euros, current prices) (Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Fifth synergy analysis is presented in Figure 4.13. The results are not quite clear, because there is both negative and negative synergies between energy consumption per capita and population in EU-28 Member States.

Positive synergies between energy consumption per capita and population were identified in Bulgaria, Germany, Estonia, Croatia, Latvia, Lithuania, Hungary, Poland and Romania. In other EU-28 Member States synergy between energy consumption per capita and population was negative.

If we think normatively, we would like to see negative synergy between energy consumption per capita and population, but this is not the case in the EU-28. There are still some Member States which have positive synergy between energy consumption per capita and population.

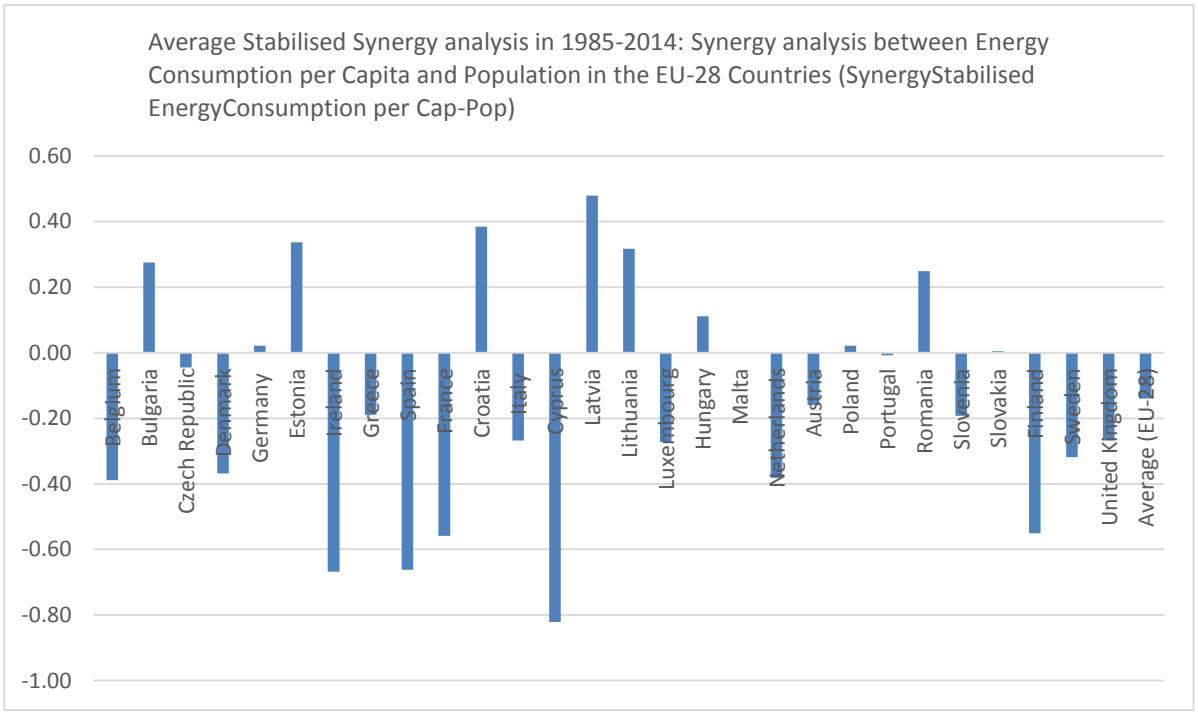


Figure 4.13. Stabilised synergy analysis in 1985-2014: Synergy analysis between average energy consumption per capita and average population in the EU-28 Member States.

In Figure 4.14 trade-off curve between energy consumption per capita and population in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is population, the lower is energy consumption per capita.

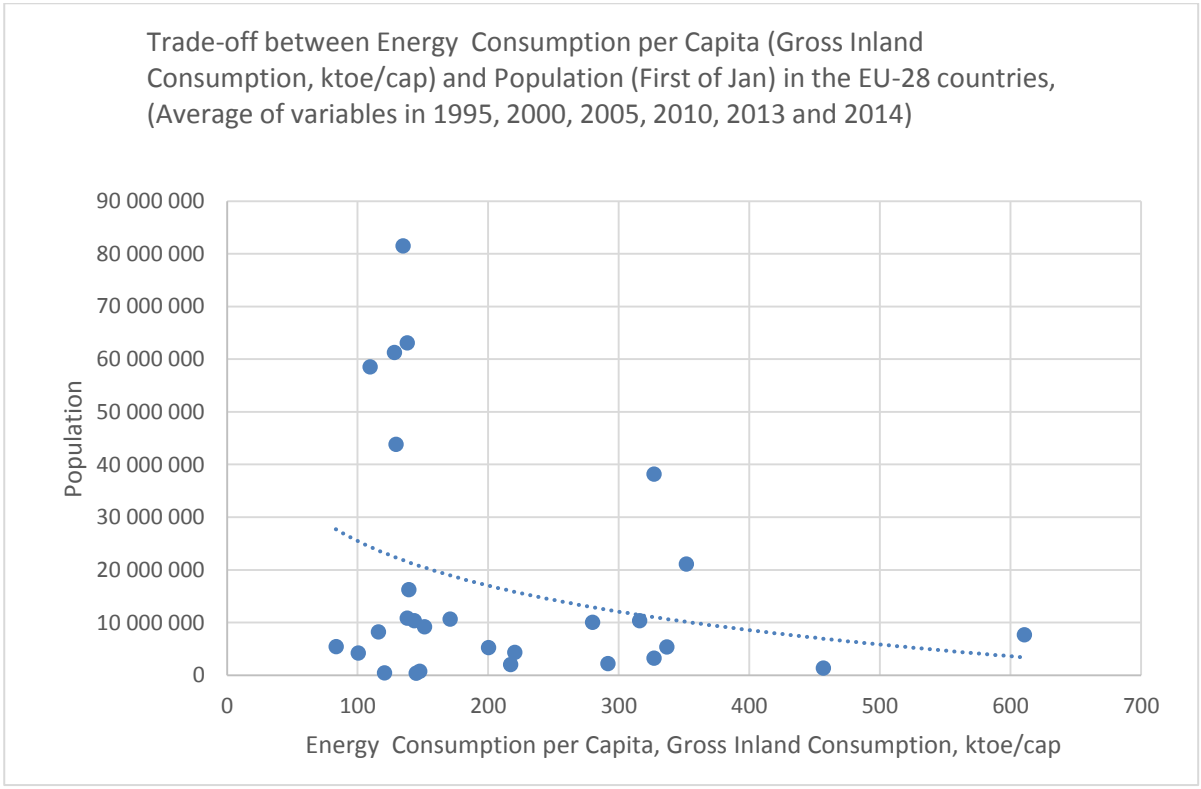


Figure 4.14. Trade-off analysis between energy consumption per capita and population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.15 average energy consumption per capita (Gross Inland Consumption, ktoe/cap) and population (First of January) in the EU-28 Member States are reported. Energy consumption per capita is measured in left vertical angle and population in measured in right vertical angle. There is no linear relationship between these two variables.

Figure 4.15 reveals that in high population Member States like in Germany, France, United Kingdom, Italy and Spain, gap between population curve and energy intensity is very high. On the other hand, negative gap between population curve and energy consumption per capita is high in Bulgaria and in Estonia. In many Middle and Eastern European Member States, this gap between population curve and energy intensity is quite high.

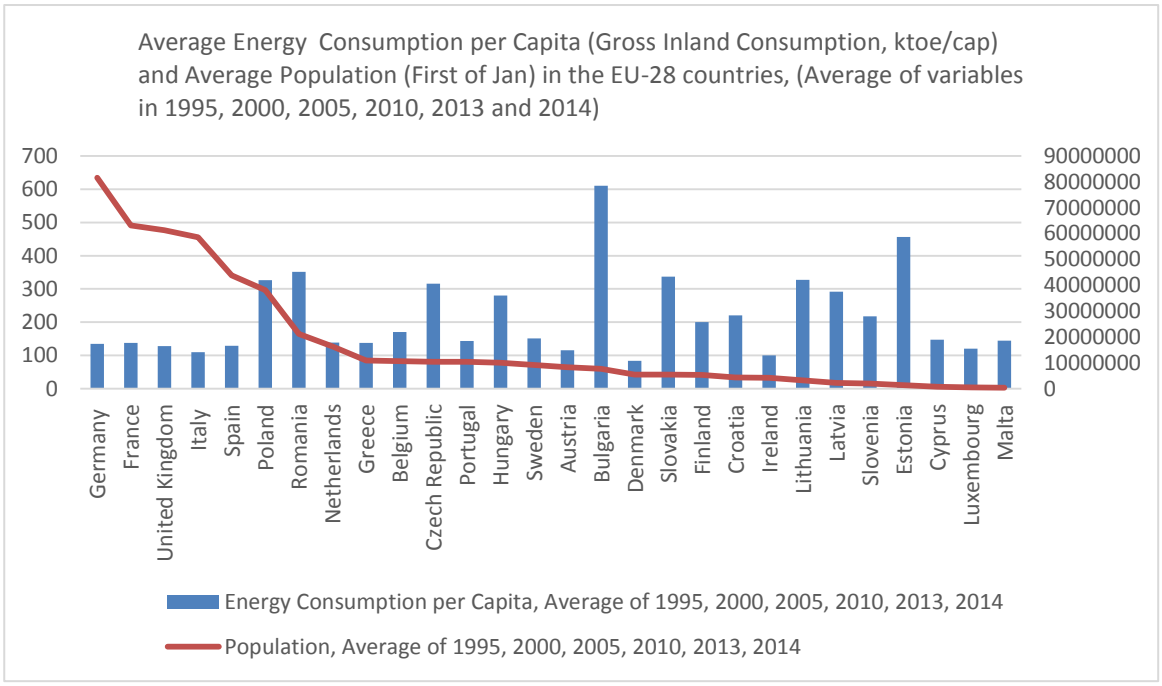


Figure 4.15. Average energy consumption per capita (Gross inland consumption, ktoe/cap) and average population (First of January). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Sixth synergy analysis is presented in Figure 4.16. The results are not quite clear, because there is both negative and negative synergies between energy consumption per capita and urban population in EU-28 Member States.

Positive synergies between energy consumption per capita and urban population were identified in Bulgaria, Estonia, Latvia, Lithuania, Poland and Romania and Slovakia (7 EU-Member States). In 21 other EU-28 Member States synergy between energy consumption per capita and urban population was negative. In Czech Republic synergy was close to zero level.

If we think normatively, we would like to see negative synergy between energy consumption per capita and urban population, but this is not the case in the EU-28. There are still some Member States which have positive synergy between energy consumption per capita and population. Baltic Member States, Bulgaria,

Poland and Romania are having positive synergy between energy consumption per capita and urban population.

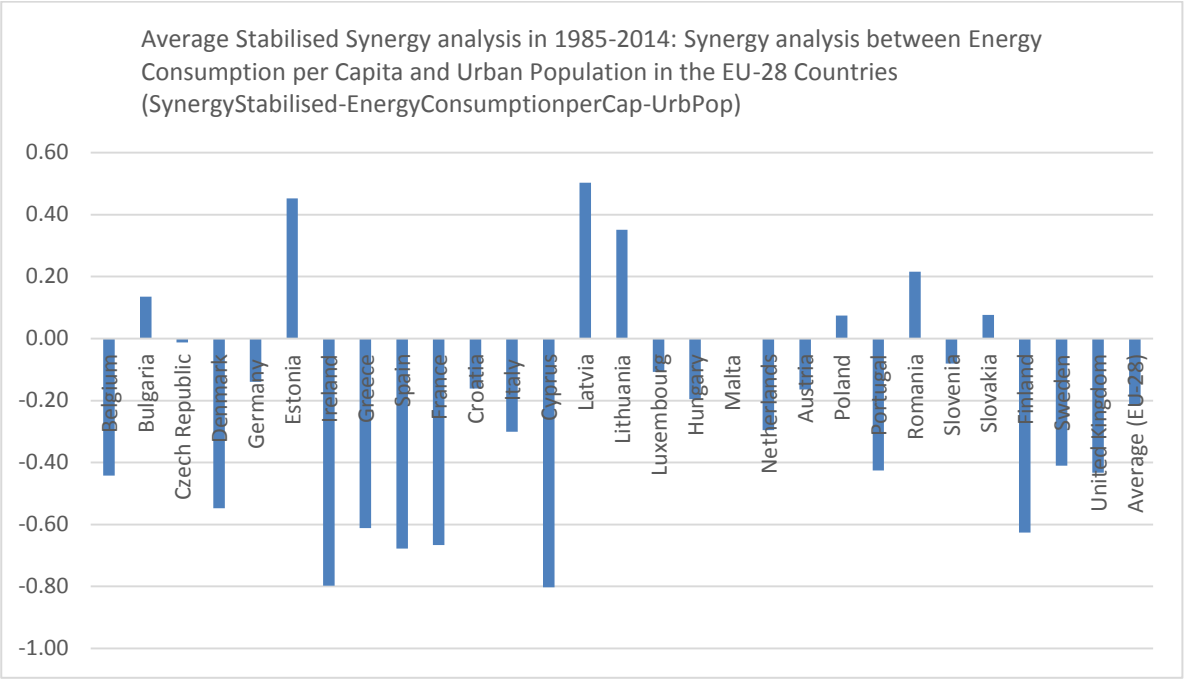


Figure 4.16. Stabilised synergy analysis in 1985-2014: Synergy analysis between average energy consumption per capita and average urban population in the EU-28 Member States.

In Figure 4.17 trade-off curve between energy consumption per capita and urban population in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is urban population, the lower is energy consumption per capita.

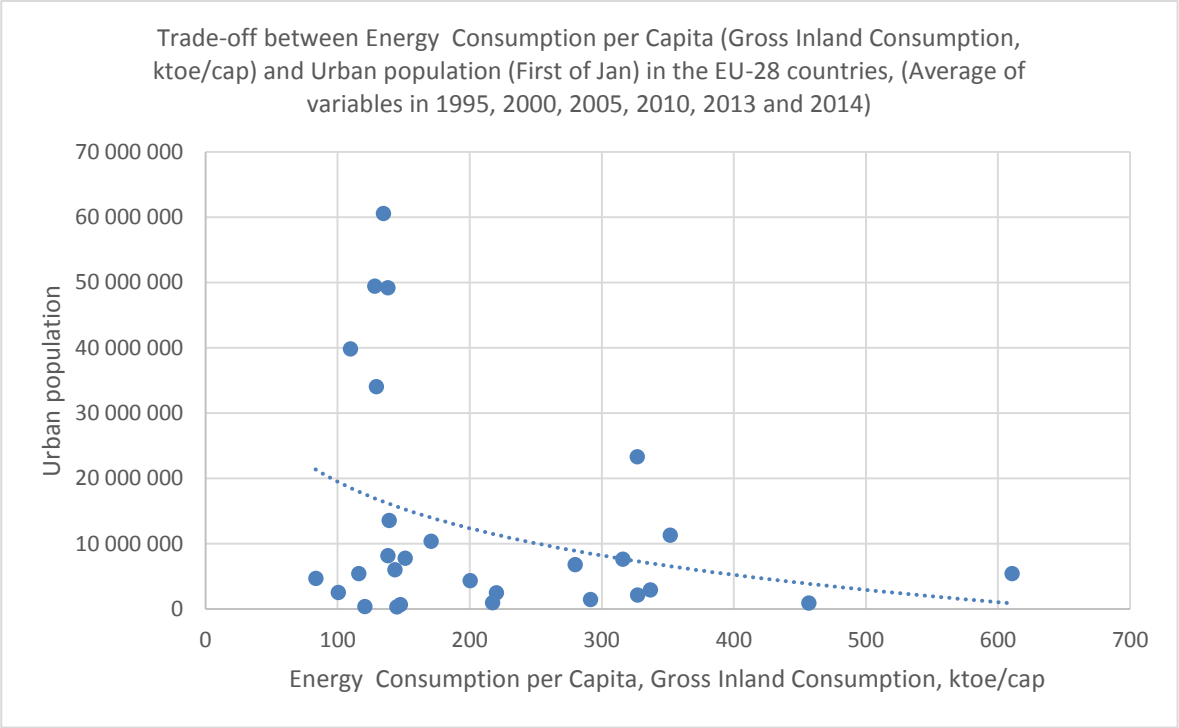


Figure 4.17. Trade-off analysis between energy consumption per capita and urban population in the EU-28 Member States. Stabilised synergy analysis in 1995-2014.

In Figure 4.18 average energy consumption per capita (Gross Inland Consumption, ktoe/cap) and urban population in the EU-28 Member States are reported. Energy consumption per capita is measured in left vertical angle and urban population in measured in right vertical angle. There is no linear relationship between these two variables. Figure 4.18 reveals that in high urban population Member States like in Germany, France, United Kingdom, Italy and Spain, gap between urban population curve and energy consumption per capita is very high. On the other hand, negative gap between urban population curve and energy consumption per capita is high in Bulgaria and in Estonia. In many Middle and Eastern European Member States, this gap between urban population curve and energy intensity is quite high.

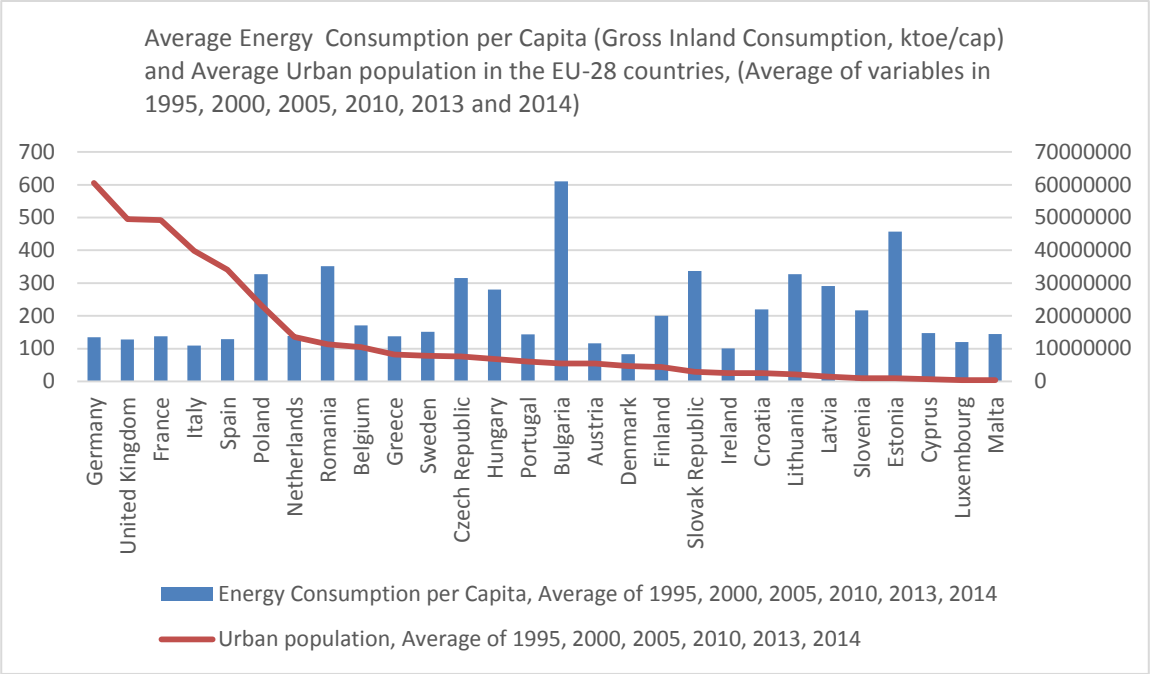


Figure 4.18. Average energy consumption per capita (Gross inland consumption, ktoe/cap) and average urban population. Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

4.3. Key drivers vs. final electricity consumption per capita

Thirdly, we present synergy analyses and trade-off analyses between final electricity consumption per capita and key drivers: population, value added and urban population.

Seventh synergy analysis is presented in Figure 4.19. The results are quite clear, because there are mostly negative synergies between final electricity consumption per capita and value added in EU-28 Member States.

Positive synergies between final electricity consumption per capita and value added were identified in Luxembourg and Austria. In other EU-28 Member States synergy between final electricity consumption per capita and value added was negative.

If we think normatively, we would like to see negative synergy between final electricity consumption per capita and value added. There are still two Member States (Luxembourg and Austria), which have positive synergy between final electricity consumption per capita and value added, but majority of EU-28 Member States have negative synergy between final electricity consumption per capita and value added.

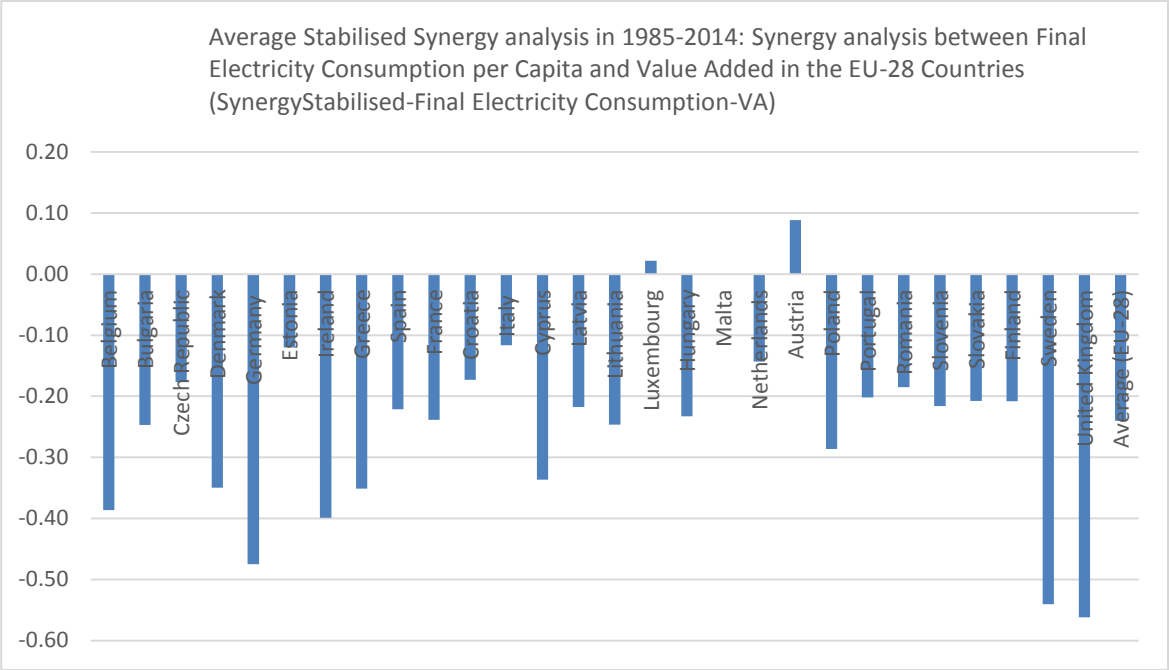


Figure 4.19. Stabilised synergy analysis in 1985-2014: Synergy analysis between final electricity consumption per capita and average value added in the EU-28 Member States.

In Figure 4.20 trade-off curve between final electricity consumption per capita and average value added in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is value added, the lower is final electricity consumption per capita in the EU-28 region.

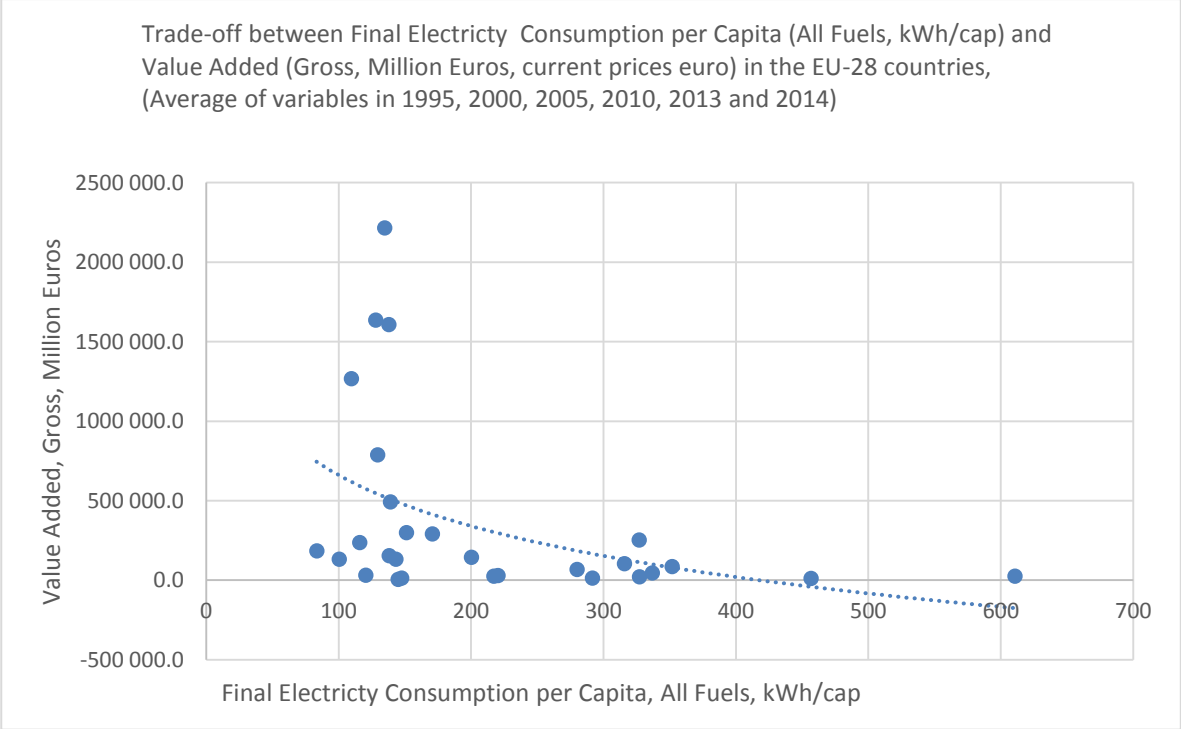


Figure 4.20. Trade-off analysis between final electricity consumption per capita and value added in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.21 average final electricity consumption per capita (All Fuels, kWh/cap) and average value added (Gross, Million Euros, current prices euros) in the EU-28 Member States are reported. Final electricity consumption per capita is measured in left vertical angle and value added in measured in right vertical angle. There is no linear relationship between these two variables.

Key observation is that high average final electricity consumption per capita do not imply high value added. This observation means that typically low final electricity consumption per capita means better value added in the EU-28 Member States. Again, we can note that from this perspective energy efficiency is a very relevant political question for European Union.

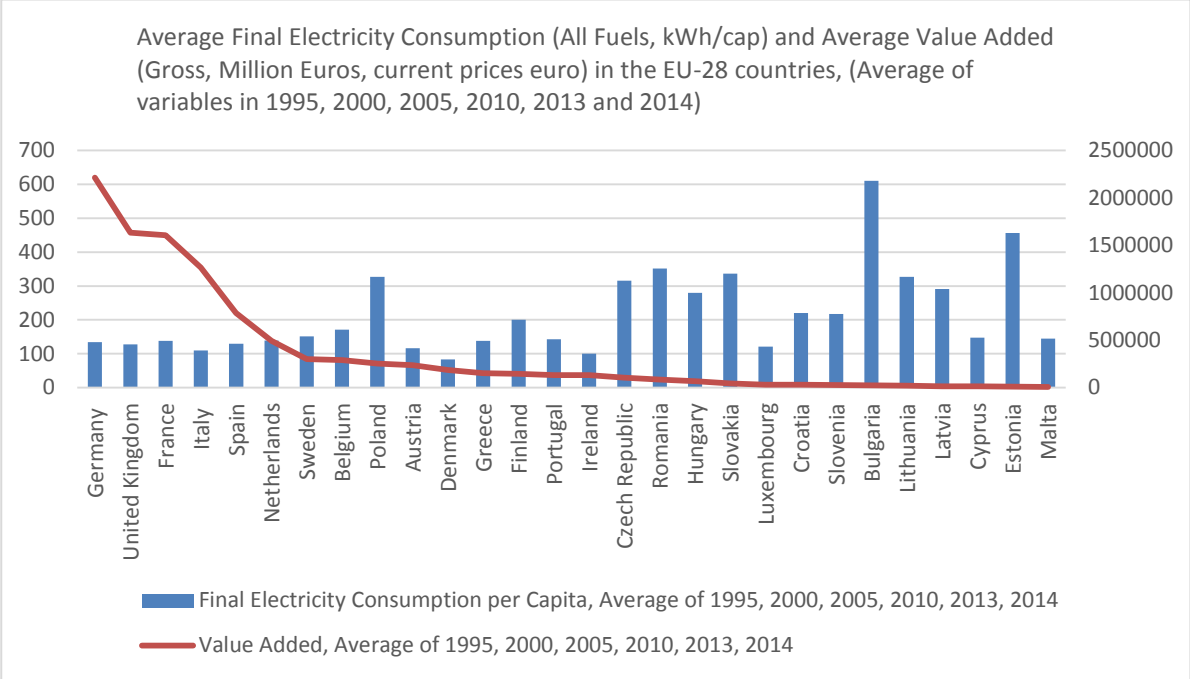


Figure 4.21. Average final electricity consumption per capita (All Fuels, kWh/cap) and average value added (Gross, Million euros, current prices euro). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Eighth synergy analysis is presented in Figure 4.22. The results are not quite clear, because there are both negative and positive synergies between final electricity consumption per capita and population in EU-28 Member States. Positive synergies between final electricity consumption per capita and population were identified in Bulgaria, Germany, Estonia, Croatia, Latvia, Lithuania, Hungary, Poland and Romania. In Slovakia synergy level was on zero level. In other EU-28 Member States synergy between final electricity consumption per capita and population was negative.

If we think normatively, we would like to see negative synergy between final electricity consumption per capita and population. There are quite many EU Member States, which have positive synergy between final electricity consumption per capita and population, but majority of EU-28 Member States have negative synergy between final electricity consumption per capita and value added.

Thus, in many Middle and Eastern European Member States, there is positive synergy between these two variables.

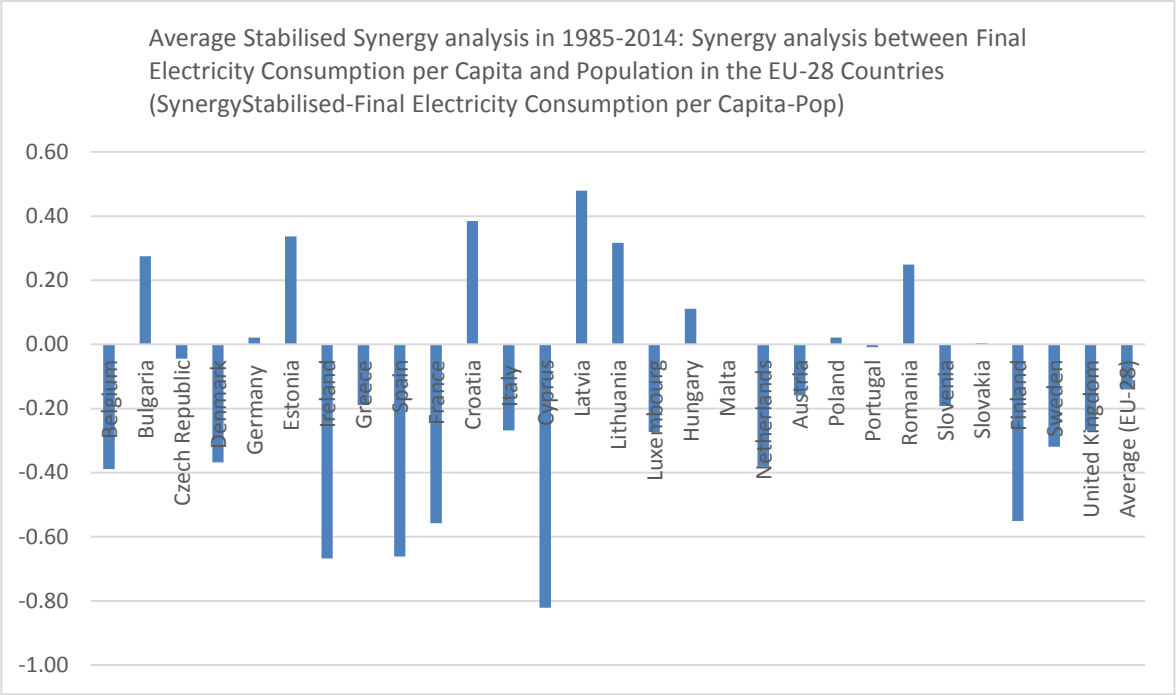


Figure 4.22. Stabilised synergy analysis in 1985-2014: Synergy analysis between final electricity consumption per capita and average population in the EU-28 Member States.

In Figure 4.23 trade-off curve between final electricity consumption per capita and average population in the EU-28 Member States is outlined. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is population, the lower is final electricity consumption per capita.

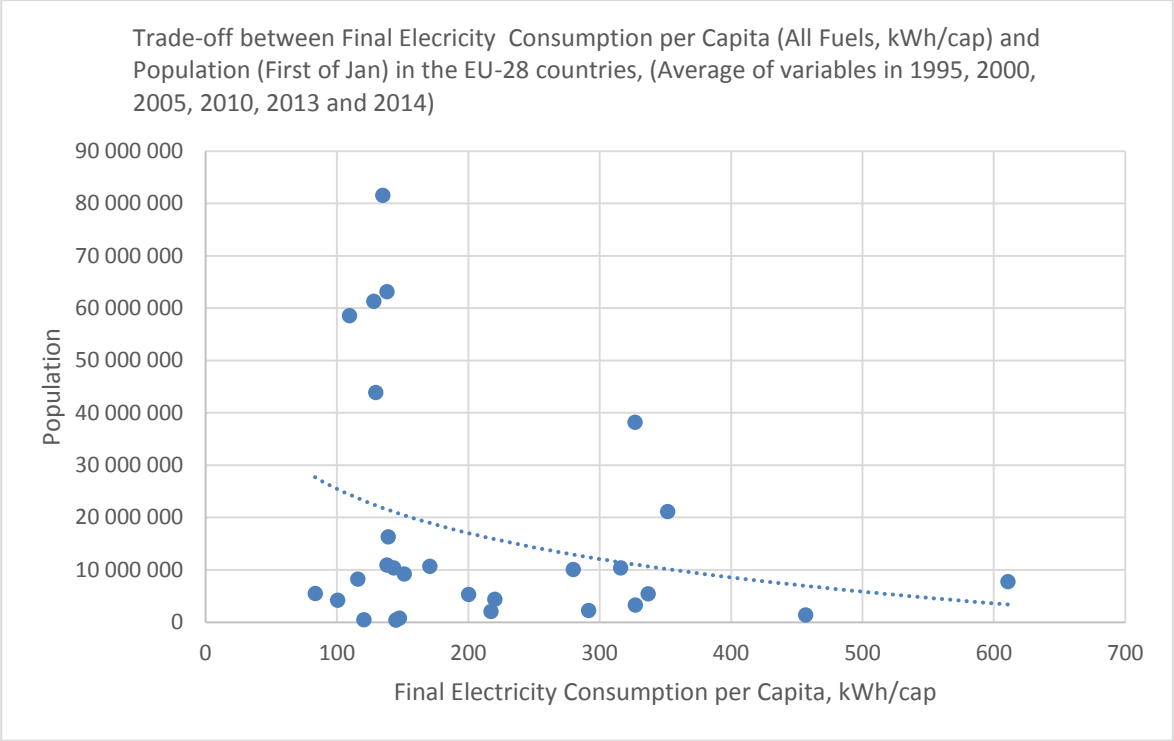


Figure 4.23. Trade-off analysis between final electricity consumption per capita and population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.24 final electricity consumption per capita (All Fuels, kWh/cap) and average population (First of January) in the EU-28 Member States are reported. Final electricity consumption per capita is measured in left vertical angle and population in measured in right vertical angle. There is no linear relationship between these two key variables.

Key observation is that high average population do not imply high average final electricity consumption per capita. This observation means that typically high population level does not imply high final electricity consumption per capita in the EU-28 Member States.

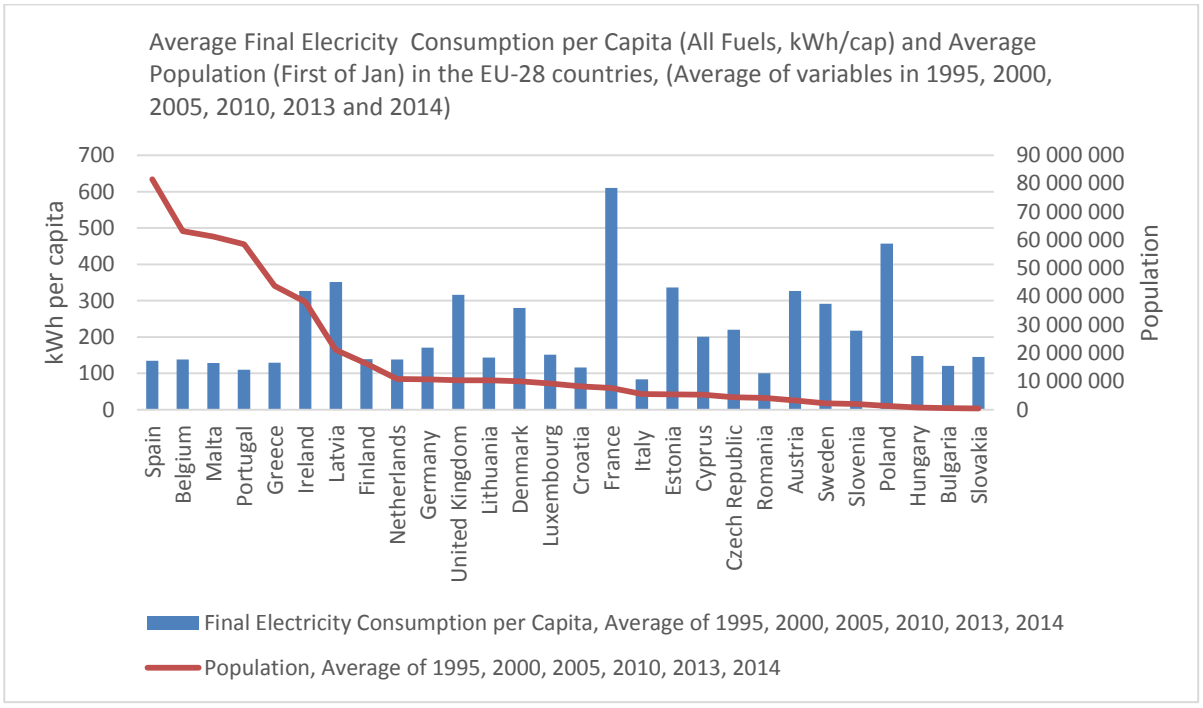


Figure 4.24. Average final electricity consumption per capita (All Fuels, kWh/cap) and average population (First of January). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Ninth synergy analysis is presented in Figure 4.25. This figure shows us that in most (21) EU-28 Member States synergy between final electricity consumption per capita and urban population is negative. In the other 7 EU-Member States synergy between final electricity consumption per capita and urban population is positive. Such Member States are Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia.

If we think normatively, we would like to see negative synergy between final electricity consumption per capita and urban population. There are seven EU Member States, which have positive synergy between final electricity consumption per capita and urban population, but majority of EU-28 have negative synergy between final electricity consumption per capita and value added. This observation is interesting and it should give reasons to think energy policy in these seven critically. Integration of urbanisation policy and energy policy needs special attention in these EU-Member States.

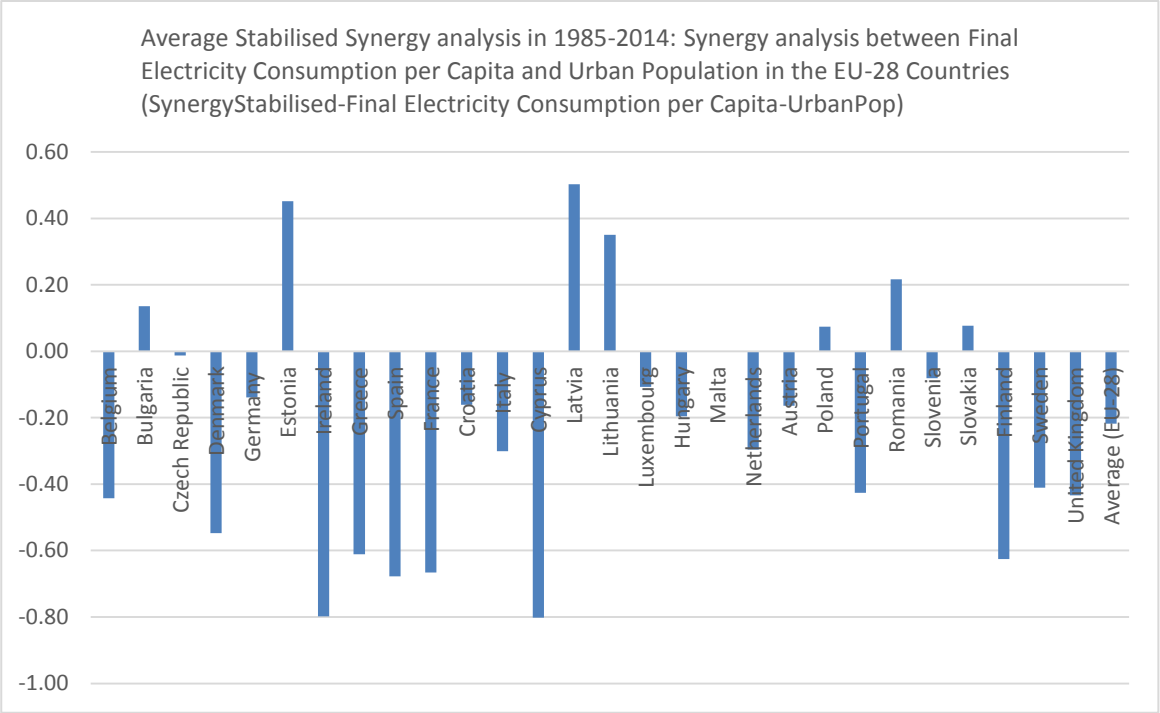


Figure 4.25. Stabilised synergy analysis in 1985-2014: Synergy analysis between final electricity consumption per capita and average urban population in the EU-28 .

In Figure 4.26 trade-off curve between final electricity consumption per capita and average urban population in the EU-28 is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher urban population, the lower is final electricity consumption per capita.

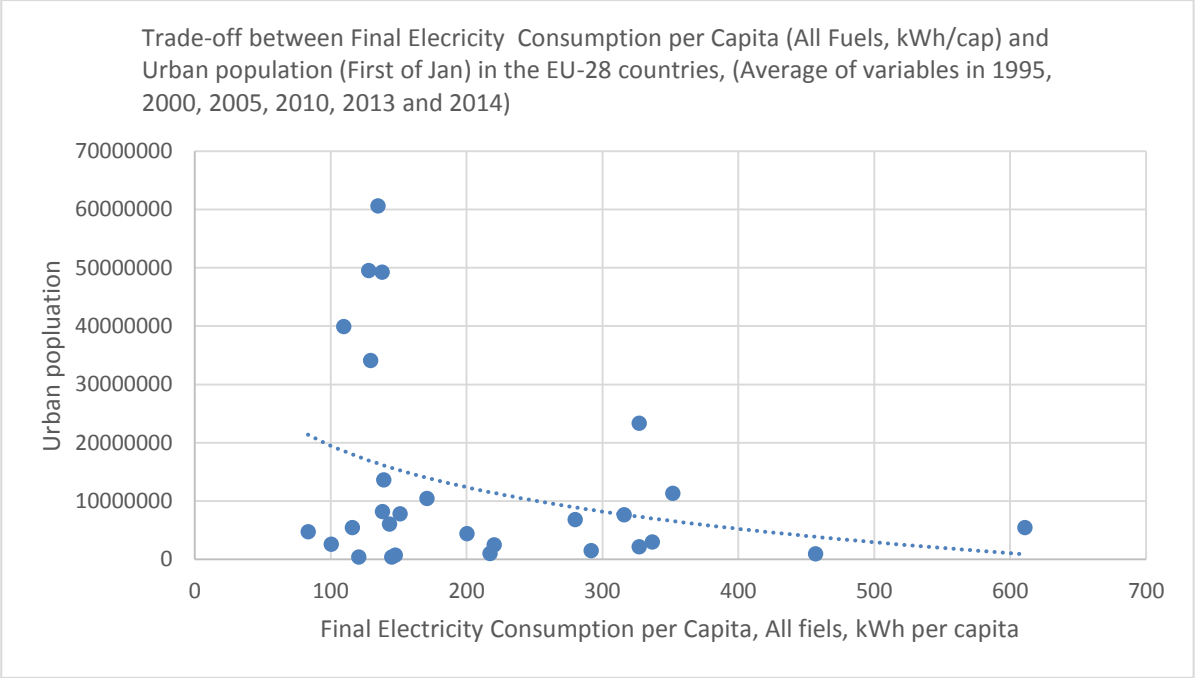


Figure 4.26. Trade-off analysis between final electricity consumption per capita and urban population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.27 final electricity consumption per capita (All Fuels, kWh/cap) and average urban population in the EU-28 are figured out. Final electricity consumption per capita is measured in left vertical angle and urban population in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high average urban population do not imply high average final electricity consumption per capita. This observation means that typically high urban population level does not imply high final electricity consumption per capita in the EU-28 . Bulgaria and Estonia are exceptions from this thumb rule.

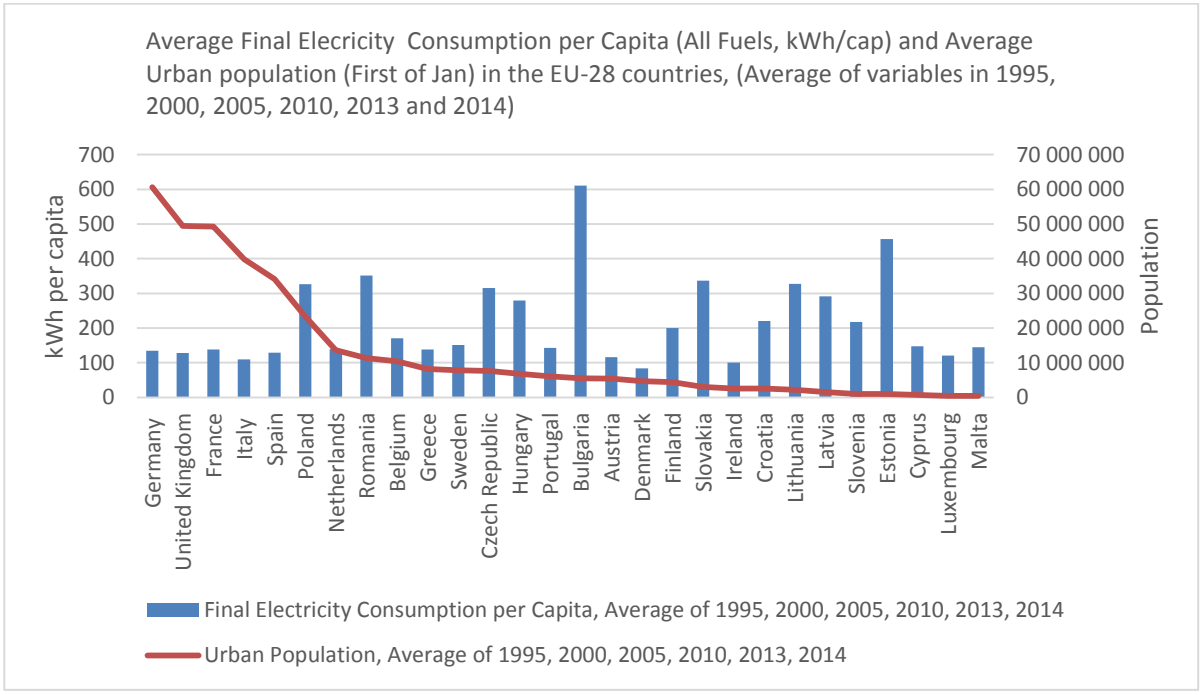


Figure 4.27. Average final electricity consumption per capita (All Fuels, kWh/cap) and average urban population. Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

4.4. Key drivers vs. primary energy intensity per capita

Fourthly, we present synergy analyses and trade-off analyses between primary energy intensity and key drivers: value added, population and urban population.

Tenth synergy analysis is presented in Figure 4.28. This figure shows us that in most EU-28 synergy between primary energy intensity and value added is negative. In two EU-Member States synergy between primary energy intensity and value added is positive. These two are Luxembourg and Austria.

If we think normatively, we would like to see negative synergy between primary energy intensity and value added. There are only two EU Member States, which have positive synergy between primary energy intensity and value added, but majority of the EU-28 Member States have negative synergy between primary energy intensity and value added. This observation is interesting and it should give reasons to think energy policy in these two critically. Integration of growth policy and energy policy needs special attention in these two EU-Member States.

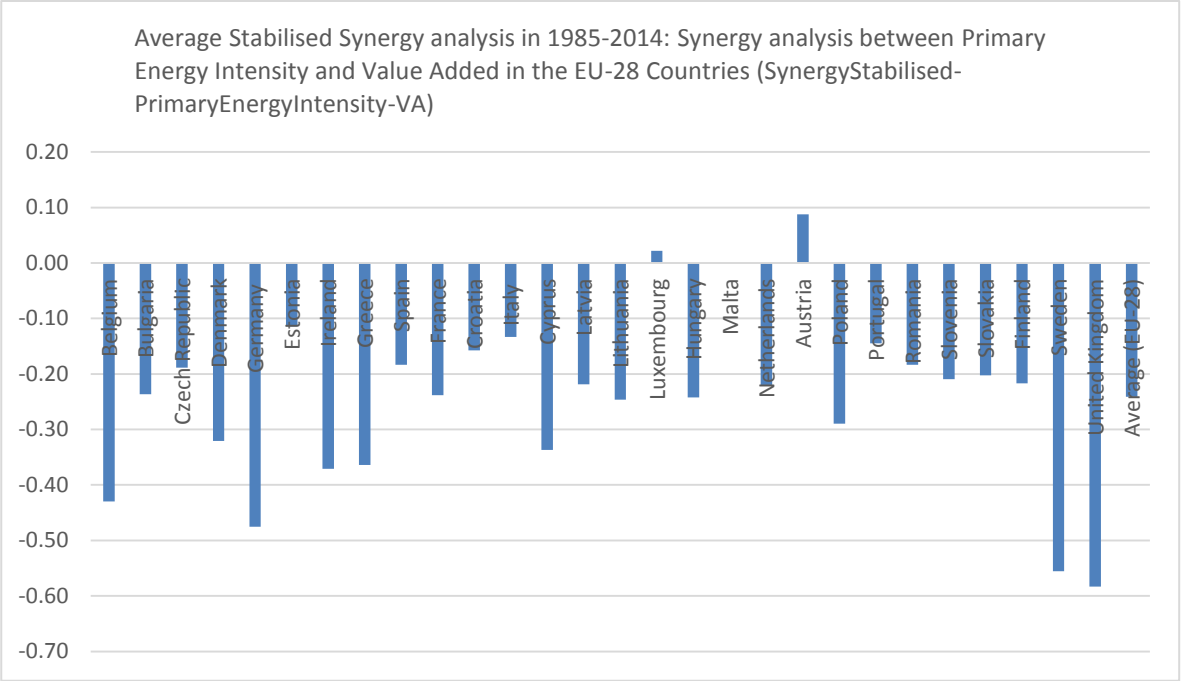


Figure 4.28. Stabilised synergy analysis in 1985-2014: Synergy analysis between primary energy intensity and average value added in the EU-28 Member States.

In Figure 4.29 trade-off curve between average primary energy intensity and average value added in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average primary energy intensity, the lower is average value-added. This is important observation for EU´s growth policy.

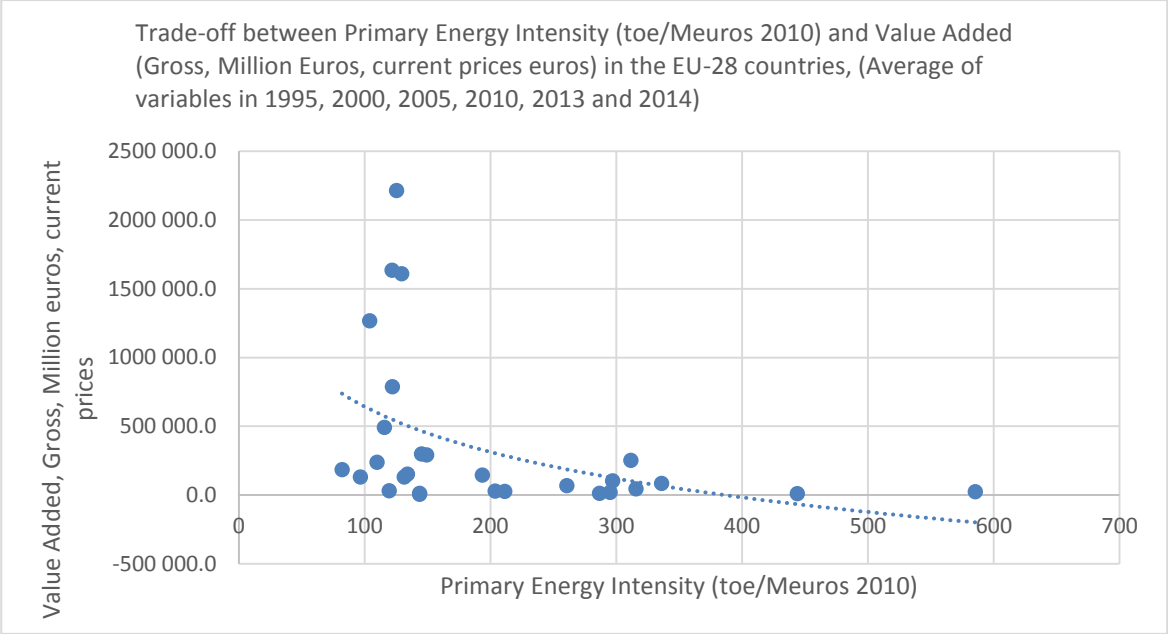


Figure 4.29. Trade-off analysis between primary energy intensity and value added in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.30 average primary energy intensity (toe/Meuros 2010) and average value added (Gross, Million Euros, current prices euros) in the EU-28 Member States are figured out. Primary energy intensity is measured in left vertical angle and value added in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high value added does not imply high primary energy intensity in the EU-28 Member States. Bulgaria and Estonia are exceptions from this thumb rule.

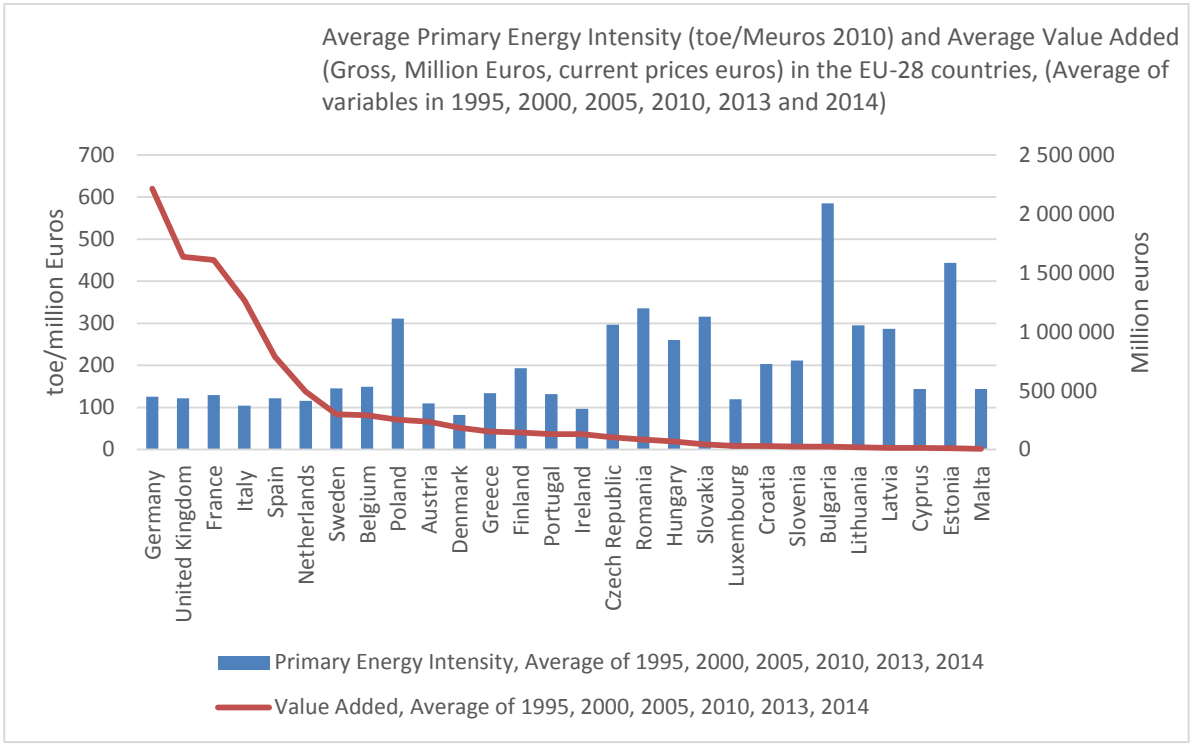


Figure 4.30. Average primary energy intensity (toe/Meuros 2010) and average value added (Gross, Million Euros, current prices). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Eleventh synergy analysis is presented in Figure 4.31. This figure shows us that in the majority EU-28 Member States synergy between primary energy intensity and population is negative. In some EU-Member States synergy between primary energy intensity and population is positive. These Member States are Bulgaria, Estonia, Croatia, Latvia, Lithuania, Hungary, Poland, Romania and Slovakia.

If we think normatively, we would like to see negative synergy between primary energy intensity and population. There are nine EU Member States, which have positive synergy between primary energy intensity and population, but majority of EU-28 Member States have negative synergy between primary energy intensity and population. This observation is interesting and it should give reasons to think energy and population policies in these Member States critically. Integration of population policy and energy policy needs special attention in these EU-Member States.

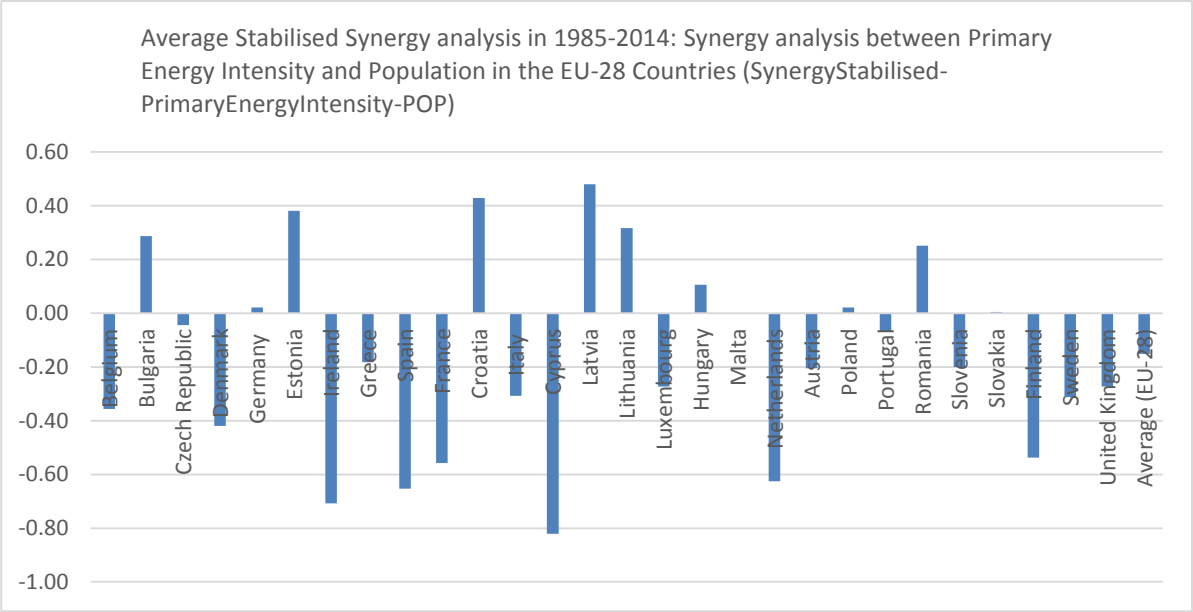


Figure 4.31. Stabilised synergy analysis in 1985-2014: Synergy analysis between primary energy intensity and average population in the EU-28 Member States.

In Figure 4.32 trade-off curve between average primary energy intensity and average population in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average primary energy intensity, the lower is average population. This is important observation for EU´s growth policy. There is no linear relationship between these two key variables. Key observation is that high population does not imply high primary energy intensity in the EU-28 Member States.

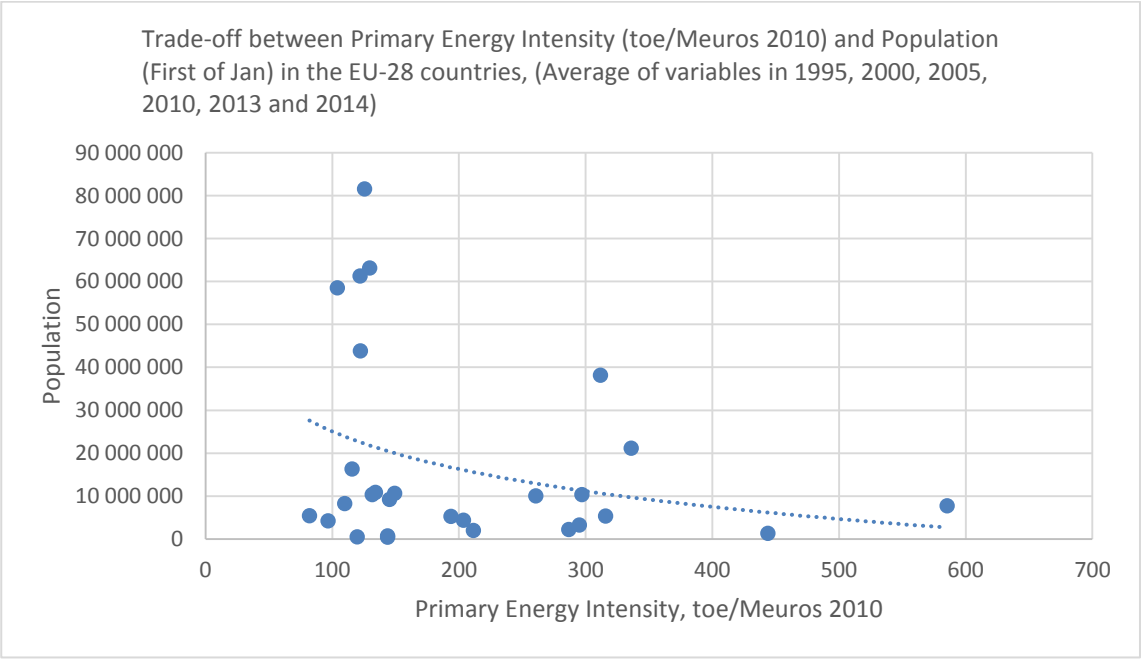


Figure 4.32. Trade-off analysis between primary energy intensity and population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.33 average primary energy intensity (toe/Meuros 2010) and average population (First of January) in the EU-28 Member States are figured out. Primary energy intensity is measured in left vertical angle and population in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high population does not imply high primary energy intensity in the EU-28 Member States. Again, Bulgaria and Estonia are clear exceptions from this thumb rule.

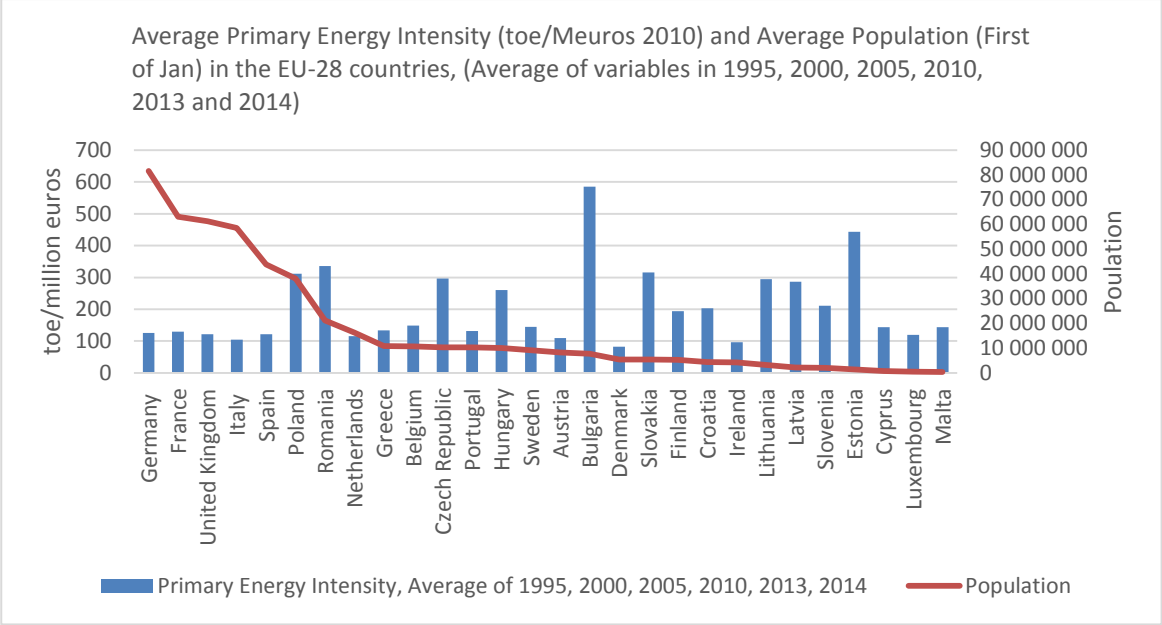


Figure 4.33. Average primary energy intensity (toe/Meuros 2010) and population (First of January), current prices euros). Average of variables in 1995, 2000, 2005, 2010, 201 and 2014).

Twelfth synergy analysis is presented in Figure 4.34. This figure shows us that in the majority EU-28 Member States synergy between primary energy intensity and urban population is negative. In some EU-Member States synergy between primary energy intensity and population is still positive. These EU Member States are Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia. In Czech Republic synergy was about zero.

If we think normatively, we would like to see negative synergy between primary energy intensity and urban population. There are eight EU Member States, which have positive synergy between primary energy intensity and urban population, but majority of EU-28 Member States have negative synergy between primary energy intensity and urban population. This observation is interesting and it should give reasons to re-think energy and population policies in these Member States critically.

Integration of urban population policy and energy policy needs special attention in these eight EU-Member States. Key question is: how these Member States could create better synergy between these variables to improve energy savings in their economies.

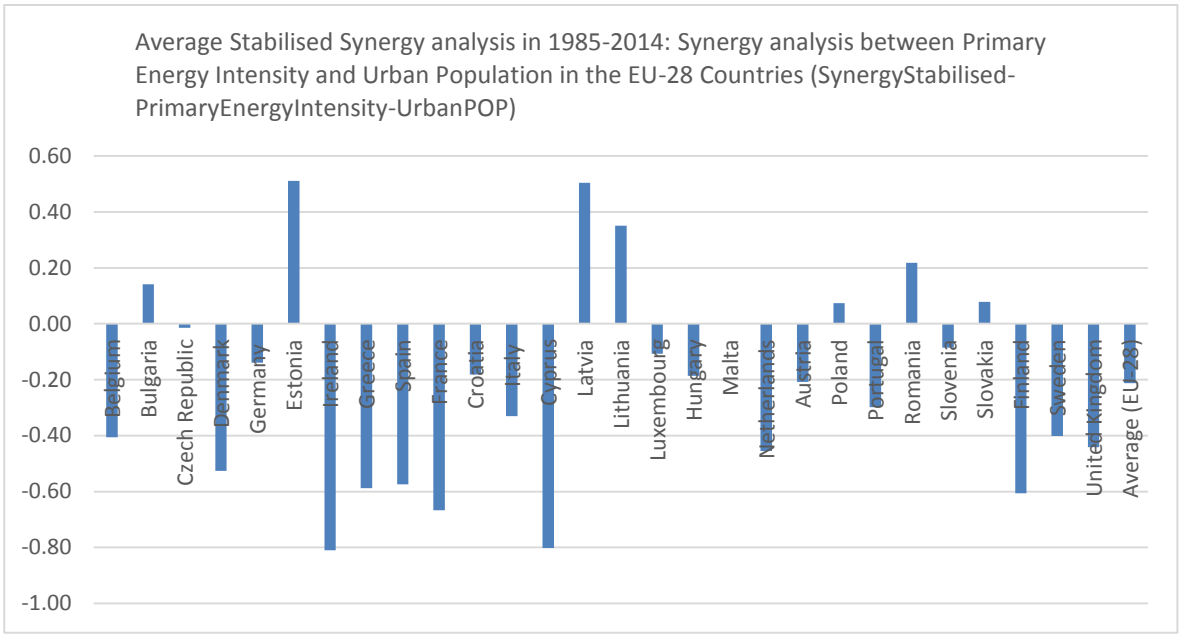


Figure 4.34. Stabilised synergy analysis in 1985-2014: Synergy analysis between primary energy intensity and average urban population in the EU-28 Member States.

In Figure 4.35 trade-off curve between average primary energy intensity and average urban population in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average primary energy intensity, the lower is average urban population. This is important observation for EU´s urbanisation policy. There is no linear relationship between these two key variables. Key observation is that high urbanisation population does not imply high primary energy intensity in the EU-28 Member States.

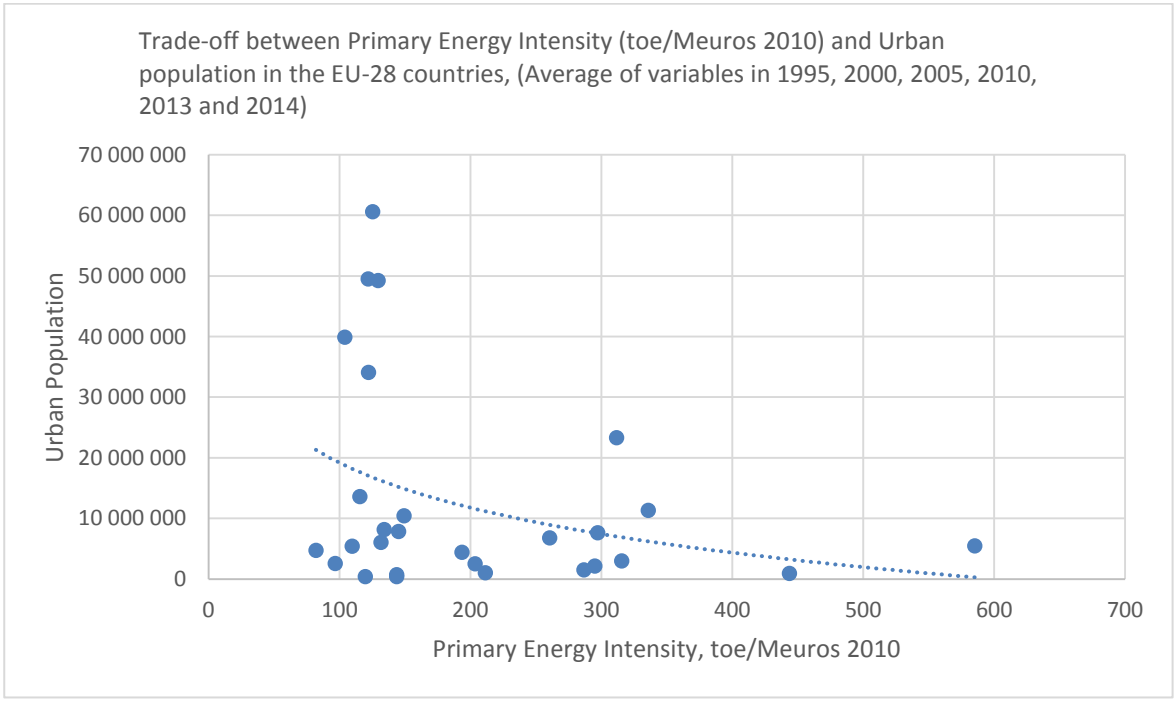


Figure 4.35. Trade-off analysis between primary energy intensity and urban population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.36 average primary energy intensity (toe/Meuros 2010) and average urban population in the EU-28 Member States are figured out. Primary energy intensity is measured in left vertical angle and urban population in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high urban population does not imply high primary energy intensity in the EU-28 Member States. Again, Bulgaria and Estonia are clear exceptions from this thumb rule. Primary energy intensity is very high in these two EU Member States in the period of 1995-2014.

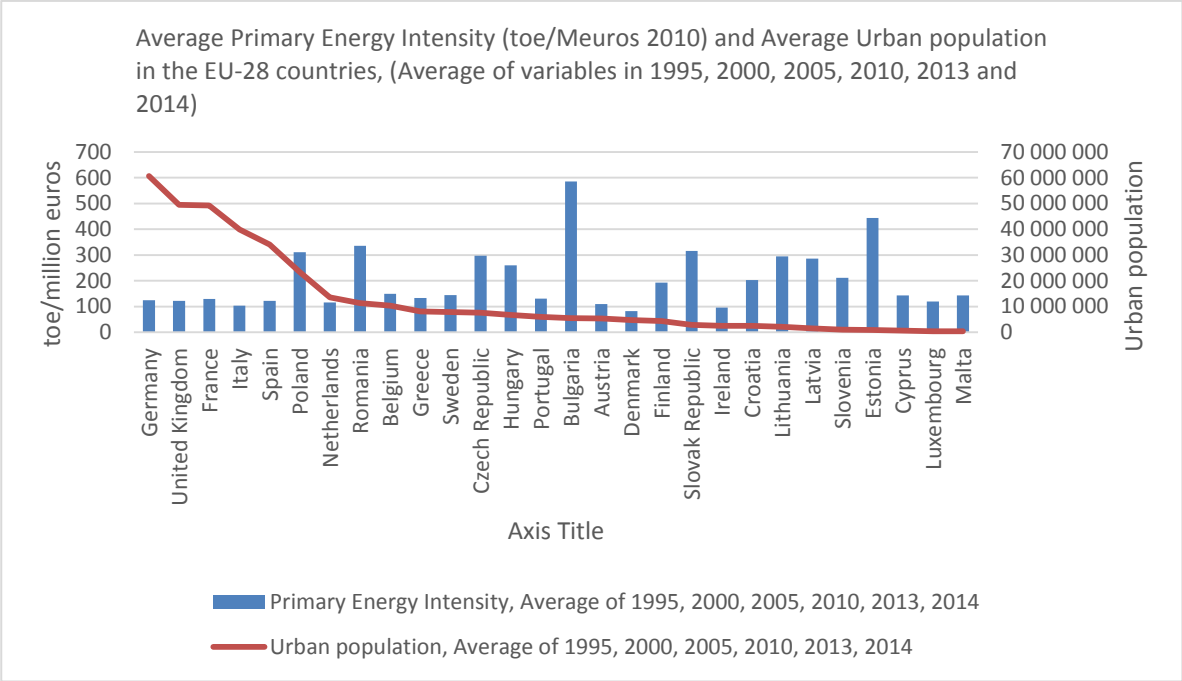


Figure 4.36. Average primary energy intensity (toe/Meuros 2010) and urban population. Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

4.5. Key drivers vs. carbon intensity per capita

Fourthly, we present synergy analyses and trade-off analyses between carbon intensity and key drivers: value added, population and urban population.

Thirteenth synergy analysis is presented in Figure 4.37. This figure shows us that in the majority EU-28 Member States synergy between carbon intensity and value added is negative. In some EU-Member States synergy between carbon energy intensity and value added is still positive. These Member States are Czech Republic, Latvia, Luxembourg, and Hungary. The strongest negative synergy between carbon intensity and value added can be observed in the United Kingdom, Denmark, Germany and Cyprus.

If we think normatively, we would like to see negative synergy between carbon intensity and value added. There are four EU-Member States, which have positive synergy between carbon intensity and value added, but majority of EU-28 Member States have negative synergy between carbon intensity and value added. This observation is interesting and it should give reasons to re-think critically energy/climate and growth policies in these few EU Member States. Key question is: how these four Member States could create better synergy between these variables to turn down carbon intensity in their economies.

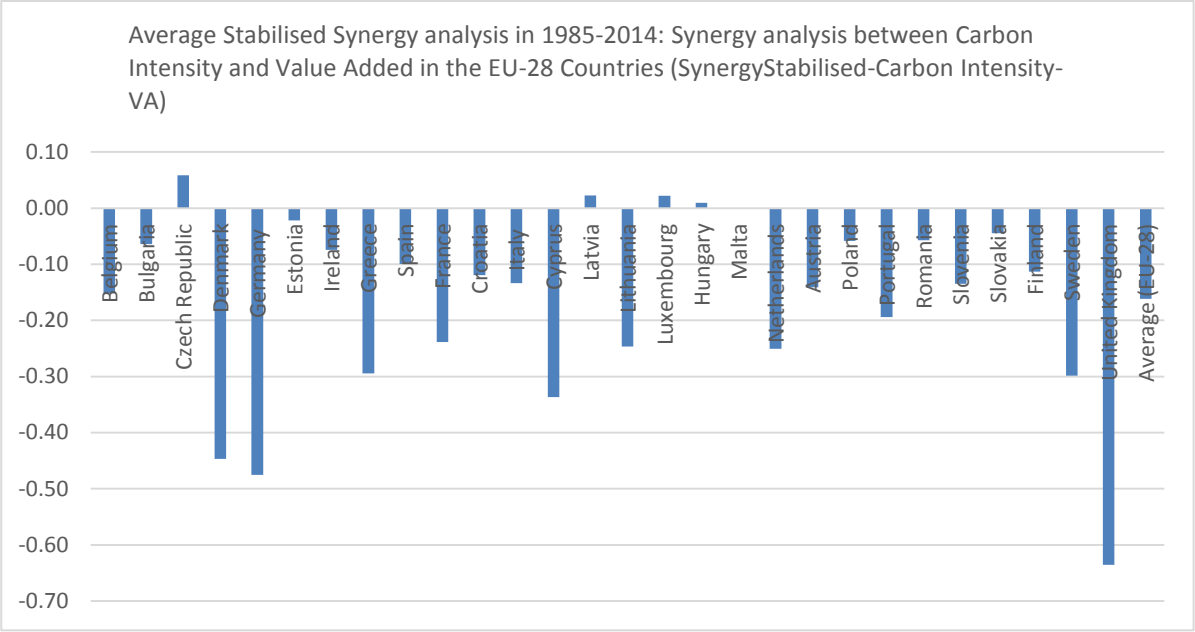


Figure 4.37. Stabilised synergy analysis in 1985-2014: Synergy analysis between carbon intensity and value added in the EU-28 Member States.

In Figure 4.38 trade-off curve between average carbon intensity and average value added in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average carbon intensity, the lower is average value added. This is important observation for EU´s climate and growth policies. There is no linear relationship between these two key variables. Key observation is that high value added does not imply high carbon intensity in the EU-28 Member States.

We can conclude, based on the synergy analysis that the European Union has succeeded in creating the right direction for its climate policy approach. Yet climate policy field is a challenge for the European Union.

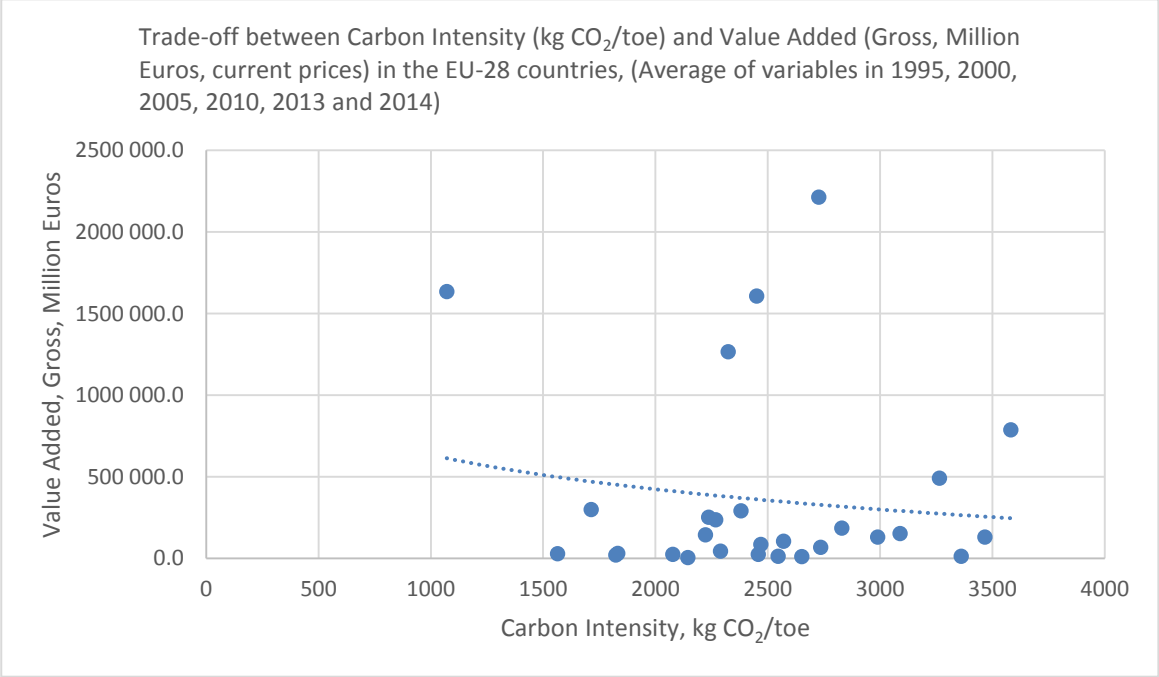


Figure 4.38. Trade-off analysis between carbon intensity value added in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.39 average carbon intensity (kg CO_2/toe) and value added (Gross, Million Euros, current prices) in the EU-28 Member States are figured out. Carbon intensity is measured in left vertical angle and value added in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high value added does not imply high carbon intensity in the EU-28 Member States. However, the data shows that there are clear exceptions (for example Bulgaria and Estonia) from this thumb rule. Again, synergy analysis reveals clearly the Member States, where an energy saving policies should be developed further.

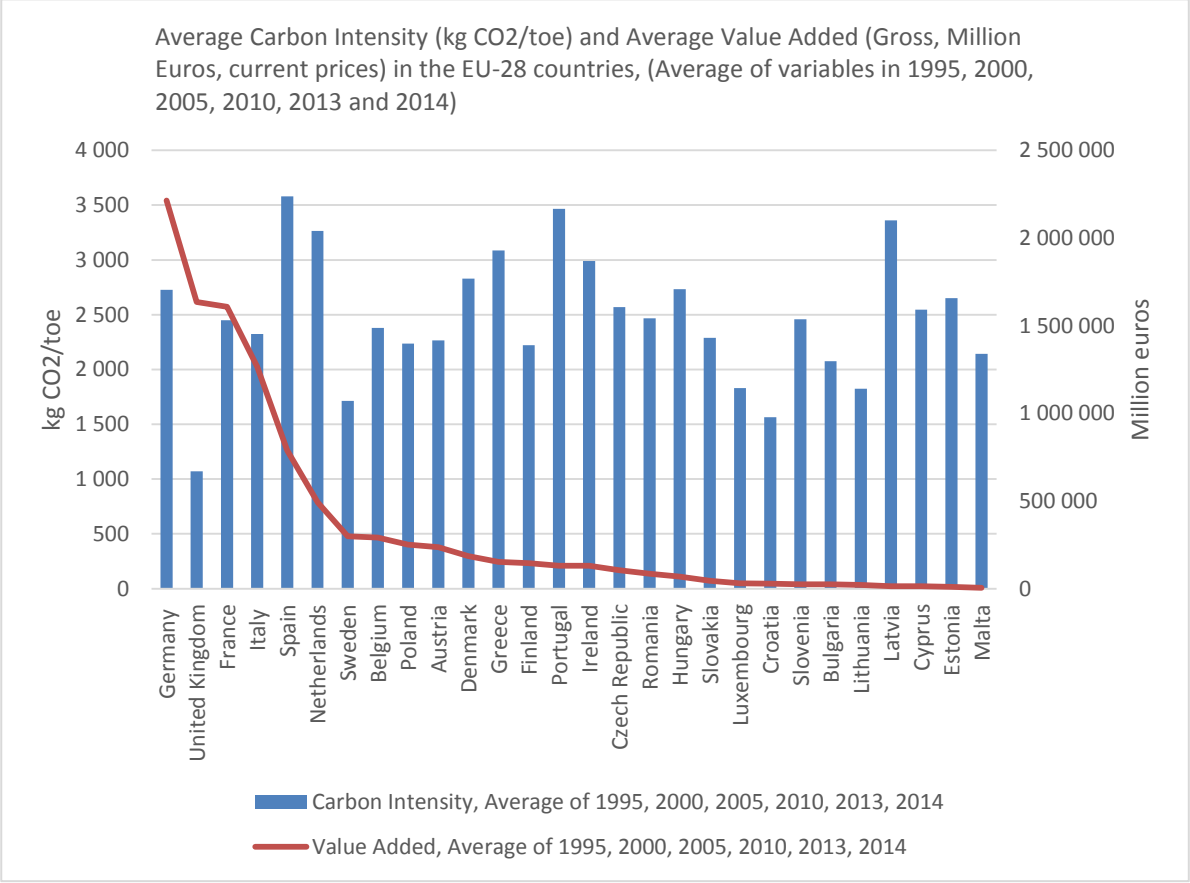


Figure 4.39. Average carbon intensity (kg CO_2/toe) and average value added (Gross, Million Euros, current prices). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Fourteenth synergy analysis is presented in Figure 4.40. This figure shows us that in the majority EU-28 Member States synergy between carbon intensity and population is negative. In some EU Member States synergy between carbon intensity and population is still positive. These include Bulgaria, Czech Republic, Estonia, Croatia, Lithuania, Poland, Romania, Slovenia and Slovakia. The strongest negative synergy between carbon intensity and population can be observed in the Belgium, Cyprus and Austria. In Malta synergy was zero and close to zero it was in Germany, Poland, Slovenia and Slovakia.

If we think normatively, we would like to see negative synergy between carbon intensity and population. There are nine EU Member States, which have positive synergy between carbon intensity and value added, but majority of EU-28 Member States have negative synergy between carbon intensity and value added. This

observation is interesting and it should give reasons to re-think critically energy/climate and population policies in these few EU Member States. Key question is: how these nine EU Member States could create better synergy between these key variables to turn down carbon intensity in their economies.

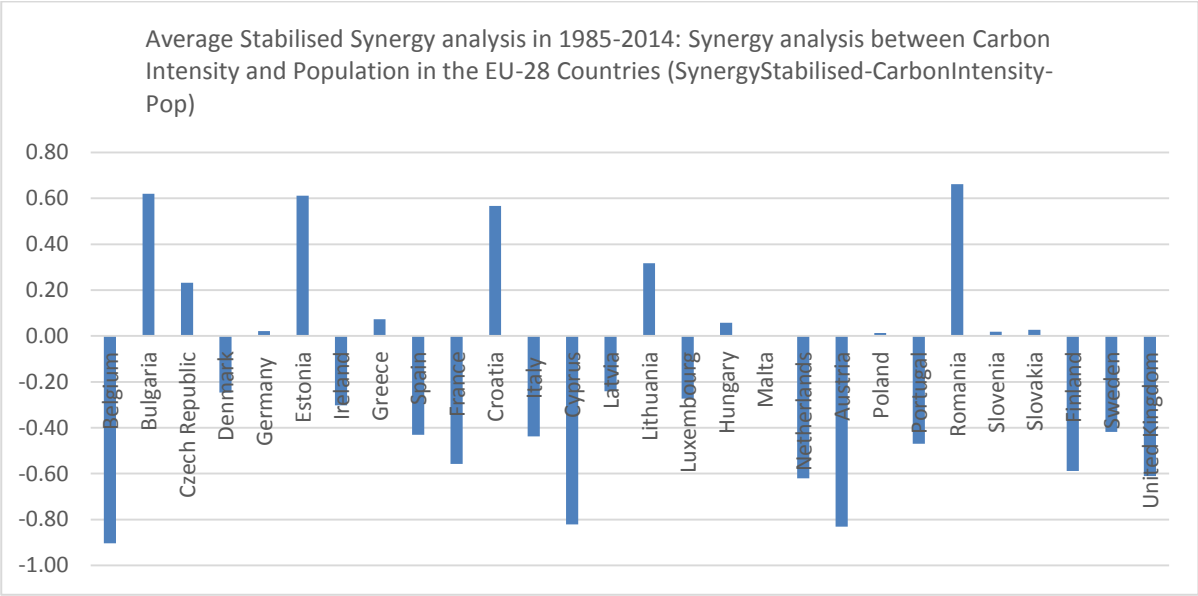


Figure 4.40. Stabilised synergy analysis in 1985-2014: Synergy analysis between carbon intensity and population in the EU-28 Member States.

In Figure 4.41 trade-off curve between average carbon intensity and average population in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average carbon intensity, the lower is average population. This is important observation for EU´s climate and population policies. There is no linear relationship between these two key variables. Key observation is that high number of population does not imply high carbon intensity in the EU-28 Member States.

We can conclude, based on the synergy analysis that the European Union has succeeded in creating the right direction for its climate policy approach. Yet climate policy field is a challenge for the European Union. Balancing demographic change and carbon intensity requires more attention in the European Union.

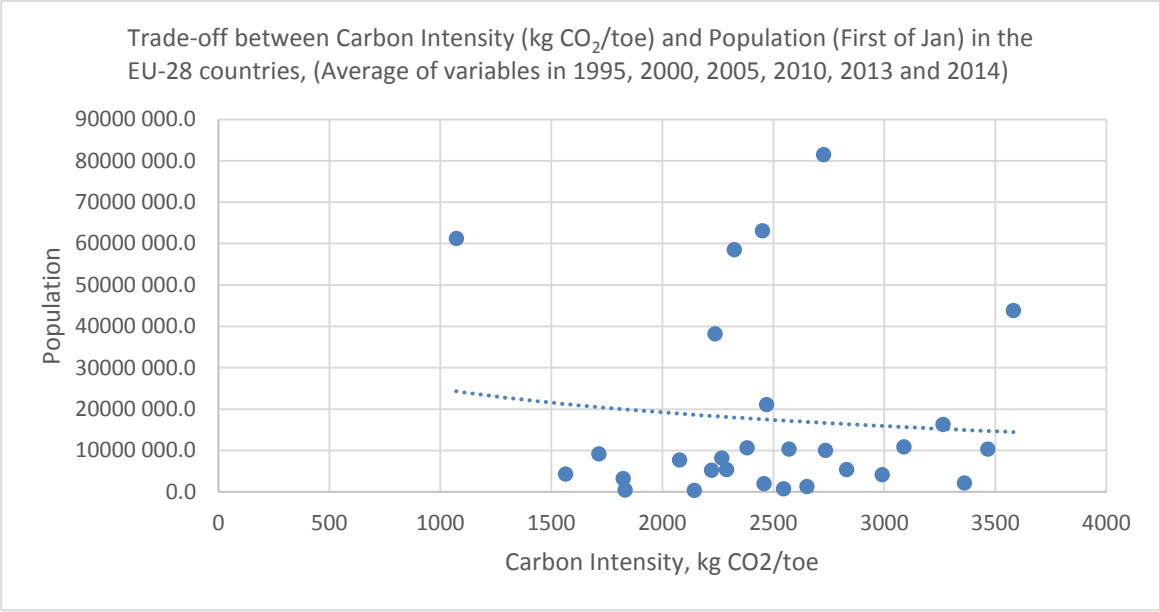


Figure 4.41. Trade-off analysis between carbon intensity and population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.42 average carbon intensity (kg CO_2/toe) and population (First of January) in the EU-28 Member States are figured out. Carbon intensity is measured in left vertical angle and population in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high value added does not imply high number of population in the EU-28 Member States. However, the data shows that there are clear exceptions (for example Spain, Portugal and Latvia) from this thumb rule. Again, synergy analysis reveals clearly the Member States, where energy policy should be better integrated with the population policy.

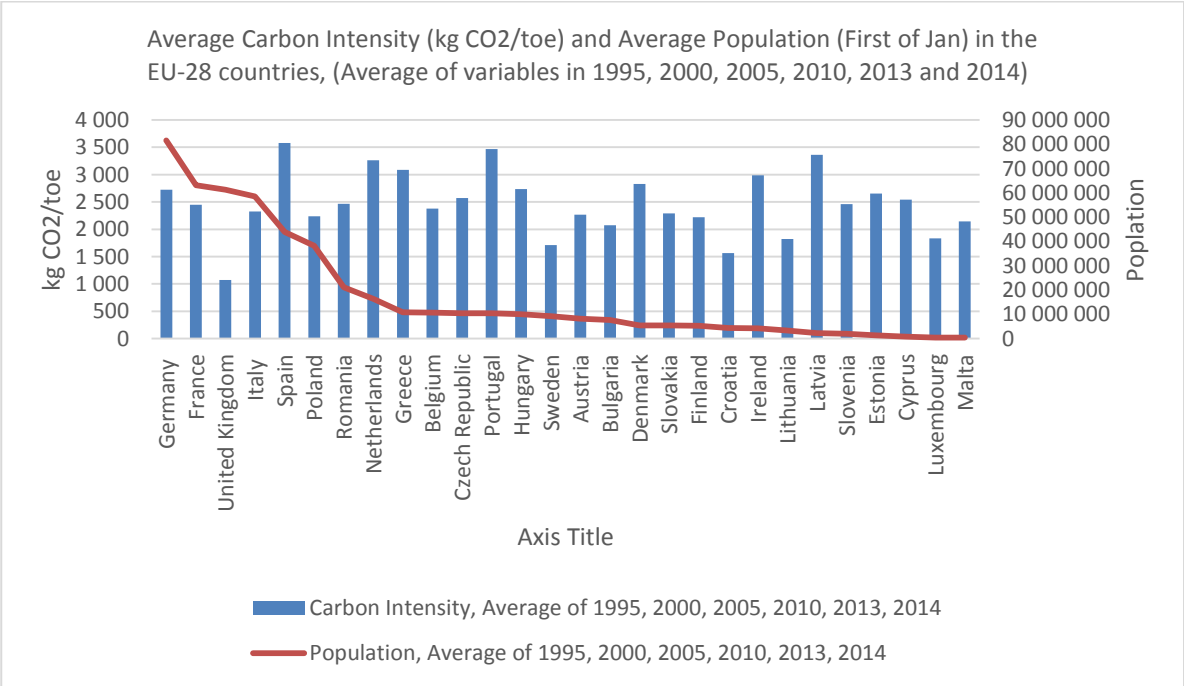


Figure 4.42. Average carbon intensity (kg CO_2/toe) and average population (First of January). Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

Fifteenth synergy analysis is presented in Figure 4.43. This figure shows us that in the majority EU-28 Member States synergy between carbon intensity and urban population is negative. In some EU-Member States synergy between carbon intensity and urban population is still positive. These EU Member States are Bulgaria, Estonia, Lithuania, Poland, Romania and Slovakia. The strongest negative synergy between carbon intensity and urban population can be observed in the Belgium, Cyprus, Austria, Finland and United Kingdom.

If we think normatively, we would like to see negative synergy between carbon intensity and urban population. There are six EU Member States, which have positive synergy between carbon intensity and population, but majority of EU-28 Member States have negative synergy between carbon intensity and number of population. This observation is interesting and it should give reasons to re-think critically energy/climate and population policies in these Member States. Key question is: how these six Member States could create better synergy between these key variables to turn down carbon intensity in their economies.

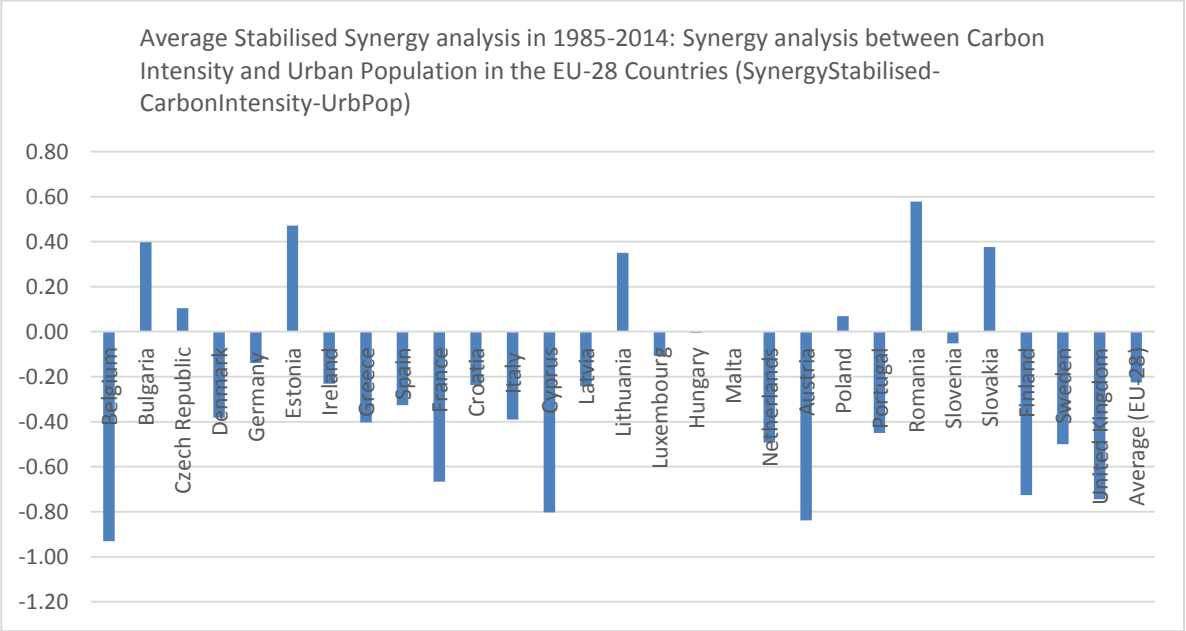


Figure 4.43. Stabilised synergy analysis in 1985-2014: Synergy analysis between carbon intensity and urban population in the EU-28 Member States.

In Figure 4.44 trade-off curve between average carbon intensity and average urban population in the EU-28 Member States is figured out. We can observe negative trade-off curve. This result is consistent with the synergy analysis presented above. In general, the higher is average carbon intensity, the lower is average urban population in the EU-region. This is important observation for EU´s climate and urbanisation policies. There is no linear relationship between these two key variables. Key observation is that high number of urban population does not imply high carbon intensity in the EU-28 Member States.

We can conclude, based on the synergy analysis that the European Union has succeeded in creating the right direction for its climate policy approach in relation to urbanization. Yet climate policy field is a challenge for the European Union. Integrating demographic change in urban regions and carbon intensity requires more attention in policy arenas of the European Union.

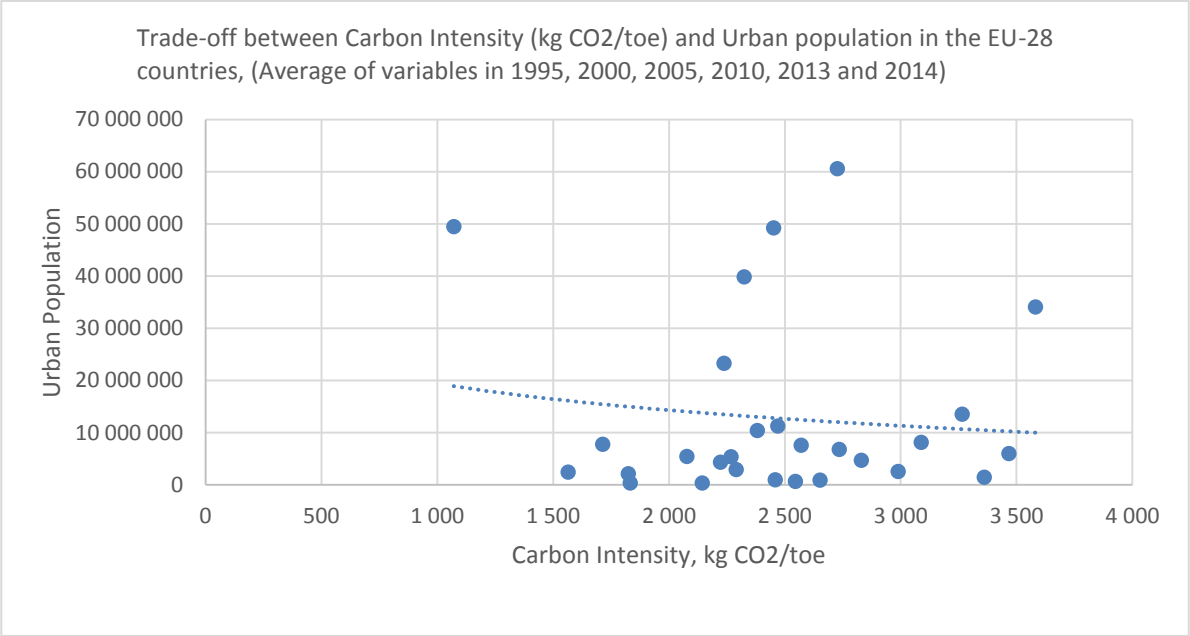


Figure 4.44. Trade-off analysis between carbon intensity and urban population in the EU-28 Member States. Stabilised synergy analysis in 1985-2014.

In Figure 4.45 average carbon intensity (kg CO_2/toe) and urban population (number) in the EU-28 Member States are figured out. Carbon intensity is measured in left vertical angle and urban population in measured in right vertical angle. There is no linear relationship between these two key variables. Key observation is that high carbon intensity does not imply high number of urban population in the EU-28 Member States. However, the data shows that there are clear exceptions (for example Spain, the Netherland, Portugal and Latvia) from this thumb rule. Again, synergy analysis reveals clearly the Member States, where energy policy should be better integrated with the urbanisation policy.

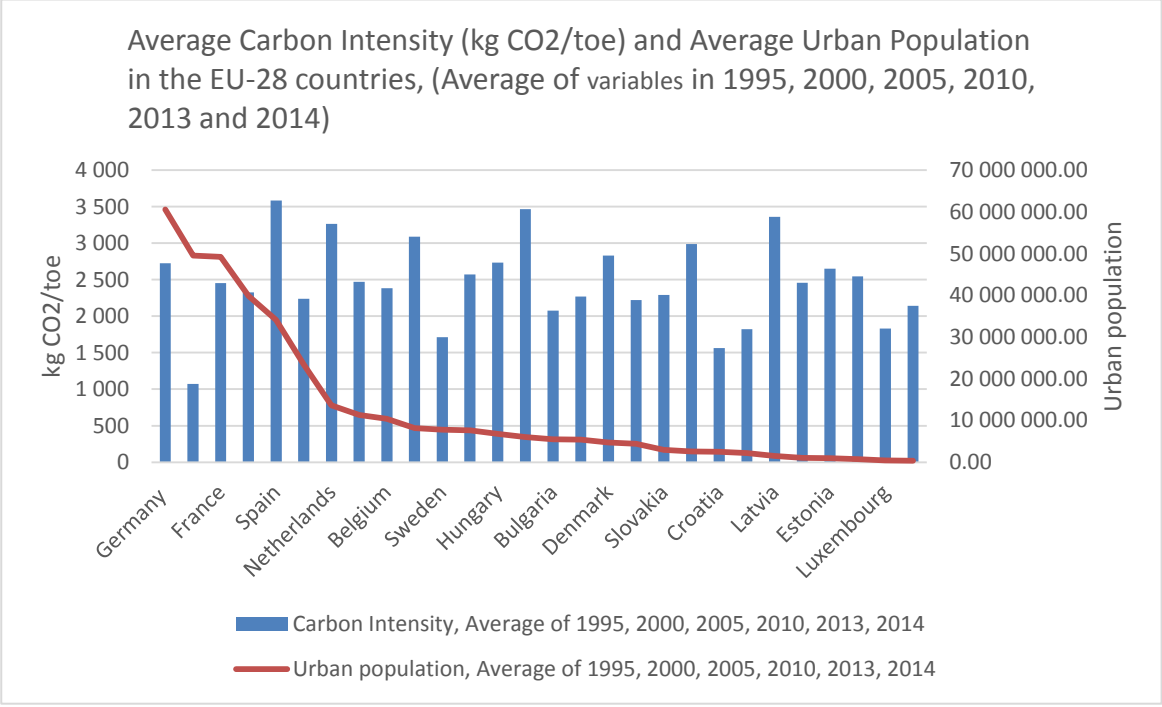


Figure 4.45. Average carbon intensity (kg CO_2/toe) and average urban population. Average of variables in 1995, 2000, 2005, 2010, 2013 and 2014).

In Chapter 4 we delivered full explorative analysis of key energy policy variables and key societal drivers (value added, population and urban population). We performed 15 synergy and trade-off analyses which mostly support hypothesis that the European Commission has quite successfully created right kind of policy framework

These synergy analyses reveal the critical challenges of energy savings and energy efficiency policies in the EU-28 region. Synergy analysis that we presented in Section 4, as a rule, support the hypothesis that the EU has managed to develop in the right direction incentives to save energy and promote energy efficiency in the EU-28 region. Synergy analysis also reveals significant challenges in these policy areas of certain EU Member States.

5. Synergy/trade-off analysis between SSI indicators and energy intensity

The content of this Chapter 5 is to present the synergy analyses between the SSI indicators of sustainable development and key energy variables. This analysis is intended to identify synergies between sustainable development policy and energy policy. As we stated above, we can identify positive synergies, negative synergy or no synergy. We will make a comprehensive synergy analysis of all EU-28 Member States, the statistical material over the years 2006 to 2014.

5.1. Sustainable Society Indicators (SSI)

In Figure 5.1 we present Sustainable Society Index System. This system includes dimensions of (1) Economic Wellbeing, (2) Environmental Wellbeing and (3) Human Wellbeing. All these dimensions are measured by the set of indicators. Human wellbeing has three sub-dimensions: Basic needs, Health and Personal and social development. Environmental wellbeing has two sub-dimensions: Natural resources and Climate and energy. Economic wellbeing has two sub-dimensions: Transition and economy.

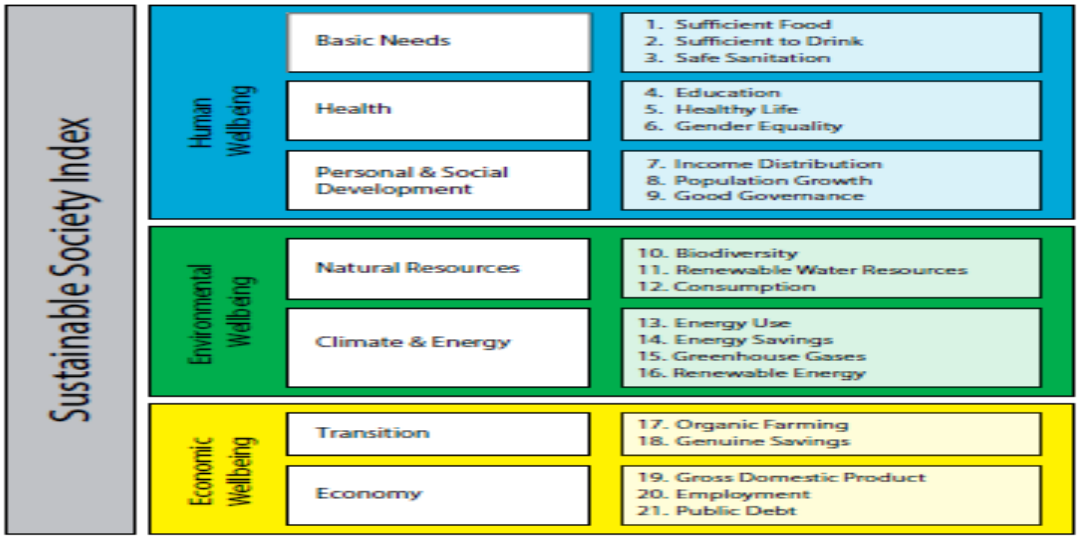


Figure 5.1. Dimension of sustainable development and indicators of sustainability (SSI-system).

The research methodology in this study explorative. We analyse, stage by stage, synergy levels between SSI-indicators and energy intensity. The goal of this explorative analysis is find policy field where there are positive or negative synergies between sustainability policy and energy policy in the EU-28 country group. This kind of analysis can be helpful for decision-makers and all stakeholders of the European Union. Our explorative research strategy of synergy analyses is explained in Figure 5.2.

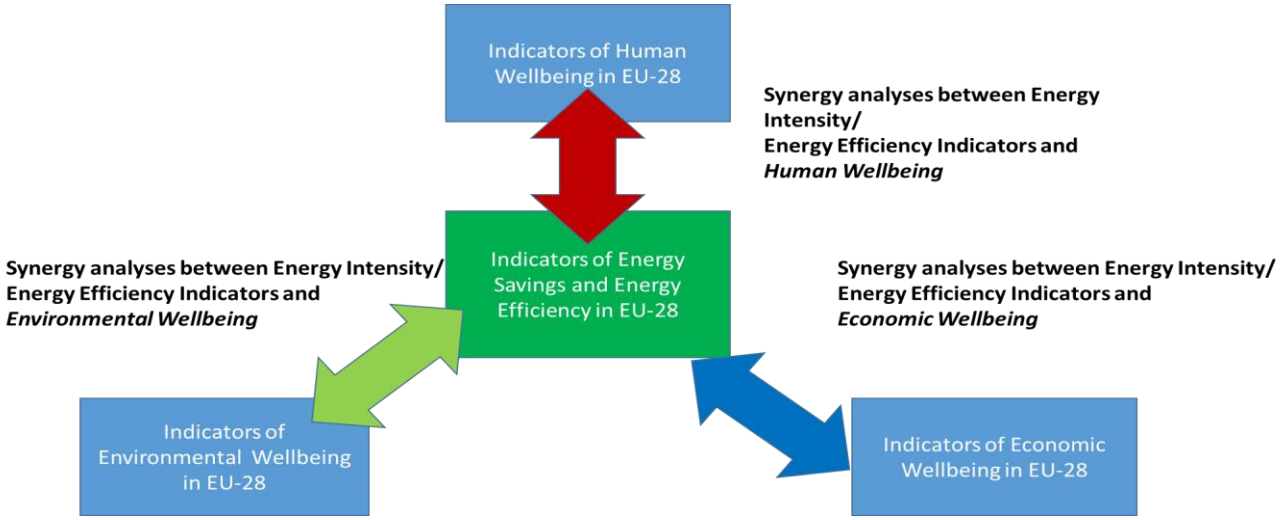


Figure 5.2. Synergy analysis of sustainable development indicators and energy intensity.

5.2. Basic need indicators and energy intensity

In Figure 5.5 we present first synergy analysis between energy intensity and the indicator of safe sanitation. Synergy seems to be mostly positive in Ireland and negative in Lithuania, Macedonia and Portugal. In most EU-28 Member States the indicators of safe sanitation variable are indexed to be 100%, which means that we are not able to measure synergy between energy intensity and safe sanitation in most of EU-28 Member States. Only reliable result, what we can conclude is that in these Member States, where index is not 100%, there are probably some problems in this special sustainability issue.

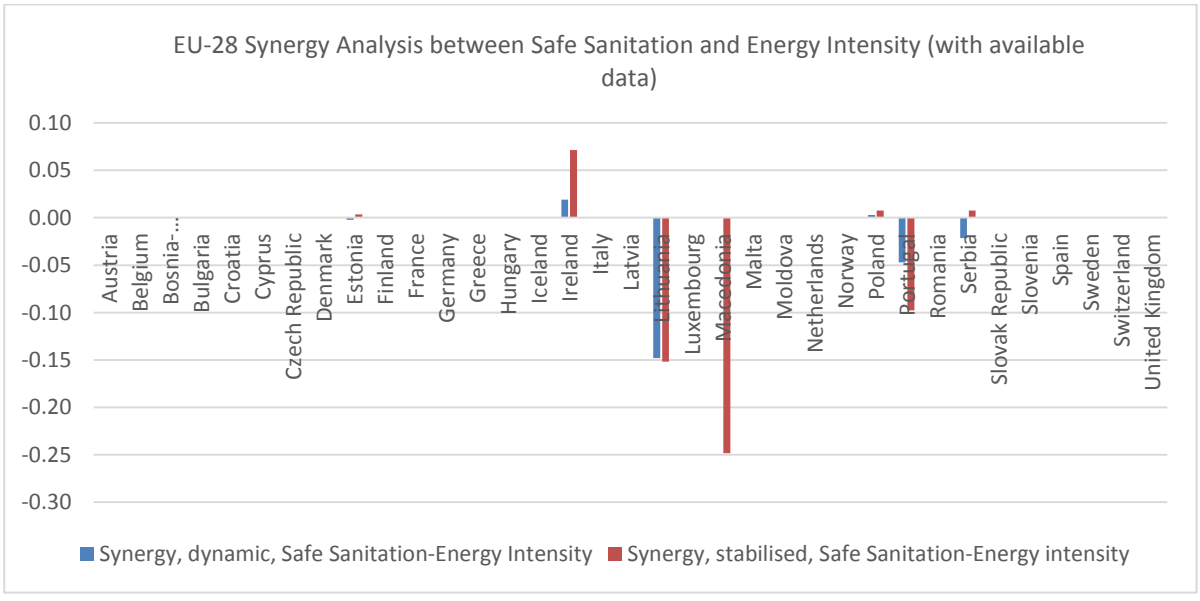


Figure 5.3. EU-28 Synergy Analysis between Sufficient Food and Energy Intensity (with available data).

In Figure 5.4 we present first synergy analysis between energy intensity and the indicator of sufficient drink. Synergy seems to be mostly negative with exceptions of Ireland and Czech Republic. In most EU-28 Member States the indicators of sufficient to drink variable are indexed to be 100%, which means that we are not able to measure synergy between energy intensity and sufficient drink in most of EU-28 Member States.

Only reliable conclusion, what we can conclude is that in these Member States, where this index is not 100%, there may be some problems in this specific sustainability issue. Water security may a central sustainability problem in some EU-Member States like in Portugal.

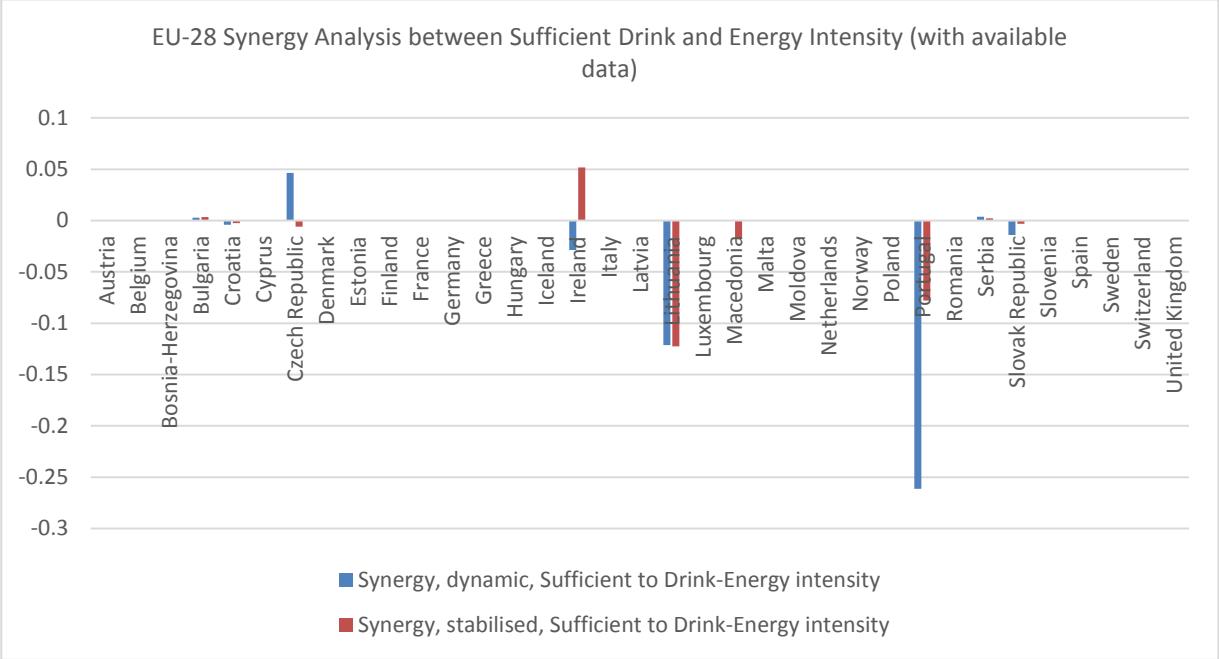


Figure 5.4. EU-28 Synergy Analysis between Sufficient Drink and Energy Intensity (with available data).

In Figure 5.5 we present first synergy analysis between energy intensity and the indicator of safe sanitation. Synergy seems to be mostly positive in Ireland and negative in Lithuania, Macedonia and Portugal. In most EU-28 Member States the indicators of safe sanitation variable are indexed to be 100%, which means that we are not able to measure synergy between energy intensity and safe sanitation in most of EU-28 Member States. Only reliable result, what we can conclude is that in these Member States, where index is not 100%, there are probably some problems in this special sustainability issue.

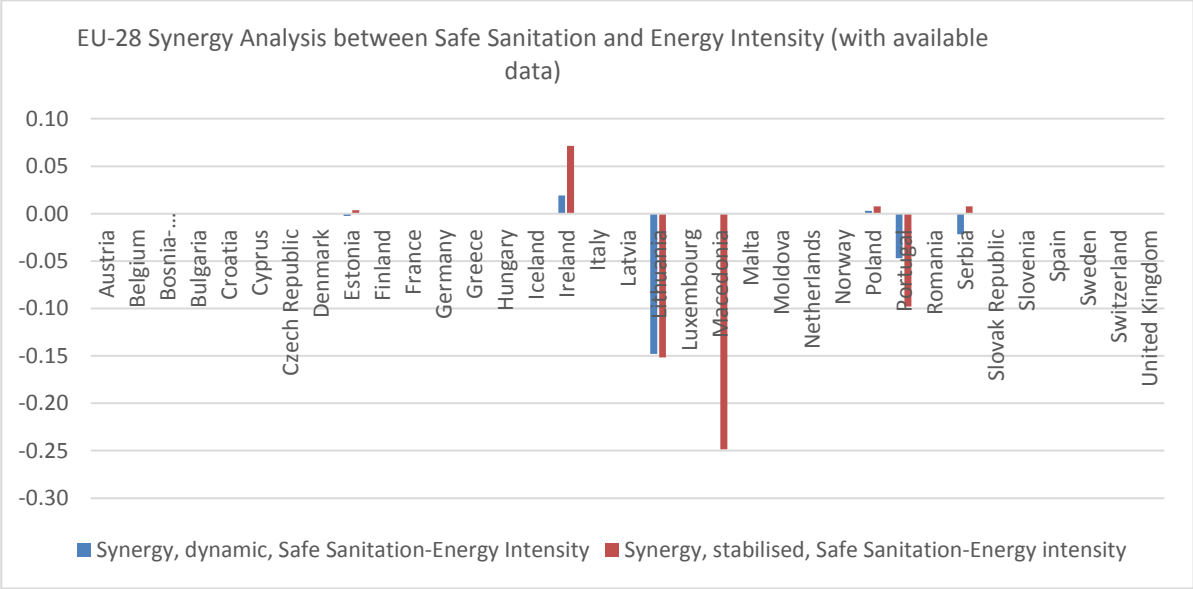


Figure 5.5. EU-28 Synergy Analysis between Safe Sanitation and Energy Intensity (with available data).

5.3. Health indicators and energy intensity

In Figure 5.6 we present first synergy analysis between energy intensity and the indicator of education. Synergy seems to be mostly negative in in the EU-28 Member States. In the United Kingdom, Sweden it has showed clearly positive synergy with ´stabilised synergies over +0.40. Synergy is less than +0,2 in most Member States in this group of positive synergy. These results indicate that modernization with higher education is having negative synergy with energy intensity in most of EU-28 Member States. This could be seen as positive energy policy response of education.

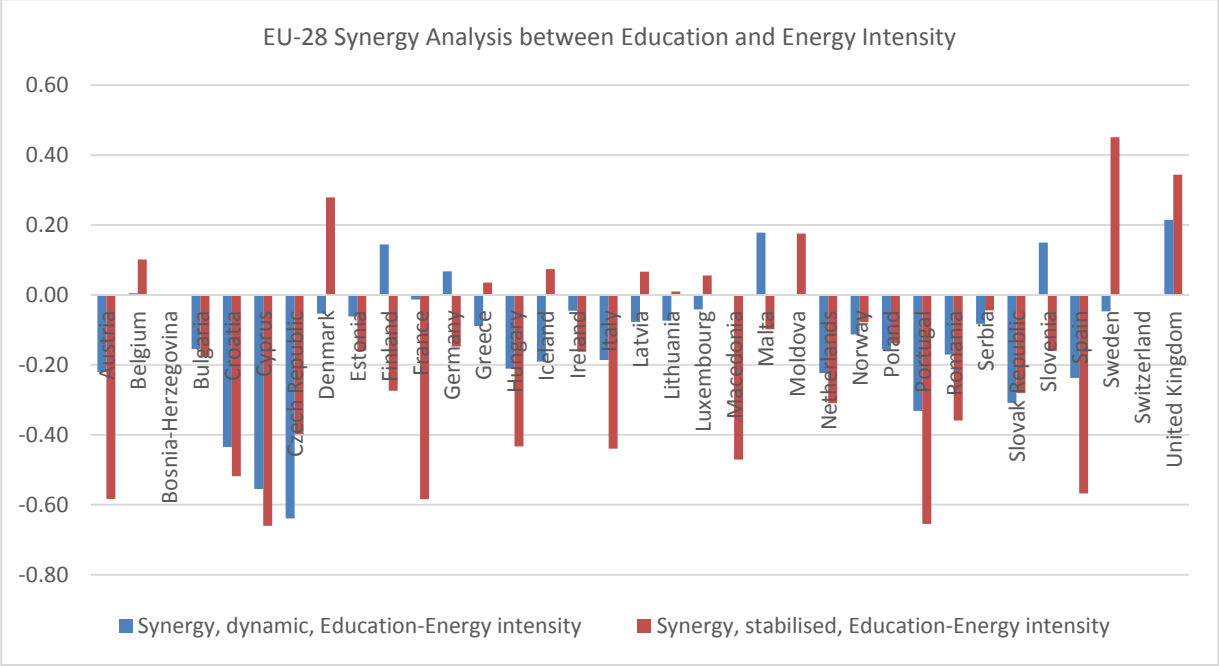


Figure 5.6. EU-28 Synergy Analysis between Education and Energy Intensity.

In Figure 5.7 we present first synergy analysis between energy intensity and the indicator of healthy life. Synergy seems to be mostly negative in in the EU-28 Member States. In Estonia, Finland, Iceland, and Slovakia synergy is slightly positive. In the cases of Finland and Estonia we can observe clearly positive synergy between energy intensity and healthy life. This kind of strong positive synergy can partly be explained by northern climate conditions. In this way synergy results are understandable. It is interesting to note that in some EU-Member States differences between dynamic and stabilised synergy results are quite different which indicates big cyclical changes in energy intensity of healthy life indicator in some EU-28 Member States. Stabilised synergy measurement reveals the direction of synergy more clearly (red colour in figures).

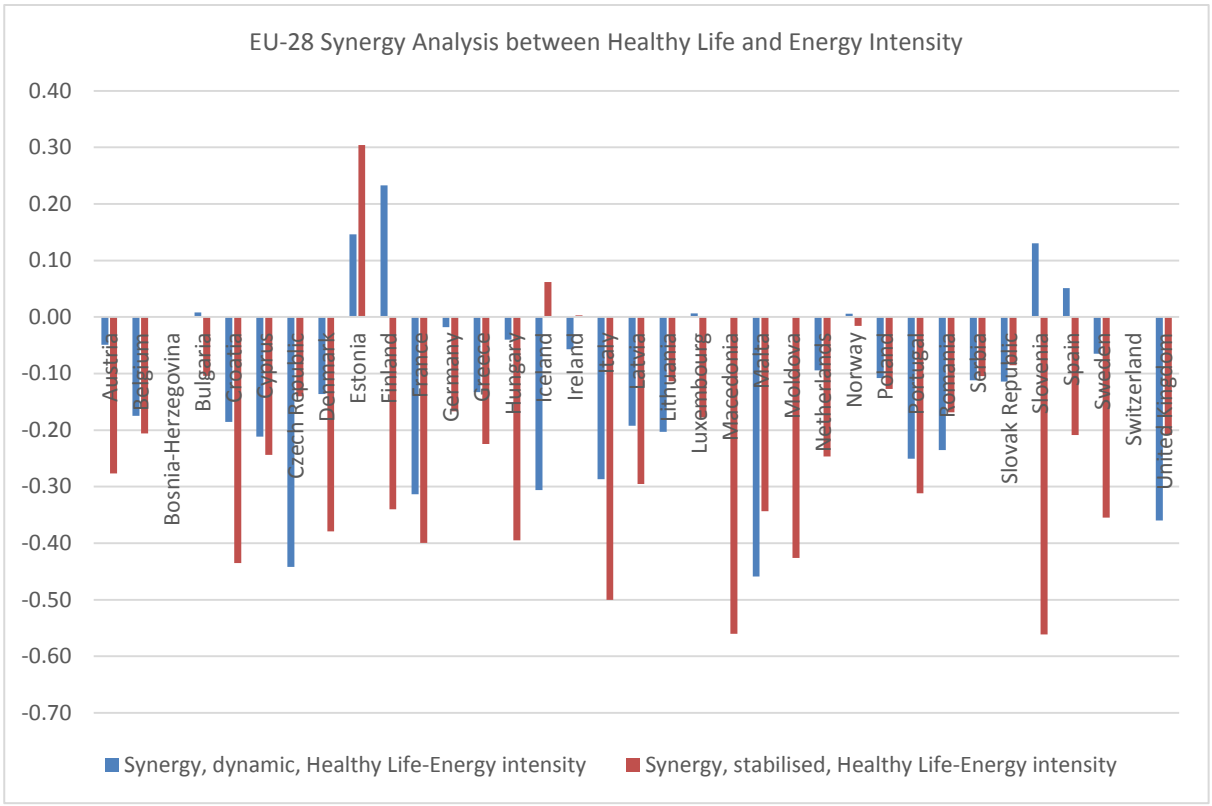


Figure 5.7. EU-28 Synergy Analysis between Healthy Life and Energy Intensity.

In Figure 5.8 we present first synergy analysis between energy intensity and the indicator of gender equality. Synergy seems to be mostly negative in the EU-28 Member States. In Croatia, Iceland and Norway synergy is very positive and some other EU-Member States it is slightly positive. Such Member States are Estonia, Macedonia and Sweden. Very negative average synergy level can be observed in Austria, Belgium, Finland, France, Latvia, Malta, Moldovia, Netherlands and Slovenia. In general, higher gender equality is associated with lower energy intensity, at least during this evaluation period 2006-2014.

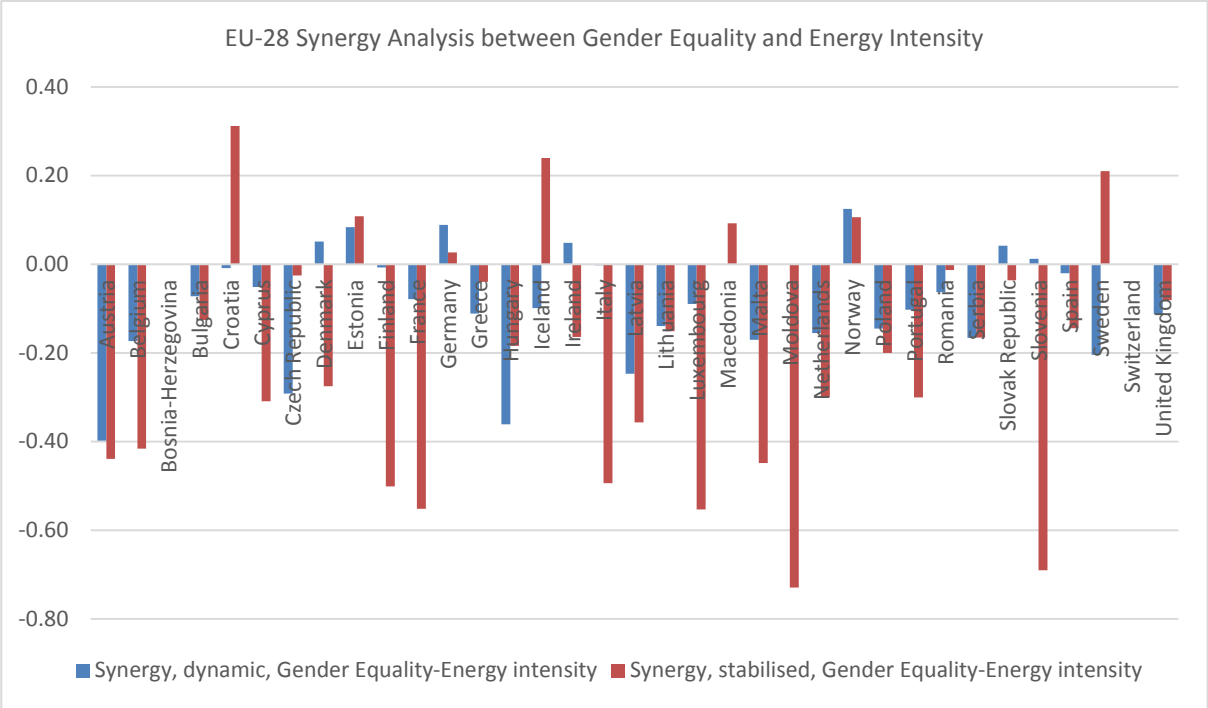


Figure 5.8. EU-28 Synergy Analysis between Gender Equality and Energy Intensity.

5.5. Personal/social development indicators and energy intensity

In Figure 5.9 we present first synergy analysis between energy intensity and the indicator of income distribution. Synergies can be observed both towards negative and positive directions in the EU-28 Member States. Positive synergies can be observed in Austria, Belgium, France, Slovak Republic and in the U.K. when we measure synergy by stabilised synergy method. Negative synergies can be discovered in Germany, Iceland, Luxemburg and Spain, when we measure synergy by stabilised synergy method. In Germany and Iceland negative average synergy is almost -0.6.

When can conclude that income distribution is a variable that is not explicitly linked to either positive or negative synergy with energy intensity in the EU-28 Member States. However, we can conclude that equity and distributional aspect of energy policy may require more energy policy attention in some EU-Member States. However, this sensitive policy issue requires more policy analyses inside EU-28 counties.

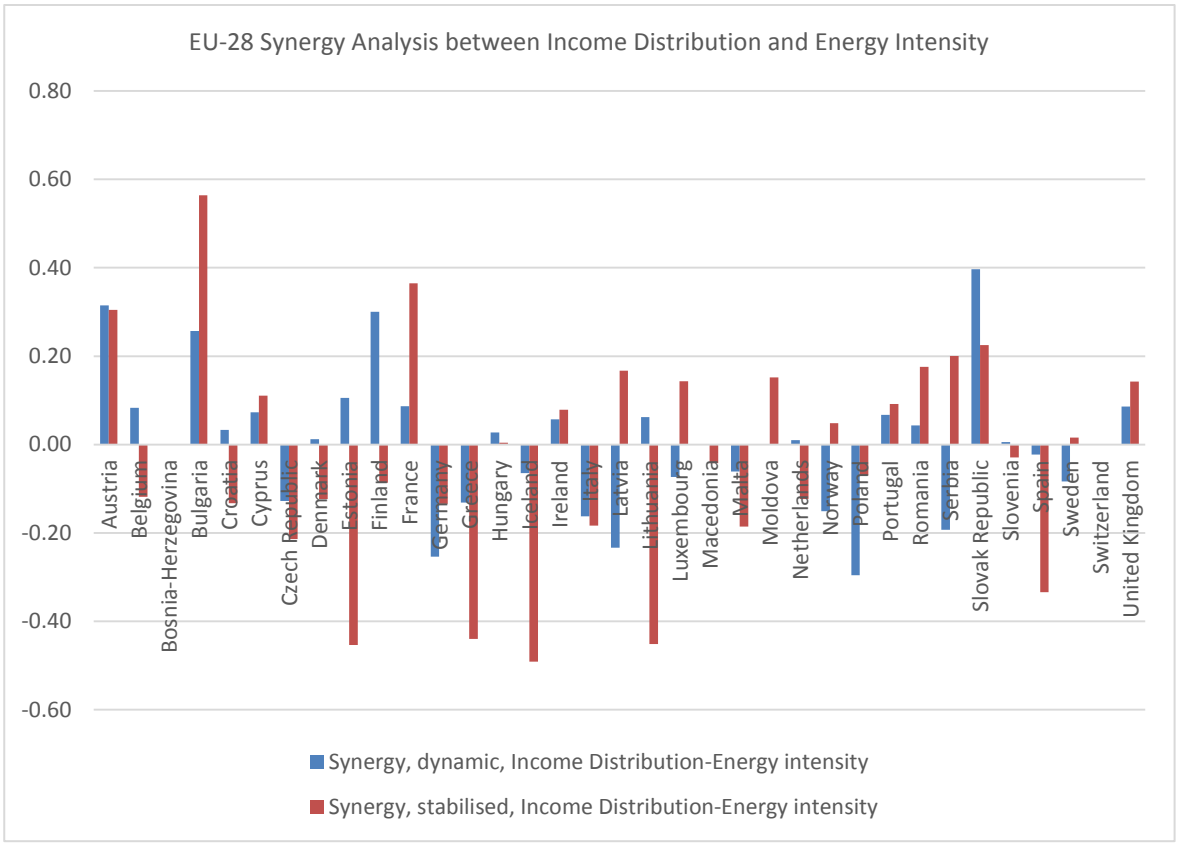
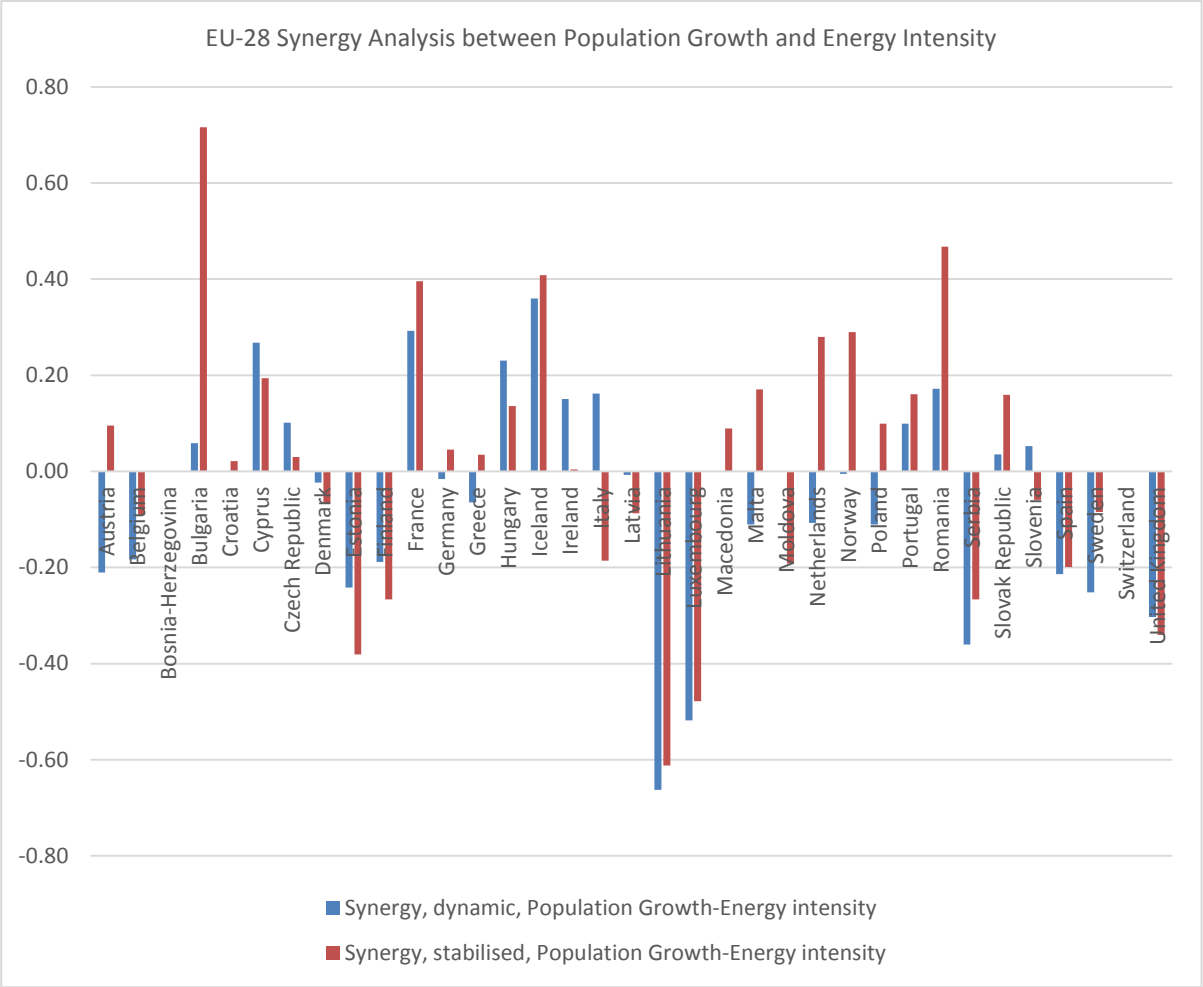


Figure 5.9. EU-28 Synergy Analysis between Income Distribution and Energy Intensity.

In Figure 5.10 we present first synergy analysis between energy intensity and the indicator of population growth. Synergies can be observed both towards negative and positive directions in the EU-28 Member States. Positive synergies can be observed in Bulgaria, Cyprus, France, Hungary, Iceland, Ireland, Italy, Netherlands Norway, Poland, Portugal, Romania and Slovak Republic. When we measure synergy by stabilised synergy method. Very negative synergies can be discovered in Lithuania and Luxemburg. Negative synergies can be observed also in Slovenia, Spain, Sweden and in the U.K.

When can conclude that population growth is a variable that is not explicitly linked to the positive or negative synergy with energy intensity in the EU-28 Member States. Very special out-layers in this synergy analysis were Lithuania and Luxembourg, there negative synergy was over -0,5, when we measure synergy by stabilised synergy method. Bulgaria showed about +0,70 synergy levels in this EU-28 analysis, when we measure synergy by stabilised synergy method.



In Figure 5.11 we present first synergy analysis between energy intensity and the indicator of good governance. Synergies can be observed both towards negative and positive directions in the EU-28 Member States. Positive synergies can be observed in Belgium, Bulgaria, Ireland, Spain, Croatia, Italy, Hungary, Malta, the Netherlands, Austria, Portugal, Romania, Slovenia, Finland and United Kingdom, when we measure synergy by stabilised synergy method.

Negative synergies can be discovered in Denmark, Germany, Greece, France, Cyprus, Latvia, Lithuania, Luxembourg, Poland, Slovakia and Sweden, when we measure synergy by stabilised synergy method. We cannot define either positive or negative stabilised synergy trend in Estonia.

We can conclude that good governance is a variable that is not explicitly linked to the positive or negative synergy with energy intensity in the EU-28 Member States. Very special out-layer in this synergy analysis was Iceland, there average synergy level was almost -0,60, when we measure synergy by stabilised synergy method. The United Kingdom had very strong positive synergy levels (about +0,80) in this EU-28 synergy analysis, Also Finland, Luxembourg, Moldovia, Portugal, Slovenia and Spain had very positive synergy levels, when we measure synergy by stabilised synergy method.

We can conclude that good governance does not, in general lead to lower energy intensity levels in the EU-region, when we analyse the data sets of 2006-2014. There is still needs to monitor critically governance structures to reach lower energy intensity.

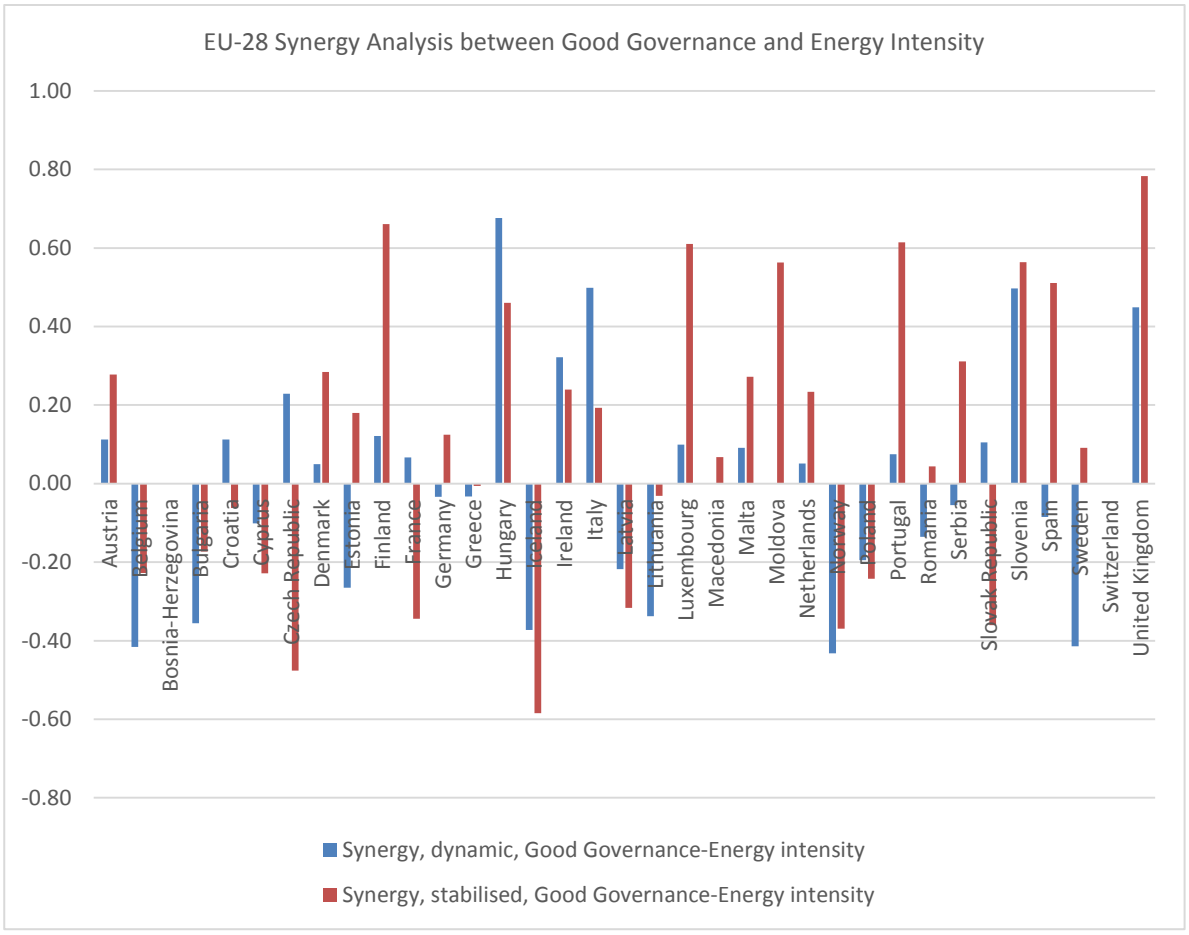


Figure 5.11. EU-28 Synergy Analysis between Good Governance and Energy Intensity.

5.6. Natural resource indicators and energy intensity

Now we start presenting synergy analyses which are linked to environmental welfare.

In Figure 5.12 we present first synergy analysis between energy intensity and the indicator of biodiversity of forest area. Synergies can be observed both towards negative and positive directions in the EU-28 Member States. Positive synergies can be observed in Austria, Belgium, Cyprus, Denmark, France, Germany, Greece, Iceland, Ireland, Macedonia, Netherlands, Norway, Portugal, Slovenia, Spain, and in the United Kingdom, when we measure synergy by stabilised synergy method. Strong negative synergies can be discovered in Poland and Slovak Republic and Lithuania, when we measure synergy by stabilised synergy method.

When can conclude that biodiversity of forest area is a variable that is not explicitly linked to the positive or negative synergy with energy intensity in the EU-28 Member States. Very special out-layer in this synergy analysis was Poland, there negative synergy is almost -0,80, when we measure synergy by average stabilised synergy. Austria, Macedonia, France and U.K. showed biggest positive synergy levels in this EU-28 synergy analysis, when we measure synergy by stabilised synergy method.

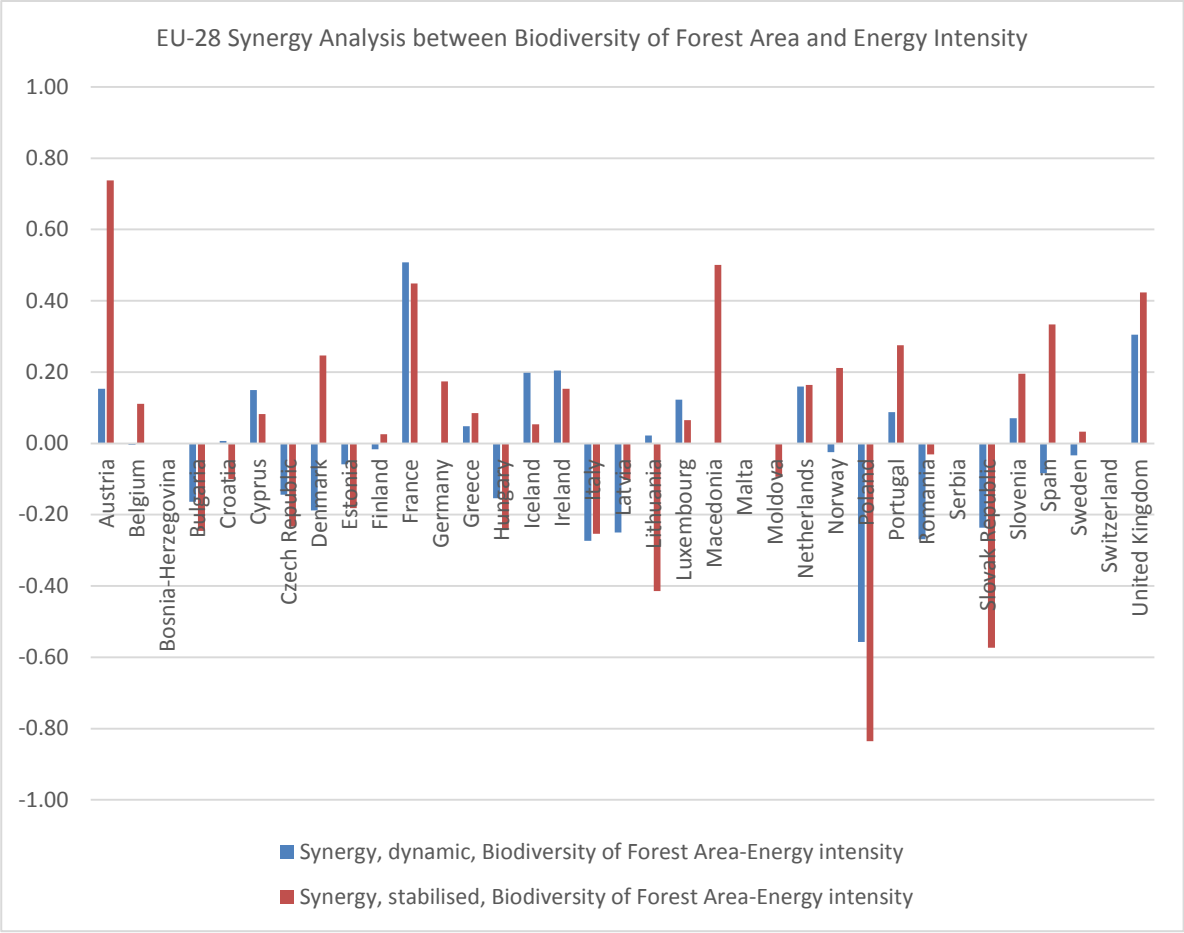


Figure 5.12. EU-28 Synergy Analysis between Biodiversity of Forest Area and Energy Intensity.

In Figure 5.13 we present first synergy analysis between energy intensity and the indicator of biodiversity of protected area. Synergies can be observed both towards negative and positive directions in the EU-28 Member States.

Positive synergies can be observed in Ireland, Norway, Estonia and Belgium, when we measure synergy by stabilised synergy method. Negative synergies can be discovered in Malta, Portugal, Romania, Spain, Slovakia, Sweden and France, when we measure synergy by stabilised synergy method.

We cannot identity either positive or negative synergy in this synergy analysis, there were many Member States where it was impossible find synergy towards positive or negative direction, when we measure synergy by stabilised synergy method. Such Member States are Austria, Bosnia-Herzegovina, Cyprus, Italy, Poland, Slovakian Republic and Spain.

When can conclude that biodiversity of protected is a variable that is not explicitly linked to the positive or negative synergy with energy intensity in the EU-28 Member States. High positive synergy levels were observed in Iceland (+0.40), Norway (+0.40), Belgium (+0.50) and Estonia (+0.18). Portugal (-0,80), Romania (-0.50), Spain (-0.50), Slovakia (-0.4), Sweden (-0.35), France (-0.4) and Malta (-0.40) showed biggest negative synergy levels in this EU-28 synergy analysis, when we measure synergy by stabilised synergy method.

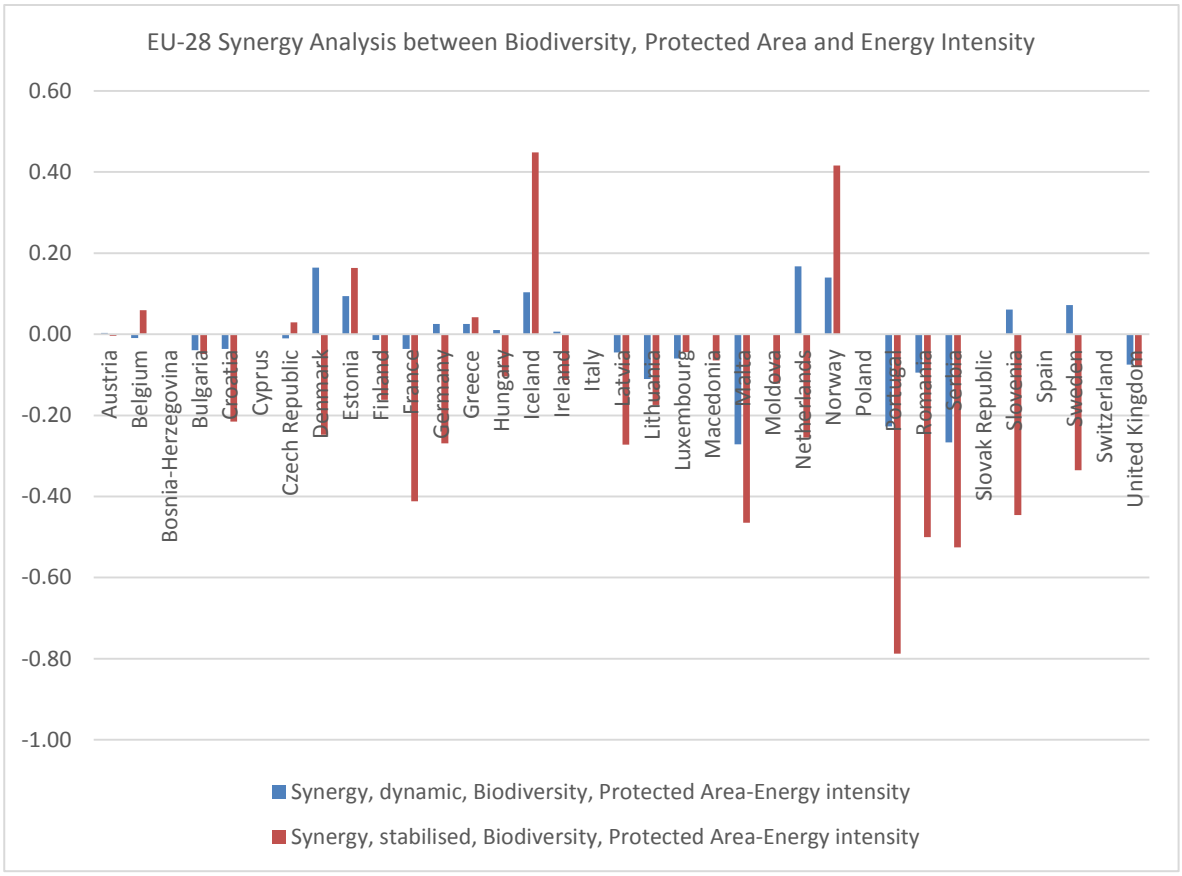


Figure 5.13. EU-28 Synergy Analysis between Biodiversity, Protected Area and Energy Intensity.

In Figure 5.14 we present first synergy analysis between energy intensity and the indicator of renewable water resources. Synergies can be observed both towards negative and positive directions in the EU-28 Member States, but in clear majority of EU-28 Member States synergies were positive. Negative synergies can be discovered in Serbia (-0,40), Slovak Republic (-0.40), Luxembourg (-0.20) and Estonia (-0.20), when we measure synergy by stabilised synergy method.

We can conclude that renewable water resources is a SSI variable that is explicitly linked more to the positive synergy with energy intensity in the EU-28 Member States. Very special out-layer in this synergy analysis was Austria, where positive synergy is almost +0,60, when we measure synergy by stabilised synergy method.

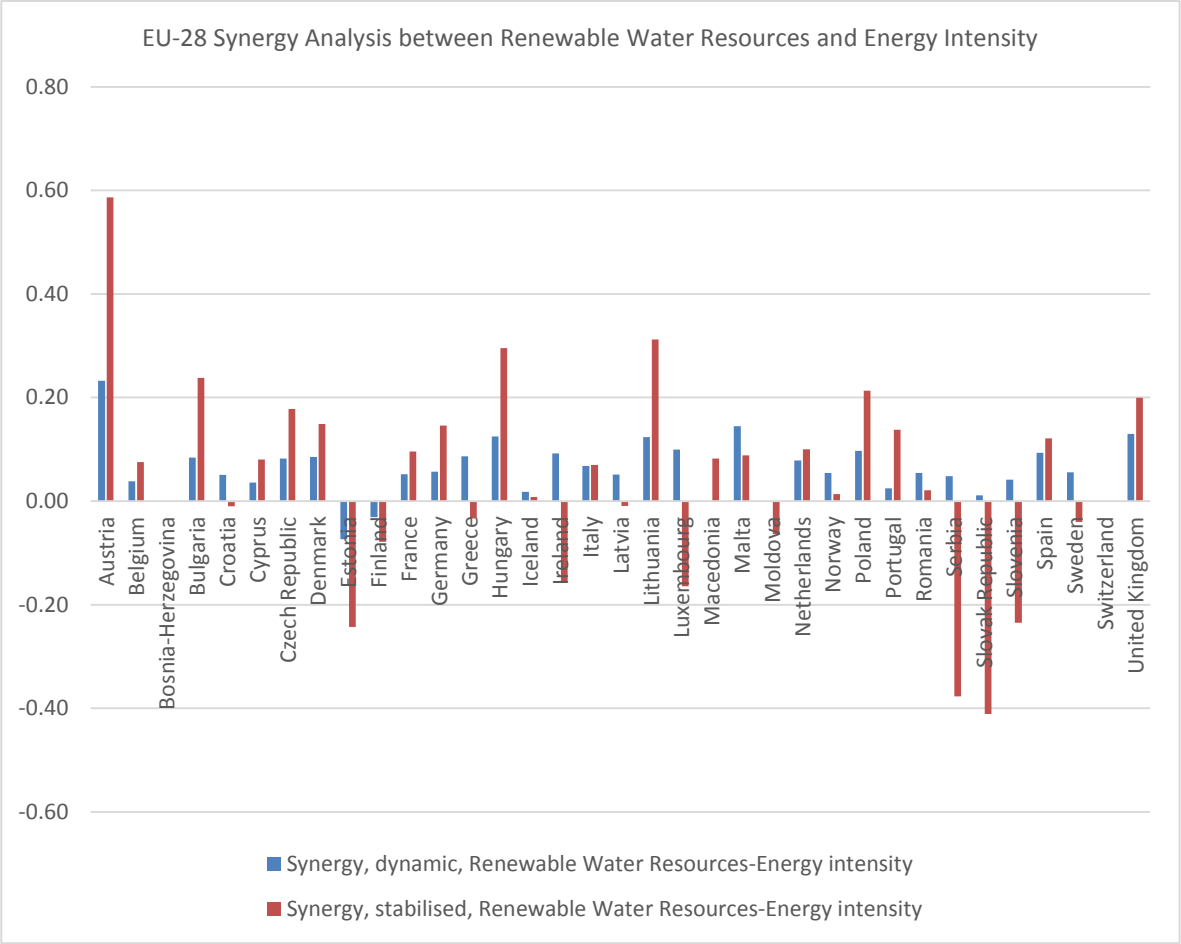


Figure 5.14. EU-28 Synergy Analysis between Renewable Water and Energy Intensity.

In Figure 5.15 we present first synergy analysis between energy intensity and the SSI indicator of consumption. Synergies can be observed both towards negative and positive directions in the EU-28 Member States.

Positive synergies can be discovered in Belgium, Greece, Latvia, Luxembourg, Malta, Moldovia, Netherlands, Portugal, Romania, Slovenia, Spain and Sweden, when we measure synergy by stabilised synergy method. Portugal and Spain have strong positive synergy levels.

Negative synergies can be discovered in France, Iceland, Lithuania, Poland, Serbia and Slovak Republic, when we measure synergy by stabilised synergy method. We can conclude that consumption is SSI variable that is explicitly linked more to positive synergy levels in EU-Member States with energy intensity in the EU-28 Member States. Out-layers with very positive synergy levels were Portugal (over +0.50) and Spain (about +0.50). Out-layers with very negative synergy levels were France (over -0.80), Iceland (about -0.80), Lithuania (-0.70) and Poland (over -0.70).

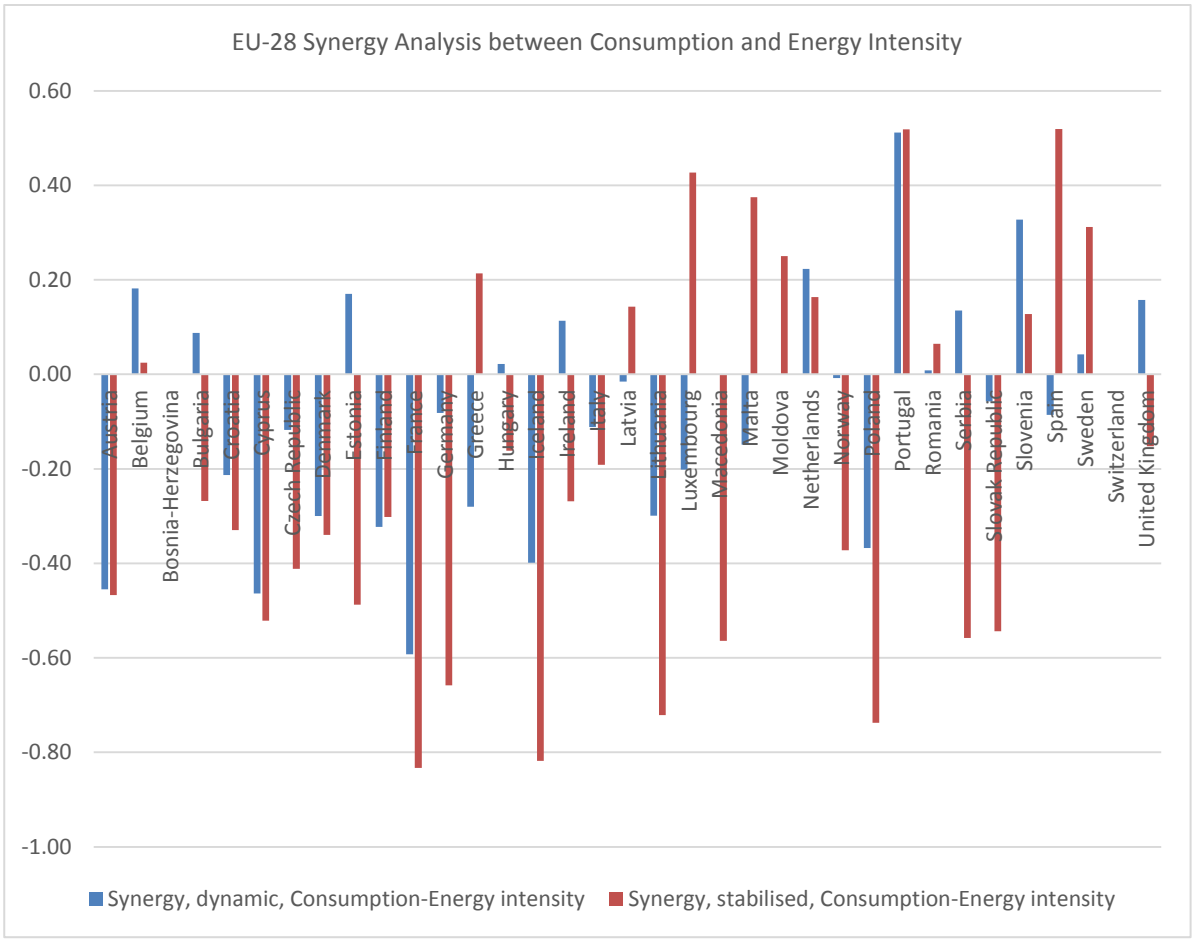


Figure 5.15. EU-28 Synergy Analysis between Consumption and Energy Intensity.

Now we have performed synergy analysed which are linked to the Sustainable Society indicators (SSIs) of natural resource management.

5.7. Climate change indicators and energy intensity

In this chapterwe report synergy analyses, which are linked to climate and energy issues.

In Figure 5.16 we present synergy analysis between energy intensity and the indicator of energy use. We can observe that most country-level synergies are positive in the EU-28 Member States, when we measure synergy by stabilised synergy method.

Negative synergies can be discovered in Greece, Macedonia, Poland and Bosnia-Herzegovina, when we measure synergy by stabilised synergy method.

We can conclude that energy use is a SSI variable that is explicitly linked more to the positive synergy with energy intensity in the EU-28 Member States. Very special out-layer in this synergy analysis were France, Iceland, Italy, Luxembourg, Portugal and the United Kingdom, where positive synergy is over +0,60, when we measure synergy by stabilised synergy method. Again, differences between dynamic and stabilised synergy levels were quite big in some Member States, which indicates large cyclic changes in measured variables in relation to each other.

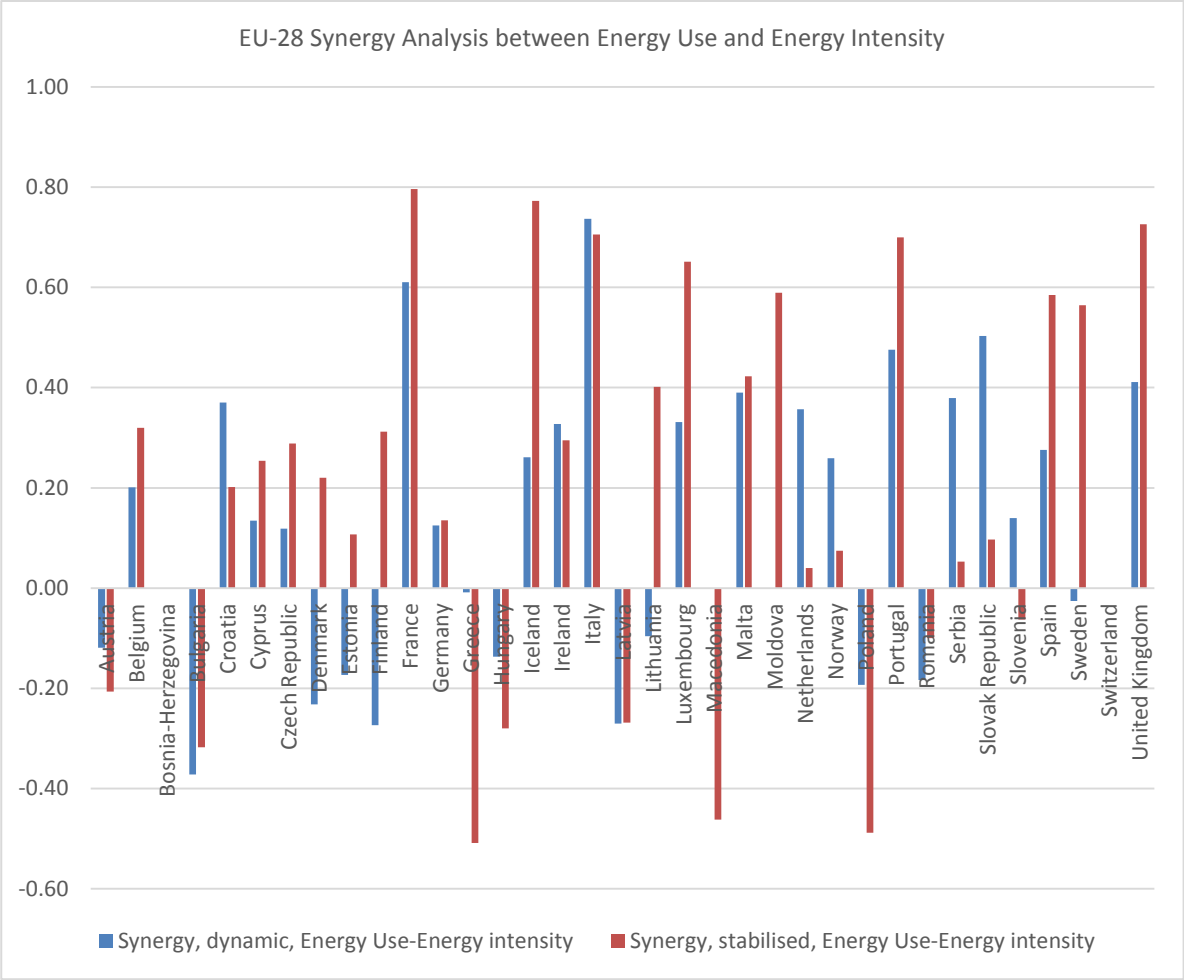


Figure 5.16. EU-28 Synergy Analysis between Energy Use and Energy Intensity.

In Figure 5.17 we present synergy analysis between energy intensity and the indicator of energy saving. We can observe that in majority of EU-Member States synergies are positive in the EU-28 Member States, when we measure synergy by stabilised synergy method.

Positive synergies or very low synergies can be discovered in the majority of EU-28 Member States. Negative synergies can be discovered in Estonia (-0.30), Iceland (-0.20, dynamic synergy)), Lithuania (-0.20, dynamic synergy), Luxembourg (almost -0.30), and Sweden (-0.10).

We can conclude that energy saving is the SSI variable that is not explicitly linked either to the positive or negative synergy with energy intensity in the EU-28 Member States. Very special out-layers in this synergy analysis were Czech Republic (almost +0.30), Iceland (almost +0.30) and Romania (almost +0.30) when we measure synergy by stabilised synergy method. Estonia showed highest negative synergy level (almost -0,30) in this EU-28 synergy analysis, when we measure synergy by stabilised synergy method.

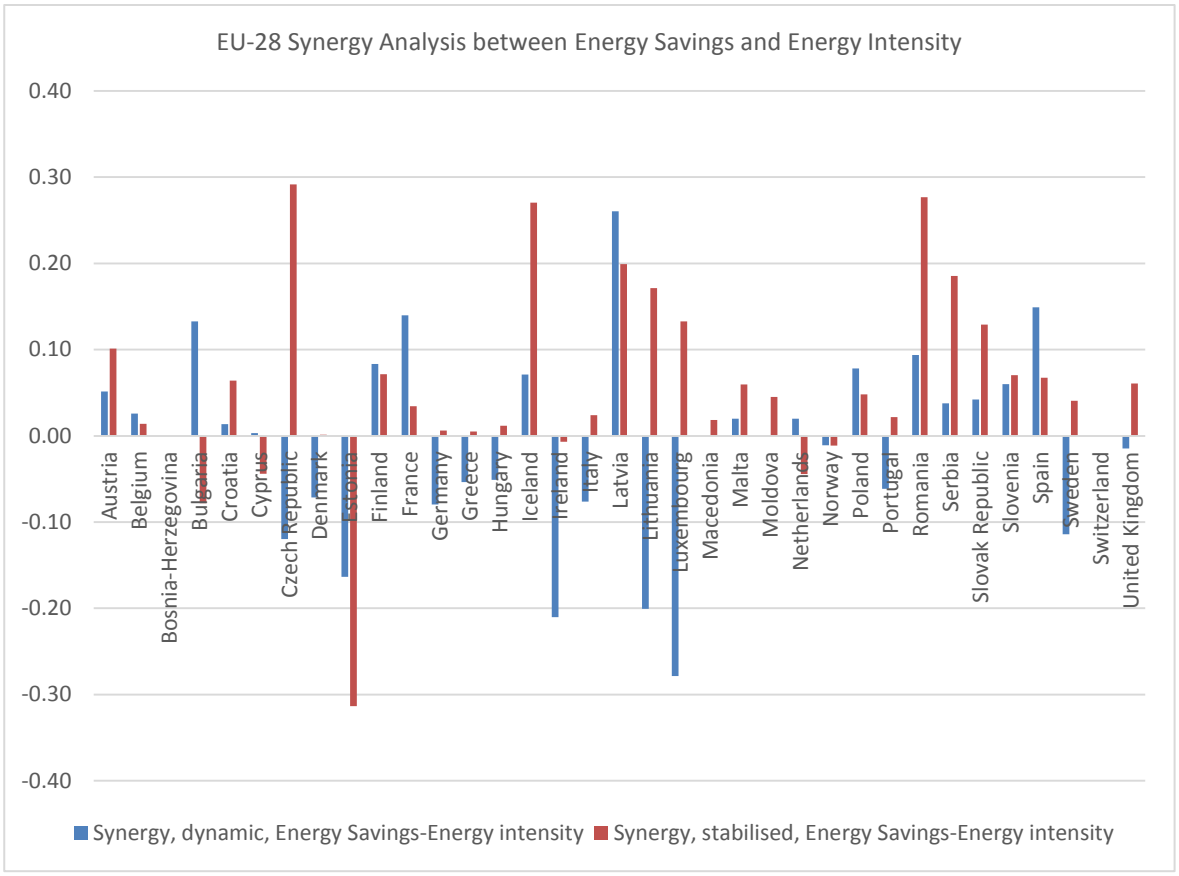


Figure 5.17. EU-28 Synergy Analysis between Energy Savings and Energy Intensity.

In Figure 5.18 we present synergy analysis between energy intensity and the indicator of greenhouse gases. We can observe that in majority of EU-Member States synergies are positive in the EU-28 Member States, when we measure synergy by stabilised synergy method.

Negative synergies can be discovered in France (almost -0,40, dynamic synergy), Lithuania (almost-0,40) and Iceland (over -0,40) and Poland (-0.20) when we measure synergy by stabilised synergy method. If we think normatively, negative synergy is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region in this case.

We can conclude that greenhouse gases is the SSI variable that is linked to the positive synergy in the EU-28 Member States. The most positive synergy was identified in Austria (about +0,70). In many EU-Member States (France, Hungary, Luxembourg, Malta, Portugal, Spain and the U.K.) positive synergy was about +0,50 or over. Positive synergy means that high energy intensity is linked to high greenhouse gases in the uropean Union and its Member States.

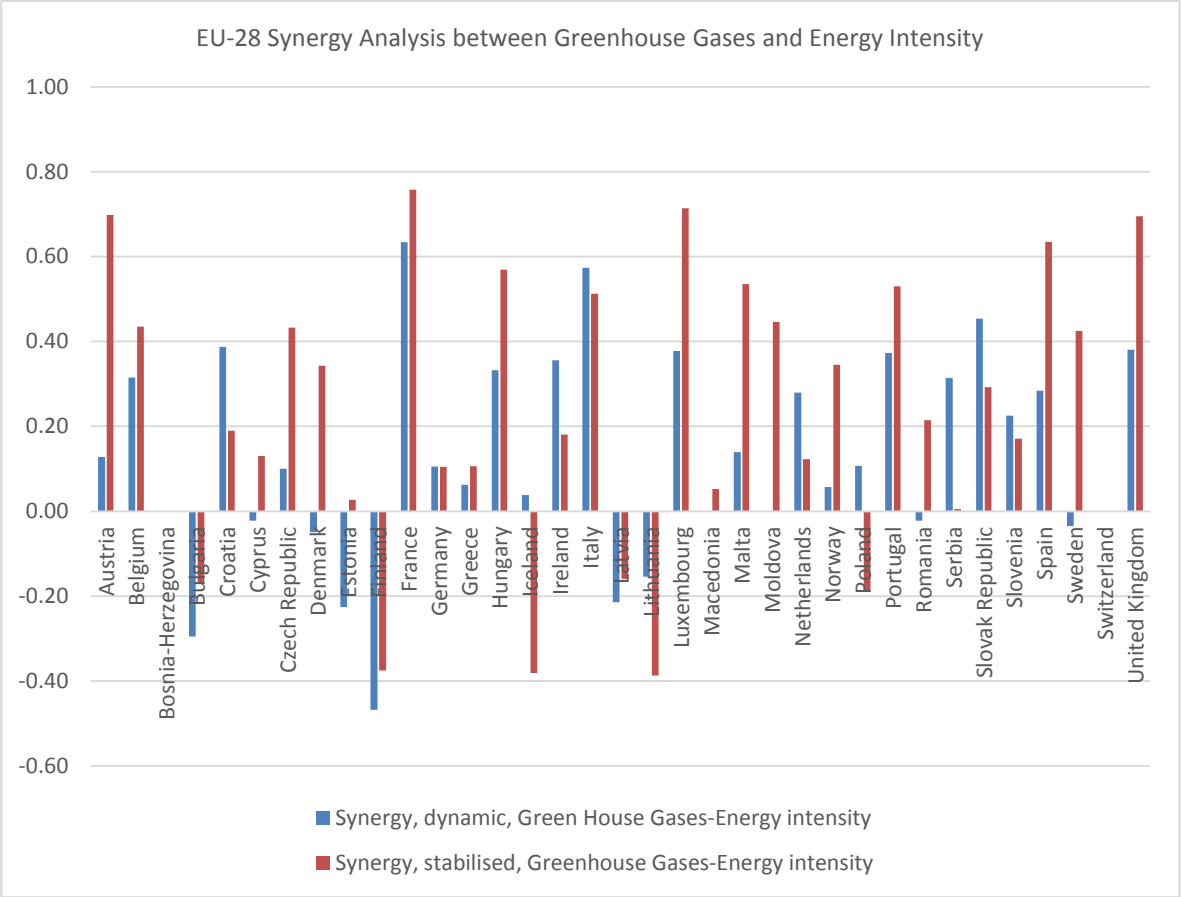


Figure 5.18. EU-28 Synergy Analysis between Greenhouse Gases and Energy Intensity.

In Figure 5.19 we present synergy analysis between energy intensity and the indicator of renewable energy. We can observe that in majority of EU-Member States synergies are negative in the EU-28 Member States, when we measure synergy by stabilised synergy method.

Positive synergies can be discovered in Estonia, Greece, Hungary, Iceland, Netherlands and Norway. In other EU-Member States synergies are negative between energy intensity and renewable energy, when we measure synergy by stabilised synergy method. If we think normatively, in this case negative synergy is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28.

We can conclude that renewable energy is the SSI variable that is linked slightly more to negative synergy (with energy intensity) in the EU-28 Member States, but there quite many Member States, where synergy is positive. The most positive synergy levels were identified in Iceland (over +0,70) and Norway (+0.44). Average positive synergy levels were observed in Estonia, Greece, Hungary and Netherlands. Positive synergy means that high energy intensity is linked to high renewable energy use in the EU-28 region. Negative synergy levels were highest in Austria, Germany, Luxembourg and Moldovia, where negative synergy levels were more than -0.5.

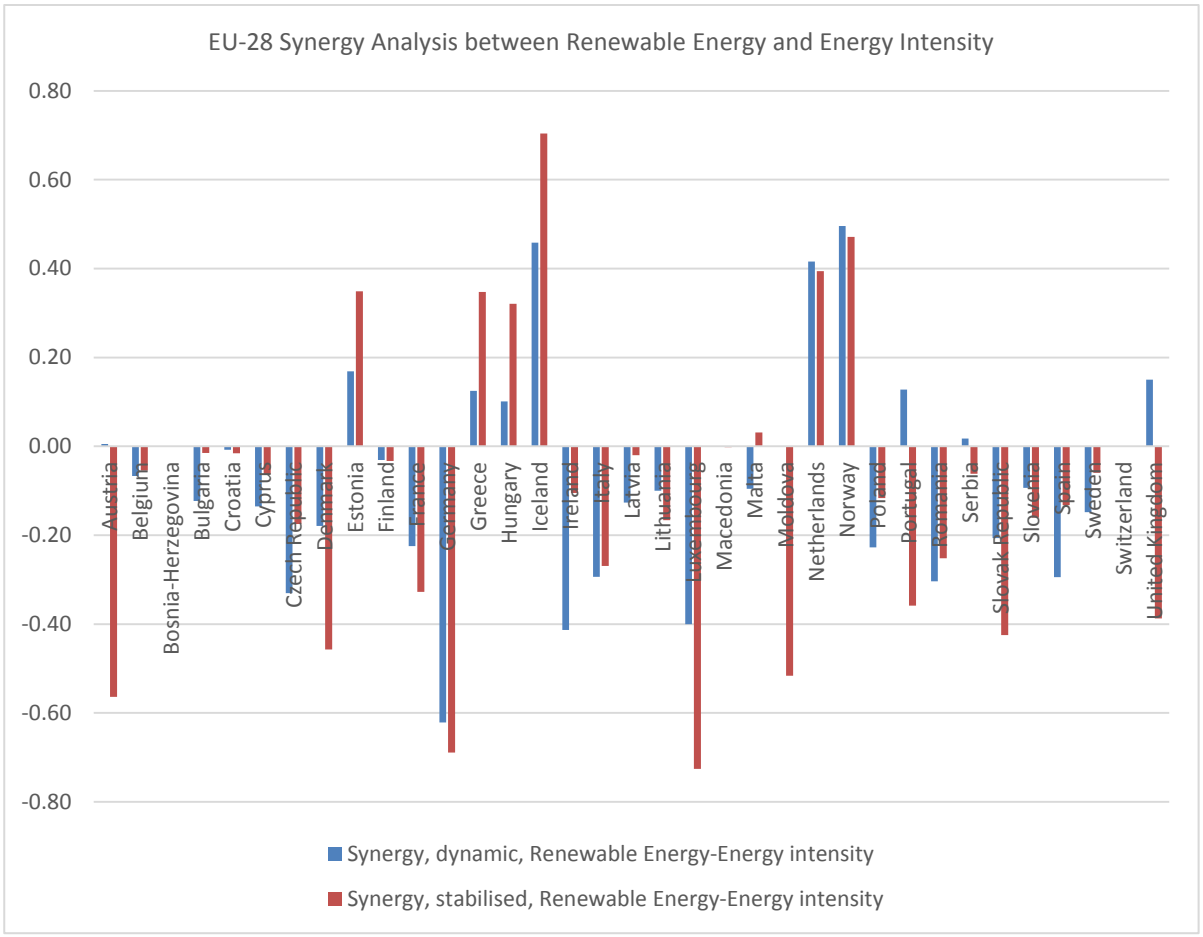


Figure 5.19. EU-28 Synergy Analysis between Renewable Energy and Energy Intensity.

Now we have reported all synergy analyses in relation to climate and energy issues of Sustainable Society Indicators.

5.8. Transition indicators and energy intensity

In this chapter we report synergy analyses, which are lined to transition and energy intensity.

In Figure 5.20 we present synergy analysis between energy intensity and the indicator of organic farming. We can observe that in majority of EU-Member States synergies are negative in the EU-28 Member States, when we measure synergy by stabilised synergy method.

Positive synergies can be discovered in most of the EU-28 Member States. In other EU-Member States synergies are negative between energy intensity and organic farming, when we measure synergy by stabilised synergy method. If we think normatively, negative synergy is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region. From this perspective, identified result of negative synergies in the majority of EU-Member States is a desirable empirical discovery.

We can conclude that organic farming is the SSI variable that is linked more to negative synergy in the EU-28 Member States, but there some Member States (six EU-Member States), where synergy is positive. The strongest positive synergies were identified in Serbia, Iceland, Romania and Finland (over +0,30). Positive synergy means, that a high energy intensity is linked to a high organic farm activity. Negative synergy was

the highest in France, where negative synergy was over -0,40 (dynamic synergy) or over -0.60 (stabilised synergy).

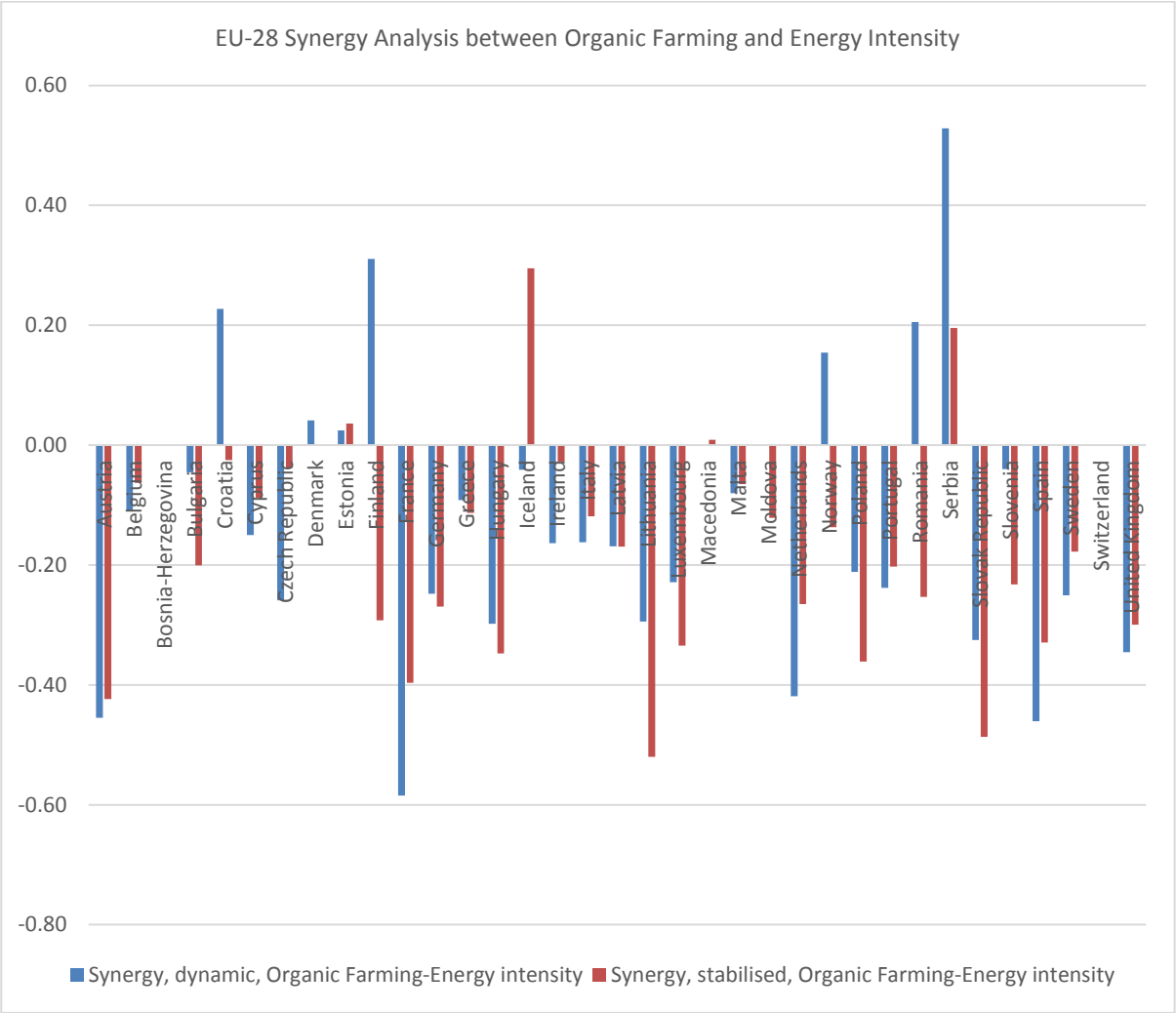


Figure 5.20. EU-28 Synergy Analysis between Organic Farming and Energy Intensity.

In Figure 5.21 we present synergy analysis between energy intensity and the indicator of genuine savings. Genuine Savings (GS) is a measure of how a nation's total capital stock changes year-on year. It is thus firmly based in the idea of wealth accounting (Hamilton and Hepburn 2014). Total capital, also referred to as comprehensive or inclusive wealth, include all those assets from which people obtain well-being, either directly or indirectly. Genuine savings thus comprises produced capital, all machines, buildings, telecommunication networks, human capital, natural capital and social capital.

We can observe that in majority of EU-Member States synergies are positive in the EU-28 Member States, when we measure synergy by stabilised synergy method. Negative synergies can be discovered clearly in Latvia, Estonia, Finland, Denmark, Netherlands, Slovak Republic and Sweden. In other EU-Member States, synergies are positive between energy intensity and genuine savings, when we measure synergy by stabilised synergy method. If we think normatively, negative synergy is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region. From this perspective identified result of positive synergies in the majority of EU-Member States is not a desirable finding. In EU-28 region high genuine savings are mostly associated with high energy intensity.

We can conclude that genuine savings is the SSI variable that is linked more to positive synergy in the EU-28 Member States, but there are some (six EU-Member States), where synergy between variables is clearly positive. The most negative synergy was identified in Denmark (almost -0.6). Positive synergy was highest in Poland, where positive synergy was almost +0.80.

We can see that differences between dynamic and stabilised synergy measurements are large, and in some cases leading to very different controversial results (Denmark, Germany, Italy, Lithuania, Poland, Sweden and the United Kingdom.

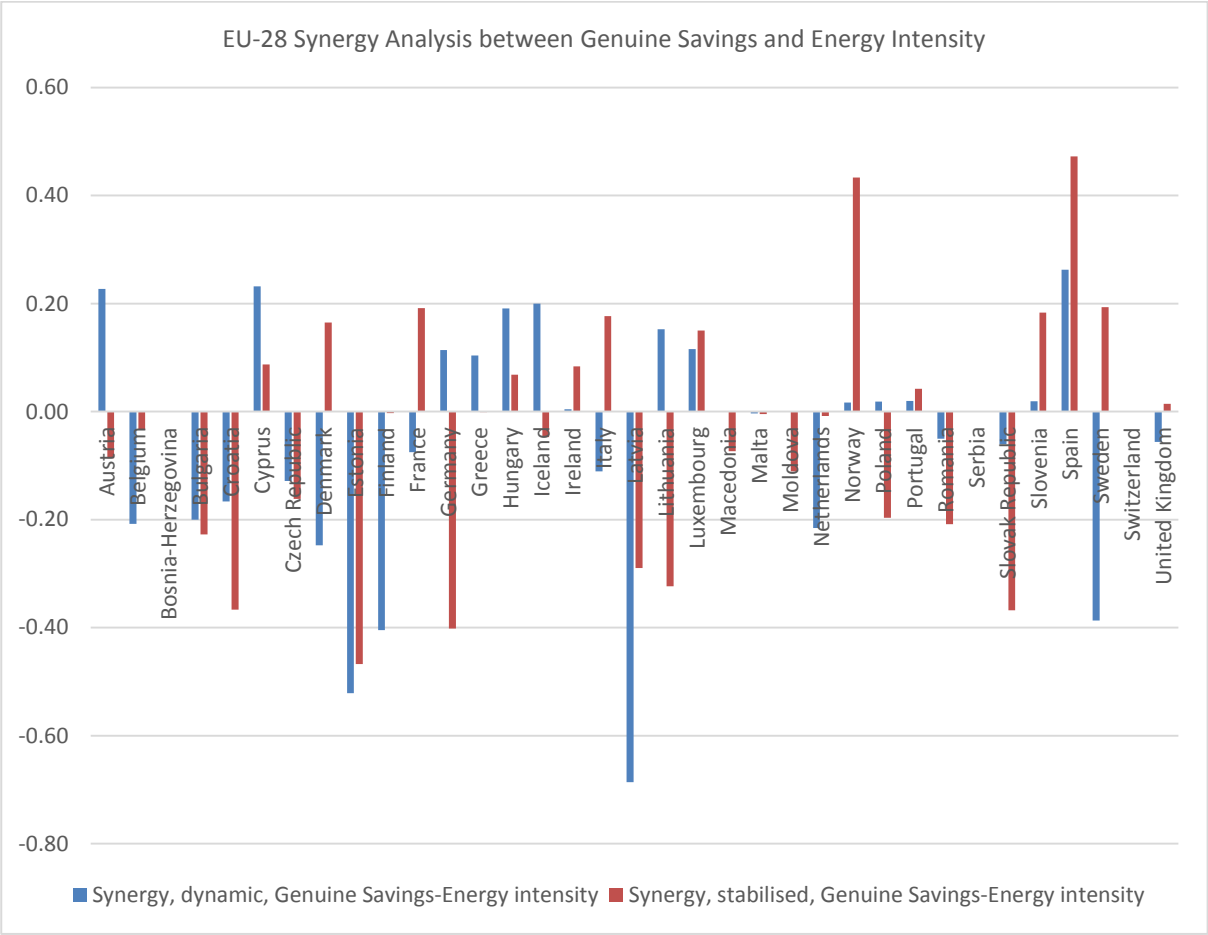


Figure 5.21. EU-28 Synergy Analysis between Genuine Savings and Energy Intensity.

5.9. Economic indicators and energy intensity

In Figure 5.22 we present synergy analysis between energy intensity and the indicator of gross domestic product (GDP). We can observe that in majority of EU-Member States synergies are negative, when we measure synergy by stabilised synergy method. Positive synergies can be discovered in most of EU-28 Member States, when we measure synergy by stabilised synergy method.

If we think normatively, in general terms, negative synergy between energy intensity and GDP is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region. From this normative perspective identified result of negative synergies in most EU-Member States is a desirable finding. In EU-28 region high GDP are not associated with a high energy intensity, which is positive finding.

We can conclude that gross domestic product (GDP) is the SSI variable that is linked more to negative synergy in the EU-28 Member States, but there some Member States, where synergy between GDP and energy intensity variable is very positive and strong. Positive synergy was highest in Iceland and Estonia, where positive synergy was almost +0.40 (stabilised synergy).

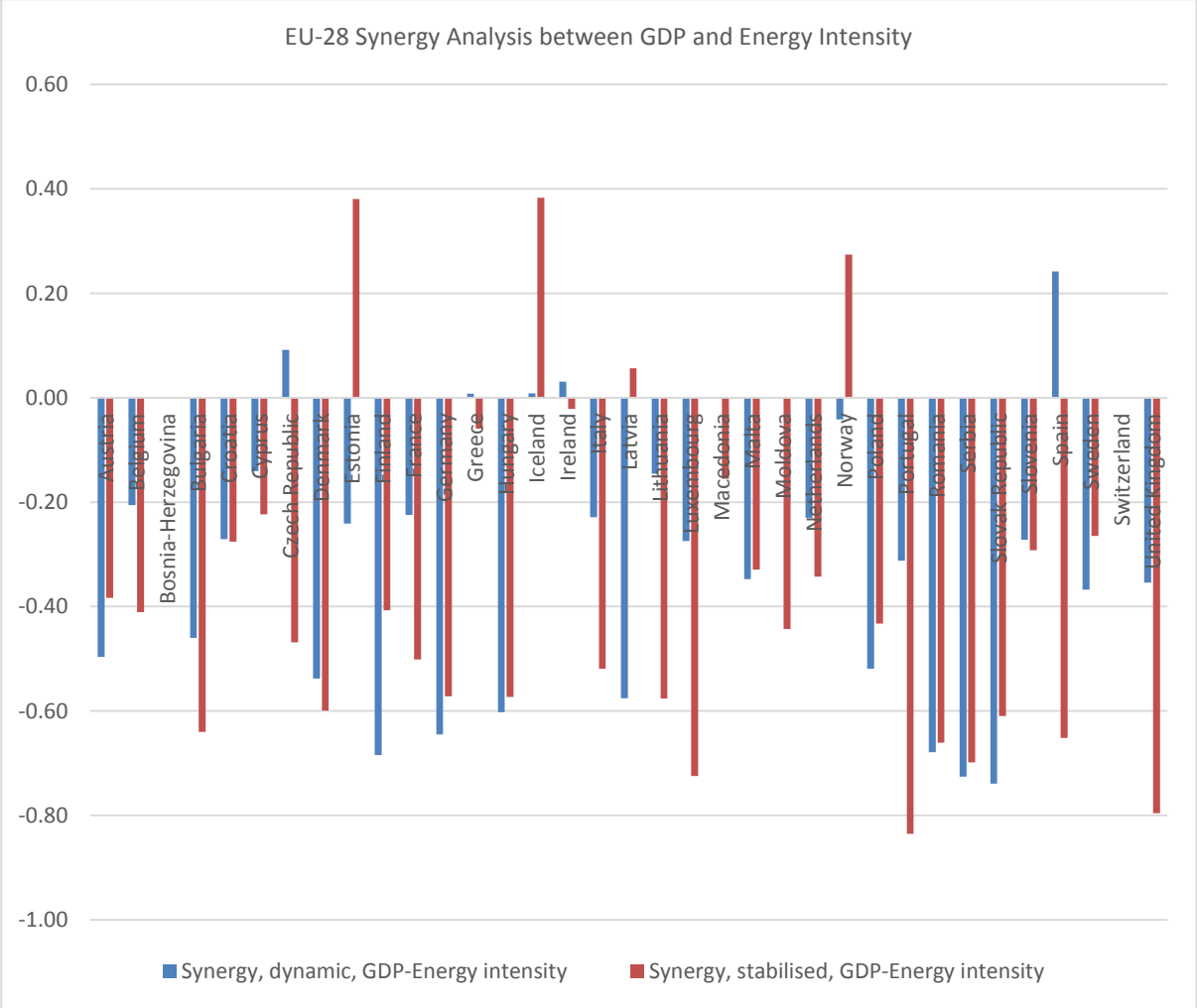


Figure 5.22. EU-28 Synergy Analysis between GDP and Energy Intensity.

In Figure 5.23 we present synergy analysis between energy intensity and the indicator of employment. We can observe that in majority of EU-Member States (15 Member States) synergies are positive, when we measure synergy by stabilised synergy method. Positive synergies can be discovered in 18 EU-Member States, when we measure synergy by stabilised synergy method.

If we think normatively, negative synergy between energy intensity and employment is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region. From this normative perspective identified result of positive synergies in majority EU-Member States is not a desirable discovery. However, in many EU-Member States (18 EU-28 Member States) synergy between employment and energy intensity is positive, which is quite a problematic energy policy issue in the EU-28 region, because job creation has been one of three pillars of European economic policy.

We can conclude that employment is the SSI variable that is linked more to positive synergy in the EU-28 Member States, but there are many Member States, where synergy between employment and energy

intensity variable is positive creating counterfactual results. The most negative synergy was identified in Italy (almost -0.30, stabilised synergy), Portugal (-0.30, stabilised synergy) and in the United Kingdom (-0.40, stabilised synergy). Positive synergy was highest in Austria, where positive synergy was about +0.70.

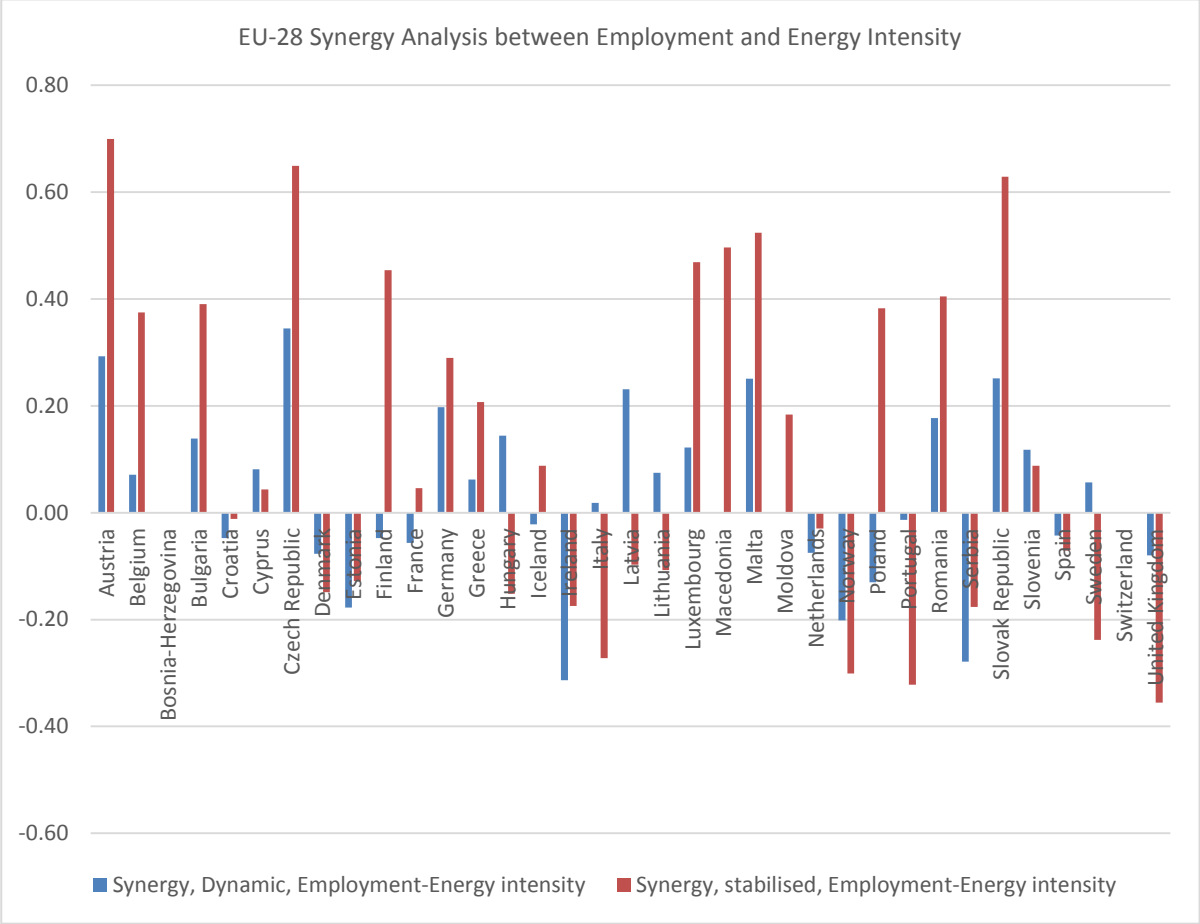


Figure 5.23. EU-28 Synergy Analysis between Employment and Energy Intensity.

In Figure 5.24 we present synergy analysis between energy intensity and the indicator of public debt. We can observe that in majority of EU-Member States (18 Member States) synergies are slightly negative, when we measure synergy by stabilised synergy method. Positive synergies can be discovered in other EU-Member States, when we measure synergy by stabilised synergy method. In many cased border-line of negative or positive synergy is not very clear and different ways (dynamic or stabilised synergy measurement) to measure synergy lead to opposite results (Austria, Finland, Iceland and Romania).

If we think normatively, negative synergy between energy intensity and public debt is desirable synergy direction and positive synergy is less desirable synergy direction in the EU-28 region in this evaluation case. From this normative perspective identified result of negative synergies in majority EU-Member States is a desirable empirical finding from sustainability perspective. However, in many EU-Member States (10 EU-28 Member States) synergy between employment and energy intensity is clearly positive, which is a problematic policy issue in the EU-28 region.

We can conclude that public is the SSI variable that is linked more to negative synergy in the EU-28 Member States, but there are quite many Member States, where synergy between public debt and energy intensity variable is positive. The most negative synergy was identified in Italy and Poland (over -0,60). Positive synergy was highest in Bulgaria and Serbia, where positive synergy was almost +0.40.

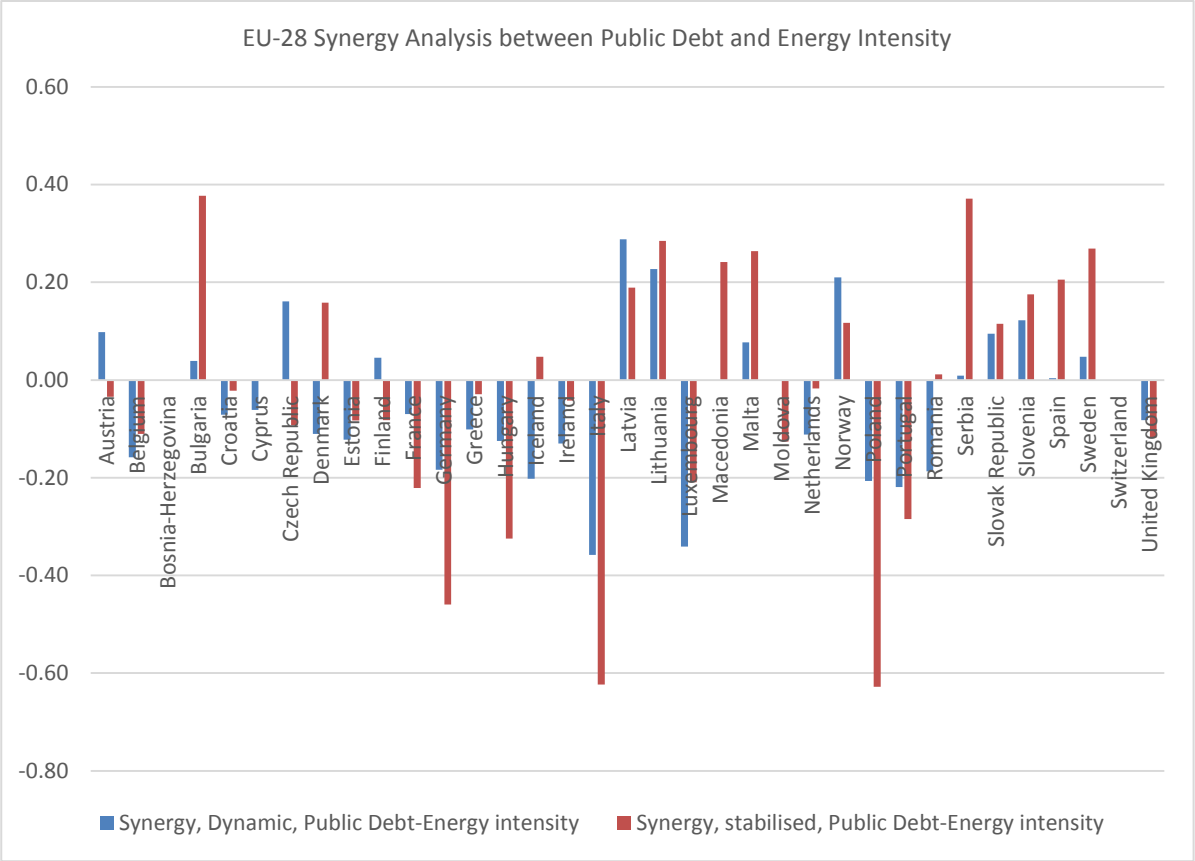


Figure 5.24. EU-28 Synergy Analysis between Public Debt and Energy Intensity.

Now we have reported all synergy analyses between energy intensity and SSI index variables. The results and findings, with regard to the synergy analyses, reveal that, in the EU-28 Member States there are still needs of tailored sustainability policy integration in the EU-28 area. The general positive finding was the fact that the direction of synergy between energy intensity and SSI indicators was right in many sustainability policy areas in the EU-28 Member States.

6. Summary and conclusions

Policymakers, and institutions like European Commission, European Parliament and governments in the individual Member States need to be guided not by faith, but by evidence of what has worked.

This deliverable includes many interesting empirical results and findings, which have now been reported in full scale in our EU synergy and trade-off analysis report. EUFORIE aims to analyse European futures for energy efficiency. This report provides a lot of new information about relevant trends of energy efficiency in the EU-28 Member States.

This large empirical and explorative evaluation study is based on new methodology of synergy analysis. Comparative regional analyses and policy relevant observations were delivered for all 28 EU Member States.

In Table 5.1 we can present our summary of results of synergy and trade-off analyses between energy-related indicators and key indicators (value added, population, and urban population) for the EU-28 Member States.

Table 5.1. Summary of synergy and trade-off analyses of energy-related indicators (energy intensity, energy consumption, electricity consumption, primary energy intensity, and carbon intensity) and selected key indicators (value added, population and urban population) for the EU-28 Member States.

Synergy analysis	**Direction of synergy between variables**	**Trade-off analysis**	**Exceptions among EU-28 Member States**
Energy Intensity and Value Added	Negative in 26 EU-28 Member States	The higher is value-added, the lower is energy intensity.	Luxembourg and Austria.
Energy Intensity and Population	Majority of EU-28 Member States had negative synergies (18 Member States). 9 EU-Member States had positive synergies. One country, Portugal had almost zero level synergy.	The lower is population, the higher is energy intensity.	No clear exceptions.
Energy intensity and urban population	Majority of EU-28 Member States had negative synergies (21 Member States). One country, Czech Republic had almost zero level synergy.	The lower is urban population, the higher is energy intensity.	Seven EU- Member States had positive synergies.
Energy consumption per capita and value added	Majority of EU-28 Member States had negative synergies (26 Member States).	The higher is value-added, the lower is energy consumption per capita.	Luxembourg and Austria.
Energy consumption and population	Majority of EU-28 Member States had negative synergies (17 Member States). 11 EU-Member States had positive synergies. Slovakia had almost zero level synergy.	The higher is population, the lower is energy consumption per capita.	No clear exceptions.
Energy consumption and urban population	Majority of EU-28 Member States had negative synergies (21 Member States). Seven EU-Member States had positive synergies.	The higher is urban population, the lower is energy consumption per capita.	No clear exceptions.
Final electricity consumption per capita and value added	Majority of EU-28 Member States had negative synergies (26 Member States). Two EU-Member States had positive synergies.	The higher is value added, the lower is final electricity consumption per capita	Luxembourg and Austria.

Final electricity consumption per capita and population	Majority of EU-28 Member States had negative synergies (18 Member States). In ten EU-Member States is was positive.	The higher is population, the lower is final electricity consumption per capita.	No clear exceptions.
Final electricity consumption per capita and urban population	Majority of EU-28 Member States had negative synergies (21 Member States). In seven EU-Member States is was positive.	The higher is urban population, the lower is final electricity consumption per capita.	No clear exceptions.
Primary energy intensity and value added	Majority of EU-28 Member States had negative synergies (26 Member States). In two EU-Member States is was positive.	The higher is value added, the lower is primary energy intensity.	Luxembourg and Austria.
Primary energy intensity and population	Majority of EU-28 Member States had negative synergies (21 Member States). In nine EU-Member States is was positive.	The higher is population, the lower is primary energy intensity.	No clear exceptions.
Primary energy intensity and urban population	Majority of EU-28 Member States had negative synergies (21 Member States). In nine EU-Member States is was positive. In Czech Republic it was almost zero.	The higher is urban population, the lower is primary energy intensity.	No clear exceptions.
Carbon intensity and value added	Majority of EU-28 Member States had negative synergies (22 Member States). In four EU-Member States is was positive. In Malta and Hungary it was zero.	The higher is value added, the lower is carbon intensity.	Czech Republic, Latvia, Luxembourg and Hungary.
Carbon intensity and population	Majority of EU-28 Member States had negative synergies (15 Member States). In eleven EU-Member States is was positive. In Malta it was zero.	The higher is population, the lower is carbon intensity.	Bulgaria and Romania had very positive synergy.
Carbon intensity and urban population	Majority of EU-28 Member States had negative synergies (21 Member States). In seven EU-Member States is was positive. In Malta it was zero.	The higher is urban population, the lower is carbon intensity.	Bulgaria, Estonia and Romania had very positive synergy. Belgium, Poland and Cyprus had very negative synergy.

In Table 5.2 we can present our summary of results of synergy analyses between energy intensity and the 21 Sustainable Society Index (SSI) indicators for the EU-28 region.

Table 5.2. Summary of synergy: Energy intensity and Sustainable Society Indicators for EU-28 Member States.

Synergy analysis	**Direction of synergy between variables**	**Policy harmosation field**	**Special comments**
Energy Intensity and Sufficient Food	Both positive and negative synergies identified	Basic needs	Sustainability problems in some EU-Member States
Energy Intensity and Sufficient Drink	Both positive and negative synergies identified	Basic needs	Sustainability problems in some EU-Member States
Energy Intensity and Safe Sanitation	Both positive and negative synergies identified	Basic needs	Sustainability problems in some EU-Member States
Energy Intensity and Education	Negative synergy in majority of EU28-Member States	Health	France and Sweden are clearly exceptions (strongest positive synergies in relative terms).

Energy Intensity and Healthy Life	Negative synergy in majority of EU28-Member States	Health	Estonia and Finland are clearly exceptions (strongest positive synergies in relative terms).
Energy Intensity and Gender Equality	Negative synergy in majority of EU28-Member States	Health	France and Finland are clearly exceptions (strongest positive synergies in relative terms).
Energy Intensity and Income Distribution	Positive synergy in majority of EU28-Member States	Personal and social development	France and Slovakia are clearly exceptions (strongest positive synergies in relative terms).
Population Growth	Both positive and negative synergies identified	Personal and social development	Lithuania and Estonia are clearly exceptions (strongest negative synergies in relative terms). Ireland and Cyprus are clearly exceptions (strongest positive synergies in relative terms.
Energy Intensity and Good Governance	Positive synergy in majority of EU28-Member States	Personal and social development	Cyprus is clearly an exception (strongest negative synergy in relative terms). Hungary, Malta and the Netherlands are clearly exceptions (strongest positive synergies in relative terms.
Energy Intensity and Biodiversity of Forest Area	Both positive and negative synergies identified	Natural resources	Ireland is clearly an exception (strongest positive synergy in relative terms. Poland is clearly an exception (strongest negative synergy in relative terms.
Energy Intensity and Biodiversity, Protected Ares	Positive synergy in majority of EU28-Member States	Natural resources	Greece is clearly an exception (strongest positive synergy in relative terms. Portugal is clearly an exception (strongest negative synergy in relative terms.
Energy Intensity and Renewable Water	Positive synergy in majority of EU28-Member States	Natural resources	Negative synergies were found in Estonia, Finland and Greece.
Energy Intensity and Consumption	Both positive and negative synergies identified	Climate and energy	Both Romania and Hungary have highest positive synergies. Strong negative synergies were observed in Cyprus, Lithuania and Poland.
Energy Intensity and Energy Use	Positive synergy in majority of EU28-Member States	Climate and energy	Ireland, Portugal and Slovakia have highest positive synergies. Strong negative synergy was observed in Finland.
Energy Intensity and Energy Savings	Positive synergy in majority of EU28-Member States	Climate and energy	Many EU-Member States have negative synergies
Energy Intensity and Greenhouse Gases	Positive synergy in majority of EU28-Member States	Climate and energy	Greece, Lithuania and Finland have negative synergies.
Energy Intensity and Renewable Energy	Negative synergy in majority of EU28-Member States	Climate and energy	Portugal shows very positive synergy. Very strong negative synergies were observed in Lithuania, Luxembourg and Romania.
Energy Intensity and Organic Framing	Negative synergy in majority of EU28-Member States	Transition	Estonia, Greece, Latvia and Finland have positive synergies.
Energy Intensity and Genuine Savings	Positive synergy in majority of EU28-Member States	Transition	Portugal is an exception with almost +0.8 synergy. Strong negative synergies have Germany, Estonia, Lithuania, Sweden and Finland.

Energy Intensity and Gross Domestic Product	Negative synergy in majority of EU28-Member States	Economy	Ireland is an exception with strong positive synergy (over +0.5). Positive synergies were observed in Spain, Croatia, Italy, Luxembourg and Finland.
Energy Intensity and Employment	Negative synergy in narrow majority of EU28-Member States	Economy	France is an exception. It has -0.5 negative synergy. Austria is also an exception. It has almost +0.5 positive synergy.
Energy Intensity and Public Debt	Negative synergy in majority of EU28-Member States	Economy	Many EU-Member States have positive synergies

These reported synergy analyses above reveal that in many EU member there are needs to correct incentive schemes of energy policy. The European Union also has knowledge based reasons to pay special attention to the following energy policy issues: (1) Improving energy efficiency in Central and Eastern European Member States, (2) improving energy efficiency in the context of fast urbanization in European cities and metropolitan regions and (3) paying a special attention to energy and sustainability policy harmonisation in the EU Member States.

It is very important to critically evaluate the integration of sustainable development policy with energy savings and efficiency solutions. In some EU Member States, there are still some problems, as shown above, in the integration of these policy arenas. The results of this report reveal that the potential synergy differs from country to country and also overt time. The EUFORIE report gives us very detailed information about these differences, but also vital information about similarities. This report reveal also interesting linkages of sustainability policy. In this EUFORIE report we limited our synergy analyses on looking pairwise synergy/trade-off analysis of various key SSI and energy variables, which are relevant for energy saving/energy efficiency policies in the EU-28 area.

The synergy method serves us for envisaging the linkages among policy sectors and track the sustainable development in more integrated approach to develop coherent energy and sustainability policies in the EU-28 region. Also transition paths towards better sustainability can be analysed by such synergy analyses.

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Annex 1. Annual synergy analyses between energy intensity and the 21 indicators of the Sustainable Society Index

Austria

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	87.8	89.4	90.5	91.3	93.7	90.55
Energy Intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Education-Energy intensity		-0.35	0.51	-0.13	-0.91	-0.22
Stabilised synergy, Education-Energy intensity		-0.35	-0.99	-0.42	-0.57	-0.58
Healthy life years	71.4	72.2	72.8	72.1	72.8	72.26
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Healthy Life-Energy intensity		-0.21	0.32	0.14	-0.44	-0.05
Stabilised synergy, Healthy Life-Energy intensity		-0.21	-0.62	-0.10	-0.17	-0.28
Gender equality (gender Gap Index)	0.70	0.72	0.71	0.72	0.74	0.72
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Gender Equality-Energy intensity		-0.45	-0.36	-0.16	-0.63	-0.40
Stabilised synergy, Gender Equality-Energy intensity		-0.45	-0.49	-0.27	-0.55	-0.44
Income distribution (ratio value)	7.6	6.9	7.0	5.5	7.7	6.93
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Income Distribution-Energy intensity		0.58	0.43	0.32	-0.06	0.32
Stabilised synergy, Income Distribution-Energy intensity		0.58	0.37	0.35	-0.07	0.30
Population growth (over 5 years, %)	2.70	2.81	2.65	1.97	1.56	2.34
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Population Growth-Energy intensity		-0.80	-0.41	0.26	0.11	-0.21
Stabilised synergy, Population Growth-Energy intensity		-0.80	0.55	0.35	0.28	0.10
Good governance (total score World Bank)	9.80	9.89	9.75	9.38	9.05	9.57
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Good Governance-Energy intensity		-0.17	-0.62	0.56	0.68	0.11
Stabilised synergy, Good Governance-Energy intensity		-0.17	0.18	0.45	0.65	0.28
Biodiversity of forest area (change over 10 years, %)	0.01	0.01	0.01	0.01	0.01	0.01
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.79	-0.58	0.65	-0.25	0.15

Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.79	0.38	0.79	0.99	0.74
Biodiversity (protected areas, %)	22.92	22.92	22.93	22.93	22.93	22.93
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.01	0.00	0.00	0.00
Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	-0.01	0.00	0.00	0.00
Renewable water resources (%)	4.7	4.4	4.4	4.4	3.1	4.21
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Renewable Water Resources-Energy intensity		0.85	0.00	0.00	0.08	0.23
Stabilised synergy, Renewable Water Resources-Energy intensity		0.85	0.49	0.66	0.35	0.59
Consumption (global hectares)	1.81	1.91	2.13	2.24	2.40	2.10
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Consumption-Energy intensity		-0.93	0.21	-0.78	-0.33	-0.46
Stabilised synergy, Consumption-Energy intensity		-0.93	-0.18	-0.41	-0.36	-0.47
Energy use (toe/capita)	4.0	4.1	4.0	4.1	3.9	4.03
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Energy Use-Energy intensity		-0.43	-0.53	-0.15	0.64	-0.12
Stabilised synergy, Energy Use-Energy intensity		-0.43	-0.33	-0.21	0.15	-0.21
Energy savings (change over 4 years, %)	-0.12	-0.09	-0.01	0.00	0.03	-0.04
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Energy Savings-Energy intensity		0.18	-0.03	0.05	0.00	0.05
Stabilised synergy, Energy Savings-Energy intensity		0.18	0.03	0.09	0.10	0.10
Greenhouse gas emissions (ton CO_2 per capita)	9.07	8.77	8.51	8.30	7.68	8.47
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Green House Gases-Energy intensity		0.64	-0.82	0.37	0.32	0.13
Stabilised synergy, Greenhouse Gases-Energy intensity		0.64	0.50	0.89	0.76	0.70
Organic farming (%)	21.0	22.1	25.3	27.4	30.5	25.25
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Organic Farming-Energy intensity		-0.97	0.16	-0.81	-0.21	-0.45
Stabilised synergy, Organic Farming-Energy intensity		-0.97	-0.15	-0.32	-0.26	-0.42
Renewable energy (% of total)	16.69	17.06	17.47	19.69	19.70	18.12
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Renewable Energy-Energy intensity		-0.42	0.99	-0.53	-0.02	0.01
Stabilised synergy, Renewable Energy-Energy intensity		-0.42	-0.66	-0.53	-0.65	-0.56
Genuine savings (%)	14.6	17.0	17.2	15.6	13.1	15.51
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Genuine Savings-Energy intensity		-0.32	0.36	0.72	0.15	0.23
Stabilised synergy, Genuine Savings-Energy intensity		-0.32	-0.17	-0.70	0.85	-0.09
GDP (US $)	34128	38621	38621	41822	42597	39157.84
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, GDP-Energy intensity		-0.40	0.00	-0.81	-0.77	-0.50
Stabilised synergy, GDP-Energy intensity		-0.40	-0.23	-0.42	-0.47	-0.38
Employment rate (%)	4.9	4.7	3.8	4.4	4.3	4.42
Energy intensity	120.3	113.9	116.6	108.8	106.2	113.16
Dynamic synergy, Employment-Energy intensity		0.77	-0.12	-0.42	0.95	0.29
Stabilised synergy, Employment-Energy intensity		0.77	0.14	0.94	0.96	0.70

Public debt (% of GDP)	65.4	62.3	63.8	72.3	74.1	67.57
Energy intensity	120.3	113.9	116.6	108.8	106.2	111.38
Dynamic synergy, Public Debt-Energy intensity		0.88	0.97	-0.51	-0.95	0.10
Stabilised synergy, Public Debt-Energy intensity		0.88	0.77	-0.91	-0.88	-0.03

Belgium

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	95.2	95.9	96.0	96.8	95.3	95.84
Energy Intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Education-Energy intensity		-0.40	0.07	-0.06	0.41	0.01
Stabilised synergy, Education-Energy intensity		-0.40	0.95	-0.14	-0.01	0.10
Healthy life years	71.1	72.2	72.8	72.2	72.8	72.22
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Healthy Life-Energy intensity		-0.88	0.33	0.07	-0.23	-0.17
Stabilised synergy, Healthy Life-Energy intensity		-0.88	0.35	-0.13	-0.16	-0.21
Gender equality (gender Gap Index)	0.71	0.72	0.75	0.75	0.77	0.74
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Gender Equality-Energy intensity		-0.68	0.54	-0.02	-0.53	-0.17
Stabilised synergy, Gender Equality-Energy intensity		-0.68	0.14	-0.55	-0.57	-0.42
Income distribution (ratio value)	7.8	8.2	8.3	5.9	9.3	7.91
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Income Distribution-Energy intensity		-0.34	0.30	0.44	-0.07	0.08
Stabilised synergy, Income Distribution-Energy intensity		-0.34	0.14	0.49	-0.76	-0.12
Population growth (over 5 years, %)	2.22	2.54	3.22	4.21	4.73	3.38
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Population Growth-Energy intensity		-0.12	0.10	-0.40	-0.31	-0.18
Stabilised synergy, Population Growth-Energy intensity		-0.12	0.02	-0.13	-0.13	-0.09
Good governance (total score World Bank)	8.07	8.23	7.56	8.02	8.01	7.98
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Good Governance-Energy intensity		-0.88	-0.32	-0.49	0.03	-0.42
Stabilised synergy, Good Governance-Energy intensity		-0.88	-0.13	0.05	0.05	-0.23
Biodiversity of forest area (change over 10 years, %)	0.16	0.17	0.17	0.00	0.00	0.10
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.41	0.27	0.13	0.00	0.00
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.41	0.58	0.12	0.15	0.11
Biodiversity (protected areas, %)	13.12	13.14	13.16	13.16	13.16	13.15
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.10	0.06	0.00	0.00	-0.01

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.10	0.38	-0.03	-0.02	0.06
Renewable water resources (%)	41.2	4.4	4.4	4.4	3.1	11.51
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Renewable Water Resources-Energy intensity		0.02	0.00	0.00	0.13	0.04
Stabilised synergy, Renewable Water Resources-Energy intensity		0.02	-0.01	0.13	0.16	0.08
Consumption (global hectares)	4.01	3.98	4.01	3.85	4.40	4.05
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Consumption-Energy intensity		0.41	0.28	0.31	-0.27	0.18
Stabilised synergy, Consumption-Energy intensity		0.41	0.01	0.33	-0.65	0.02
Energy use (toe/capita)	5.7	5.5	5.5	5.6	5.1	5.46
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Energy Use-Energy intensity		0.71	-0.22	-0.11	0.42	0.20
Stabilised synergy, Energy Use-Energy intensity		0.71	-0.28	0.15	0.70	0.32
Energy savings (change over 4 years, %)	0.01	-0.01	0.03	-0.01	0.08	0.02
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Energy Savings-Energy intensity		0.01	-0.01	0.10	0.00	0.03
Stabilised synergy, Energy Savings-Energy intensity		0.01	0.00	0.07	-0.02	0.01
Greenhouse gas emissions (ton CO_2 per capita)	10.81	10.47	10.42	10.07	9.46	10.24
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Green House Gases-Energy intensity		0.55	-0.18	0.27	0.63	0.32
Stabilised synergy, Greenhouse Gases-Energy intensity		0.55	-0.23	0.59	0.83	0.43
Organic farming (%)	2.0	2.3	3.1	4.2	6.0	3.52
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Organic Farming-Energy intensity		-0.09	0.08	-0.34	-0.09	-0.11
Stabilised synergy, Organic Farming-Energy intensity		-0.09	0.01	-0.10	-0.07	-0.06
Renewable energy (% of total)	1.66	2.37	2.60	3.57	4.36	2.91
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Renewable Energy-Energy intensity		-0.04	0.28	-0.33	-0.17	-0.07
Stabilised synergy, Renewable Energy-Energy intensity		-0.04	0.01	-0.10	-0.09	-0.05
Genuine savings (%)	14.5	15.7	13.8	14.6	7.9	13.27
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Genuine Savings-Energy intensity		-0.21	-0.22	-0.49	0.08	-0.21
Stabilised synergy, Genuine Savings-Energy intensity		-0.21	-0.17	-0.08	0.33	-0.03
GDP (US $)	32311	35798	35702	37737	37881	35885.70
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, GDP-Energy intensity		-0.16	-0.10	-0.46	-0.10	-0.21
Stabilised synergy, GDP-Energy intensity		-0.16	0.08	-0.69	-0.87	-0.41
Employment rate (%)	8.4	8.2	7.0	8.3	7.5	7.88
Energy intensity	166.1	163.2	167.5	146.8	141.2	156.96
Dynamic synergy, Employment-Energy intensity		0.73	-0.18	-0.67	0.40	0.07
Stabilised synergy, Employment-Energy intensity		0.73	-0.05	0.10	0.71	0.37
Public debt (% of GDP)	94.0	88.0	89.2	95.6	99.8	93.30
Energy intensity	166.1	163.2	167.5	146.8	141.2	154.68
Dynamic synergy, Public Debt-Energy intensity		0.27	0.54	-0.58	-0.86	-0.16
Stabilised synergy, Public Debt-Energy intensity		0.27	-0.16	-0.14	-0.41	-0.11

Bulgaria

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	11.0	8.0	10.0	10.0	9.0	9.60
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Sufficient Food-Energy intensity		0.52	-0.35	0.00	0.48	0.16
Stabilised synergy, Sufficient Food-Energy intensity		0.52	0.42	0.43	0.73	0.52
Sufficient to drink (%)	99.6	99.6	99.5	99.5	99.5	99.54
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.01	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	76.1	76.6	77.8	79.9	82.3	78.54
Energy Intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Education-Energy intensity		-0.04	-0.18	0.23	-0.63	-0.15
Stabilised synergy, Education-Energy intensity		-0.04	-0.10	-0.23	-0.32	-0.17
Healthy life years	64.8	65.3	65.6	66.6	67.5	65.97
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Healthy Life-Energy intensity		-0.06	-0.05	0.40	-0.26	0.01
Stabilised synergy, Healthy Life-Energy intensity		-0.06	-0.06	-0.13	-0.16	-0.10
Gender equality (gender Gap Index)	0.69	0.71	0.70	0.70	0.71	0.70
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Gender Equality-Energy intensity		-0.21	0.15	0.10	-0.33	-0.07
Stabilised synergy, Gender Equality-Energy intensity		-0.21	-0.08	-0.08	-0.13	-0.13
Income distribution (ratio value)	9.9	7.0	6.8	9.7	7.3	8.14
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Income Distribution-Energy intensity		0.48	0.33	0.01	0.20	0.26
Stabilised synergy, Income Distribution-Energy intensity		0.48	0.69	0.12	0.96	0.56
Population growth (over 5 years, %)	-5.27	-4.01	-4.23	-4.45	-3.17	-4.22
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Population Growth-Energy intensity		0.59	-0.65	0.12	0.17	0.06
Stabilised synergy, Population Growth-Energy intensity		0.59	0.91	0.73	0.63	0.72
Good governance (total score World Bank)	1.28	1.42	1.54	1.21	1.04	1.30
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Good Governance-Energy intensity		-0.77	-0.95	-0.03	0.33	-0.36
Stabilised synergy, Good Governance-Energy intensity		-0.77	-0.93	0.25	0.76	-0.17
Biodiversity of forest area (change over 10 years, %)	0.06	0.09	0.11	0.14	0.14	0.11
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.35	-0.30	0.03	-0.04	-0.16
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.35	-0.26	-0.17	-0.20	-0.25
Biodiversity (protected areas, %)	8.74	8.76	8.85	8.85	8.86	8.81
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.02	-0.12	0.00	-0.02	-0.04

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.02	-0.06	-0.06	-0.06	-0.05
Renewable water resources (%)	28.8	4.4	4.4	4.4	3.1	9.03
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Renewable Water Resources-Energy intensity		0.17	0.00	0.00	0.17	0.08
Stabilised synergy, Renewable Water Resources-Energy intensity		0.17	0.26	0.25	0.28	0.24
Consumption (global hectares)	1.35	1.47	1.29	1.88	1.40	1.48
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Consumption-Energy intensity		-0.59	0.74	0.01	0.19	0.09
Stabilised synergy, Consumption-Energy intensity		-0.59	0.20	-0.54	-0.14	-0.27
Energy use (toe/capita)	2.4	2.7	2.6	2.4	2.5	2.53
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Energy Use-Energy intensity		-0.69	0.06	-0.07	-0.78	-0.37
Stabilised synergy, Energy Use-Energy intensity		-0.69	-0.43	0.00	-0.15	-0.32
Energy savings (change over 4 years, %)	-0.06	-0.11	-0.09	0.09	0.05	-0.02
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Energy Savings-Energy intensity		-0.16	0.59	0.00	0.11	0.13
Stabilised synergy, Energy Savings-Energy intensity		-0.16	-0.37	0.08	0.13	-0.08
Greenhouse gas emissions (ton CO_2 per capita)	5.98	6.18	6.49	5.98	6.06	6.14
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Green House Gases-Energy intensity		-0.23	-0.59	-0.08	-0.29	-0.29
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.23	-0.39	0.00	-0.05	-0.17
Organic farming (%)	5.5	5.6	5.4	8.2	8.9	6.70
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Organic Farming-Energy intensity		-0.09	0.47	0.01	-0.58	-0.05
Stabilised synergy, Organic Farming-Energy intensity		-0.09	0.13	-0.44	-0.41	-0.20
Renewable energy (% of total)	0.05	0.45	0.55	0.84	1.28	0.63
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Renewable Energy-Energy intensity		-0.02	-0.39	0.01	-0.09	-0.12
Stabilised synergy, Renewable Energy-Energy intensity		-0.02	-0.02	-0.01	-0.01	-0.01
Genuine savings (%)	2.4	-5.7	3.1	10.4	10.9	4.23
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Genuine Savings-Energy intensity		0.04	0.06	0.00	-0.90	-0.20
Stabilised synergy, Genuine Savings-Energy intensity		0.04	-0.81	-0.06	-0.07	-0.23
GDP (US $)	9941	12096	12668	13597	14499	12560.20
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, GDP-Energy intensity		-0.65	-0.54	0.09	-0.73	-0.46
Stabilised synergy, GDP-Energy intensity		-0.65	-0.79	-0.57	-0.54	-0.64
Employment rate (%)	12.0	8.9	5.6	10.2	12.3	9.80
Energy intensity	593.2	509.2	464.9	467.8	445.2	496.06
Dynamic synergy, Employment-Energy intensity		0.55	0.23	0.01	-0.23	0.14
Stabilised synergy, Employment-Energy intensity		0.55	0.41	0.71	-0.10	0.39
Public debt (% of GDP)	39.1	23.4	15.5	14.9	17.6	22.10
Energy intensity	593.2	509.2	464.9	467.8	445.2	471.78
Dynamic synergy, Public Debt-Energy intensity		0.35	0.26	-0.19	-0.27	0.04
Stabilised synergy, Public Debt-Energy intensity		0.35	0.36	0.34	0.45	0.38

Croatia

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	7.0	7.0	5.0	4.0	4.0	5.40
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Sufficient Food-Energy intensity		0.00	-0.18	0.18	0.00	0.00
Stabilised synergy, Sufficient Food-Energy intensity		0.00	0.02	0.10	0.24	0.09
Sufficient to drink (%)	98.5	98.5	98.5	98.5	98.6	98.52
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	-0.02	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	-0.01	0.00
Safe sanitation (%)	98.2	98.2	98.2	98.2	98.2	98.20
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	74.0	78.5	80.0	81.8	84.8	79.82
Energy Intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Education-Energy intensity		-0.89	0.38	-0.62	-0.60	-0.44
Stabilised synergy, Education-Energy intensity		-0.89	-0.08	-0.40	-0.69	-0.52
Healthy life years	66.6	67.4	67.5	68.4	69.1	67.81
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Healthy Life-Energy intensity		-0.22	0.03	-0.39	-0.16	-0.19
Stabilised synergy, Healthy Life-Energy intensity		-0.22	-0.50	-0.65	-0.37	-0.43
Gender equality (gender Gap Index)	0.71	0.70	0.69	0.70	0.71	0.70
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Gender Equality-Energy intensity		0.46	-0.08	-0.27	-0.15	-0.01
Stabilised synergy, Gender Equality-Energy intensity		0.46	0.23	0.45	0.10	0.31
Income distribution (ratio value)	7.3	7.3	6.4	9.4	9.0	7.88
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Income Distribution-Energy intensity		0.00	-0.42	-0.08	0.63	0.03
Stabilised synergy, Income Distribution-Energy intensity		0.00	0.05	-0.15	-0.43	-0.13
Population growth (over 5 years, %)	0.36	0.00	-0.12	-0.55	-3.80	-0.82
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Population Growth-Energy intensity		0.05	#DIV/0!	-0.01	-0.01	#DIV/0!
Stabilised synergy, Population Growth-Energy intensity		0.05	0.00	0.02	0.01	0.02
Good governance (total score World Bank)	1.23	2.00	2.28	2.46	2.36	2.07
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Good Governance-Energy intensity		-0.09	0.37	-0.46	0.63	0.11
Stabilised synergy, Good Governance-Energy intensity		-0.09	-0.01	-0.04	-0.11	-0.06
Biodiversity of forest area (change over 10 years, %)	0.01	0.01	0.01	0.01	0.01	0.01
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.07	-0.03	0.07	0.06	0.01
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.07	-0.37	0.00	0.04	-0.10
Biodiversity (protected areas, %)	7.13	8.06	9.55	9.55	9.55	8.77
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.42	0.27	0.00	0.00	-0.04

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.42	-0.02	-0.13	-0.30	-0.22
Renewable water resources (%)	0.6	4.4	4.4	4.4	3.1	3.39
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.01	0.00	0.00	0.21	0.05
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.01	0.00	-0.01	-0.02	-0.01
Consumption (global hectares)	1.77	1.96	1.87	2.30	2.10	2.00
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Consumption-Energy intensity		-0.52	-0.87	-0.16	0.69	-0.21
Stabilised synergy, Consumption-Energy intensity		-0.52	-0.12	-0.14	-0.54	-0.33
Energy use (toe/capita)	2.0	2.0	2.0	1.9	1.9	1.97
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Energy Use-Energy intensity		-0.24	0.34	0.67	0.71	0.37
Stabilised synergy, Energy Use-Energy intensity		-0.24	-0.22	0.60	0.67	0.20
Energy savings (change over 4 years, %)	-0.13	-0.08	-0.03	0.04	0.09	-0.02
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Energy Savings-Energy intensity		0.16	-0.08	0.02	-0.04	0.01
Stabilised synergy, Energy Savings-Energy intensity		0.16	0.01	0.03	0.06	0.06
Greenhouse gas emissions (ton CO_2 per capita)	4.67	4.68	4.73	4.30	4.03	4.48
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Green House Gases-Energy intensity		-0.04	0.23	0.40	0.96	0.39
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.04	-0.49	0.55	0.74	0.19
Organic farming (%)	10.1	9.9	8.7	13.2	12.4	10.86
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Organic Farming-Energy intensity		0.44	-0.41	-0.07	0.95	0.23
Stabilised synergy, Organic Farming-Energy intensity		0.44	0.05	-0.14	-0.44	-0.02
Renewable energy (% of total)	0.26	0.63	0.78	1.80	2.41	1.17
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Renewable Energy-Energy intensity		-0.04	0.22	-0.03	-0.18	-0.01
Stabilised synergy, Renewable Energy-Energy intensity		-0.04	0.00	-0.01	-0.01	-0.02
Genuine savings (%)	8.8	9.2	11.3	12.7	9.3	10.27
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Genuine Savings-Energy intensity		-0.82	0.23	-0.30	0.23	-0.17
Stabilised synergy, Genuine Savings-Energy intensity		-0.82	-0.02	-0.10	-0.52	-0.37
GDP (US $)	15254	17888	17776	18192	18191	17460.17
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, GDP-Energy intensity		-0.32	-0.12	-0.64	0.00	-0.27
Stabilised synergy, GDP-Energy intensity		-0.32	-0.04	-0.22	-0.52	-0.28
Employment rate (%)	13.7	11.1	8.4	11.8	15.8	12.16
Energy intensity	210.9	199.4	209.5	201.9	189.6	202.26
Dynamic synergy, Employment-Energy intensity		0.29	-0.21	-0.09	-0.18	-0.05
Stabilised synergy, Employment-Energy intensity		0.29	0.02	0.31	-0.66	-0.01
Public debt (% of GDP)	42.5	35.4	29.3	42.6	53.7	40.71
Energy intensity	210.9	199.4	209.5	201.9	189.6	200.10
Dynamic synergy, Public Debt-Energy intensity		0.33	-0.29	-0.08	-0.23	-0.07
Stabilised synergy, Public Debt-Energy intensity		0.33	0.02	-0.05	-0.38	-0.02

Cyprus

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	6.0	4.0	3.0	1.0	1.0	3.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Sufficient Food-Energy intensity		-0.03	0.20	0.08	0.00	0.06
Stabilised synergy, Sufficient Food-Energy intensity		-0.03	0.08	0.11	0.16	0.08
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	78.5	77.6	81.3	86.0	78.4	80.37
Energy Intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Education-Energy intensity		-0.78	-0.98	-0.97	0.51	-0.56
Stabilised synergy, Education-Energy intensity		-0.78	-0.88	-0.99	0.01	-0.66
Healthy life years	67.6	67.6	68.2	70.3	70.7	68.86
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Healthy Life-Energy intensity		0.00	-0.18	-0.54	-0.12	-0.21
Stabilised synergy, Healthy Life-Energy intensity		0.00	-0.22	-0.42	-0.34	-0.24
Gender equality (gender Gap Index)	0.64	0.67	0.66	0.66	0.68	0.66
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Gender Equality-Energy intensity		0.23	0.16	0.20	-0.80	-0.05
Stabilised synergy, Gender Equality-Energy intensity		0.23	-0.81	-0.23	-0.43	-0.31
Income distribution (ratio value)	9.0	9.7	9.7	6.6	6.6	8.30
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Income Distribution-Energy intensity		0.12	0.00	0.17	0.00	0.07
Stabilised synergy, Income Distribution-Energy intensity		0.12	-0.52	0.35	0.50	0.11
Population growth (over 5 years, %)	9.47	9.03	7.91	6.89	6.20	7.90
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Population Growth-Energy intensity		-0.21	0.40	0.43	0.45	0.27
Stabilised synergy, Population Growth-Energy intensity		-0.21	0.25	0.34	0.39	0.19
Good governance (total score World Bank)	5.02	5.98	6.08	6.60	6.44	6.03
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Good Governance-Energy intensity		0.05	-0.34	-0.65	0.54	-0.10
Stabilised synergy, Good Governance-Energy intensity		0.05	-0.19	-0.30	-0.47	-0.23
Biodiversity of forest area (change over 10 years, %)	0.00	0.00	0.00	0.00	0.00	0.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.04	0.14	0.10	0.40	0.15
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.04	0.08	0.12	0.17	0.08
Biodiversity (protected areas, %)	4.54	4.54	4.54	4.54	4.54	4.54
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00
Renewable water resources (%)	19.9	4.4	4.4	4.4	3.1	7.25
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.01	0.00	0.00	0.16	0.04
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.01	0.05	0.12	0.16	0.08
Consumption (global hectares)	1.83	1.76	1.86	1.90	2.10	1.89
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Consumption-Energy intensity		-0.27	-0.85	-0.32	-0.42	-0.46
Stabilised synergy, Consumption-Energy intensity		-0.27	-0.51	-0.41	-0.90	-0.52
Energy use (toe/capita)	3.0	3.1	3.3	3.0	2.6	3.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Energy Use-Energy intensity		0.35	-0.68	0.53	0.33	0.13
Stabilised synergy, Energy Use-Energy intensity		0.35	-0.40	0.14	0.93	0.25
Energy savings (change over 4 years, %)	0.02	-0.02	-0.10	0.04	0.22	0.03
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Energy Savings-Energy intensity		0.00	-0.01	0.04	-0.01	0.00
Stabilised synergy, Energy Savings-Energy intensity		0.00	0.01	-0.16	-0.02	-0.04
Greenhouse gas emissions (ton CO_2 per capita)	9.54	9.49	9.69	8.79	7.50	9.00
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Green House Gases-Energy intensity		-0.57	-0.42	0.60	0.30	-0.02
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.57	-0.37	0.84	0.63	0.13
Organic farming (%)	2.4	2.4	3.7	4.3	5.8	3.73
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Organic Farming-Energy intensity		-0.06	-0.10	-0.32	-0.13	-0.15
Stabilised synergy, Organic Farming-Energy intensity		-0.06	-0.08	-0.12	-0.10	-0.09
Renewable energy (% of total)	1.12	1.59	1.59	2.45	2.69	1.89
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Renewable Energy-Energy intensity		0.02	0.00	-0.10	-0.46	-0.14
Stabilised synergy, Renewable Energy-Energy intensity		0.02	-0.10	-0.08	-0.10	-0.06
Genuine savings (%)	9.4	4.8	2.7	2.5	2.5	4.36
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Genuine Savings-Energy intensity		-0.02	0.11	0.83	0.00	0.23
Stabilised synergy, Genuine Savings-Energy intensity		-0.02	0.06	0.13	0.18	0.09
GDP (US $)	24706	27632	28355	29074	25265	27006.39
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, GDP-Energy intensity		0.08	-0.53	-0.46	0.34	-0.14
Stabilised synergy, GDP-Energy intensity		0.08	-0.27	-0.53	-0.17	-0.22
Employment rate (%)	4.3	4.5	3.6	6.3	11.8	6.10
Energy intensity	148.0	149.4	142.0	134.1	128.1	140.32
Dynamic synergy, Employment-Energy intensity		0.20	0.25	-0.07	-0.05	0.08
Stabilised synergy, Employment-Energy intensity		0.20	0.25	-0.20	-0.08	0.04
Public debt (% of GDP)	71.6	65.4	48.9	61.3	85.8	66.61
Energy intensity	148.0	149.4	142.0	134.1	128.1	138.40
Dynamic synergy, Public Debt-Energy intensity		-0.11	0.20	-0.22	-0.11	-0.06
Stabilised synergy, Public Debt-Energy intensity		-0.11	0.13	0.66	-0.68	0.00

Czech Republic

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	2.0	0.0	3.0	0.0	0.0	1.00
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Sufficient Food-Energy intensity		0.10	:	0.05	0	:
Stabilised synergy, Sufficient Food-Energy intensity		0.10	-0.17	0.13	0.18	0.06
Sufficient to drink (%)	99.8	99.8	100.0	99.8	99.8	99.84
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.15	0.04	0.00	0.05
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	-0.02	0.00	0.00	-0.01
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	79.7	82.2	81.3	84.8	87.5	83.11
Energy Intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Education-Energy intensity		-0.33	-0.82	-0.80	-0.61	-0.64
Stabilised synergy, Education-Energy intensity		-0.33	-0.24	-0.48	-0.55	-0.40
Healthy life years	68.4	69.4	68.2	70.4	71.3	69.52
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Healthy Life-Energy intensity		-0.15	-0.78	-0.60	-0.24	-0.44
Stabilised synergy, Healthy Life-Energy intensity		-0.15	0.03	-0.21	-0.23	-0.14
Gender equality (gender Gap Index)	0.67	0.68	0.66	0.68	0.68	0.67
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Gender Equality-Energy intensity		-0.09	-0.72	-0.42	0.05	-0.29
Stabilised synergy, Gender Equality-Energy intensity		-0.09	0.12	-0.09	-0.05	-0.03
Income distribution (ratio value)	5.2	5.2	9.7	5.3	5.8	6.23
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.02	0.12	-0.64	-0.13
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.10	-0.17	-0.59	-0.21
Population growth (over 5 years, %)	-0.43	0.22	7.91	2.58	2.06	2.47
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Population Growth-Energy intensity		0.06	0.00	0.08	0.26	0.10
Stabilised synergy, Population Growth-Energy intensity		0.06	0.00	0.02	0.03	0.03
Good governance (total score World Bank)	4.13	4.79	6.08	5.50	5.18	5.14
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Good Governance-Energy intensity		-0.61	0.05	0.55	0.92	0.23
Stabilised synergy, Good Governance-Energy intensity		-0.61	-0.18	-0.41	-0.70	-0.48
Biodiversity of forest area (change over 10 years, %)	0.00	0.00	0.00	0.00	0.00	0.00
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.51	-0.02	-0.01	-0.04	-0.14
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.51	0.12	-0.23	-0.31	-0.23
Biodiversity (protected areas, %)	15.05	15.05	4.54	15.05	15.05	12.95
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	-0.02	-0.02	0.00	-0.01

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.12	0.00	0.00	0.03
Renewable water resources (%)	13.3	4.4	4.4	4.4	3.1	5.93
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Renewable Water Resources-Energy intensity		0.15	0.00	0.00	0.18	0.08
Stabilised synergy, Renewable Water Resources-Energy intensity		0.15	0.13	0.20	0.24	0.18
Consumption (global hectares)	1.89	2.18	1.86	2.38	2.10	2.08
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Consumption-Energy intensity		-0.63	-0.09	-0.19	0.44	-0.12
Stabilised synergy, Consumption-Energy intensity		-0.63	0.13	-0.51	-0.63	-0.41
Energy use (toe/capita)	4.5	4.5	3.3	4.2	4.1	4.11
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Energy Use-Energy intensity		-0.05	-0.05	-0.20	0.78	0.12
Stabilised synergy, Energy Use-Energy intensity		-0.05	0.34	0.37	0.50	0.29
Energy savings (change over 4 years, %)	-0.12	-0.07	-0.10	0.06	0.06	-0.04
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Energy Savings-Energy intensity		0.27	0.04	0.03	-0.82	-0.12
Stabilised synergy, Energy Savings-Energy intensity		0.27	0.69	0.09	0.12	0.29
Greenhouse gas emissions (ton CO_2 per capita)	11.74	11.75	9.69	10.87	10.25	10.86
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Green House Gases-Energy intensity		-0.01	-0.08	-0.44	0.92	0.10
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.01	0.49	0.55	0.70	0.43
Organic farming (%)	4.0	4.2	3.7	6.2	7.5	5.12
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Organic Farming-Energy intensity		-0.60	-0.11	-0.08	-0.26	-0.26
Stabilised synergy, Organic Farming-Energy intensity		-0.60	0.88	-0.23	-0.20	-0.04
Renewable energy (% of total)	5.99	7.36	1.59	10.55	11.03	7.30
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Renewable Energy-Energy intensity		-0.43	-0.02	-0.01	-0.87	-0.33
Stabilised synergy, Renewable Energy-Energy intensity		-0.43	0.12	-0.18	-0.21	-0.17
Genuine savings (%)	9.4	11.0	2.7	11.6	5.1	7.97
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Genuine Savings-Energy intensity		-0.57	-0.02	-0.02	0.09	-0.13
Stabilised synergy, Genuine Savings-Energy intensity		-0.57	0.12	-0.58	0.39	-0.16
GDP (US $)	21180	25294	28355	27062	27200	25818.13
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, GDP-Energy intensity		-0.50	0.11	0.86	-0.10	0.09
Stabilised synergy, GDP-Energy intensity		-0.50	-0.25	-0.48	-0.63	-0.47
Employment rate (%)	8.3	7.1	3.6	7.3	7.0	6.66
Energy intensity	312.5	281.9	285.7	270.5	256.3	281.38
Dynamic synergy, Employment-Energy intensity		0.68	-0.03	-0.05	0.78	0.35
Stabilised synergy, Employment-Energy intensity		0.68	0.15	0.90	0.87	0.65
Public debt (% of GDP)	30.2	28.3	48.9	37.9	45.9	38.23
Energy intensity	312.5	281.9	285.7	270.5	256.3	273.60
Dynamic synergy, Public Debt-Energy intensity		0.64	0.02	0.24	-0.25	0.16
Stabilised synergy, Public Debt-Energy intensity		0.64	-0.14	-0.52	-0.34	-0.09

Denmark

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	101.3	101.2	99.7	99.1	99.1	100.06
Energy Intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Education-Energy intensity		0.01	-0.27	0.05	0.00	-0.05
Stabilised synergy, Education-Energy intensity		0.01	0.82	0.17	0.12	0.28
Healthy life years	69.8	70.7	71.1	72.4	73.7	71.53
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Healthy Life-Energy intensity		-0.20	0.09	-0.16	-0.28	-0.14
Stabilised synergy, Healthy Life-Energy intensity		-0.20	-0.72	-0.29	-0.30	-0.38
Gender equality (gender Gap Index)	0.75	0.75	0.77	0.78	0.78	0.77
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Gender Equality-Energy intensity		-0.16	0.43	-0.07	0.00	0.05
Stabilised synergy, Gender Equality-Energy intensity		-0.16	-0.38	-0.34	-0.23	-0.28
Income distribution (ratio value)	8.1	8.1	8.2	10.9	7.0	8.47
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.20	-0.34	0.18	0.01
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.87	-0.36	0.74	-0.12
Population growth (over 5 years, %)	1.49	1.46	1.91	2.37	2.38	1.92
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Population Growth-Energy intensity		0.31	0.18	-0.48	-0.10	-0.02
Stabilised synergy, Population Growth-Energy intensity		0.31	-0.05	-0.22	-0.31	-0.07
Good governance (total score World Bank)	11.23	11.02	10.77	10.91	10.60	10.91
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Good Governance-Energy intensity		0.29	-0.40	-0.11	0.43	0.05
Stabilised synergy, Good Governance-Energy intensity		0.29	0.32	0.23	0.30	0.28
Biodiversity of forest area (change over 10 years, %)	0.02	0.02	0.02	0.01	0.01	0.01
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.89	-0.94	0.56	0.52	-0.19
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.89	0.36	0.55	0.97	0.25
Biodiversity (protected areas, %)	3.89	3.91	4.08	4.08	4.08	4.01
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.08	0.74	0.00	0.00	0.16

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.08	-0.28	-0.37	-0.26	-0.25
Renewable water resources (%)	11.2	4.4	4.4	4.4	3.1	5.50
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Renewable Water Resources-Energy intensity		0.11	0.00	0.00	0.23	0.09
Stabilised synergy, Renewable Water Resources-Energy intensity		0.11	0.02	0.21	0.26	0.15
Consumption (global hectares)	5.63	6.07	5.80	5.72	5.60	5.76
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Consumption-Energy intensity		-0.83	-0.80	0.13	0.31	-0.30
Stabilised synergy, Consumption-Energy intensity		-0.83	-0.43	-0.12	0.03	-0.34
Energy use (toe/capita)	3.6	3.7	3.5	3.5	3.1	3.49
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Energy Use-Energy intensity		-0.55	-0.92	-0.02	0.57	-0.23
Stabilised synergy, Energy Use-Energy intensity		-0.55	0.49	0.19	0.75	0.22
Energy savings (change over 4 years, %)	-0.03	-0.06	0.03	0.06	0.11	0.02
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Energy Savings-Energy intensity		-0.08	-0.04	-0.10	-0.07	-0.07
Stabilised synergy, Energy Savings-Energy intensity		-0.08	0.01	0.04	0.04	0.00
Greenhouse gas emissions (ton CO_2 per capita)	8.93	10.34	8.85	8.54	6.64	8.66
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Green House Gases-Energy intensity		-0.42	-0.39	0.31	0.30	-0.05
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.42	0.72	0.35	0.72	0.34
Organic farming (%)	15.0	14.3	16.9	20.1	24.4	18.16
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Organic Farming-Energy intensity		0.77	0.30	-0.60	-0.31	0.04
Stabilised synergy, Organic Farming-Energy intensity		0.77	-0.11	-0.37	-0.30	0.00
Renewable energy (% of total)	5.18	5.37	5.64	6.12	7.36	5.93
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Renewable Energy-Energy intensity		-0.55	0.91	-0.74	-0.33	-0.18
Stabilised synergy, Renewable Energy-Energy intensity		-0.55	-0.15	-0.70	-0.44	-0.46
Genuine savings (%)	14.4	13.8	13.2	13.9	15.7	14.20
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Genuine Savings-Energy intensity		0.68	-0.73	-0.43	-0.51	-0.25
Stabilised synergy, Genuine Savings-Energy intensity		0.68	0.16	0.30	-0.48	0.16
GDP (US $)	33528	37162	35446	37152	37900	36237.59
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, GDP-Energy intensity		-0.60	-0.83	-0.42	-0.30	-0.54
Stabilised synergy, GDP-Energy intensity		-0.60	-0.23	-0.86	-0.71	-0.60
Employment rate (%)	5.5	3.9	3.4	7.5	7.5	5.56
Energy intensity	84.1	78.6	83.0	73.5	68.6	77.56
Dynamic synergy, Employment-Energy intensity		0.22	-0.44	-0.09	0.00	-0.08
Stabilised synergy, Employment-Energy intensity		0.22	0.03	-0.35	-0.51	-0.15
Public debt (% of GDP)	45.1	32.1	33.4	42.7	45.6	39.79
Energy intensity	84.1	78.6	83.0	73.5	68.6	75.93
Dynamic synergy, Public Debt-Energy intensity		0.23	0.72	-0.41	-0.99	-0.11
Stabilised synergy, Public Debt-Energy intensity		0.23	0.05	0.42	-0.06	0.16

Estonia

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	3.0	3.0	2.0	0.0	0.0	1.60
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Sufficient Food-Energy intensity		0.00	-0.56	0.11	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.00	-0.79	-0.12	-0.18	-0.27
Sufficient to drink (%)	99.1	99.1	99.1	99.1	99.1	99.10
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	95.1	95.1	95.1	95.2	95.2	95.14
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	-0.01	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.01	0.01	0.00
Education (enrolment rate, %)	92.2	91.5	89.4	89.5	89.5	90.41
Energy Intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Education-Energy intensity		-0.11	-0.12	-0.01	0.00	-0.06
Stabilised synergy, Education-Energy intensity		-0.11	-0.11	-0.24	-0.16	-0.16
Healthy life years	64.1	64.6	66.9	67.8	69.3	66.53
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Healthy Life-Energy intensity		0.11	0.20	-0.12	0.40	0.15
Stabilised synergy, Healthy Life-Energy intensity		0.11	0.17	0.49	0.45	0.30
Gender equality (gender Gap Index)	0.69	0.71	0.70	0.70	0.70	0.70
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Gender Equality-Energy intensity		0.30	-0.04	0.04	0.04	0.08
Stabilised synergy, Gender Equality-Energy intensity		0.30	0.04	0.05	0.04	0.11
Income distribution (ratio value)	14.9	10.8	10.3	8.1	9.3	10.69
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Income Distribution-Energy intensity		-0.23	-0.27	0.55	0.37	0.11
Stabilised synergy, Income Distribution-Energy intensity		-0.23	-0.84	-0.26	-0.48	-0.45
Population growth (over 5 years, %)	-3.02	-2.98	-2.45	-1.72	-1.17	-2.27
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Population Growth-Energy intensity		-0.24	-0.94	0.38	-0.17	-0.24
Stabilised synergy, Population Growth-Energy intensity		-0.24	-0.72	-0.27	-0.29	-0.38
Good governance (total score World Bank)	6.21	6.36	6.22	6.49	6.16	6.29
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Good Governance-Energy intensity		0.38	-0.12	-0.38	-0.93	-0.26
Stabilised synergy, Good Governance-Energy intensity		0.38	0.01	0.38	-0.04	0.18
Biodiversity of forest area (change over 10 years, %)	0.02	0.02	0.00	-0.01	-0.01	0.01
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.18	-0.26	0.05	0.16	-0.06
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.18	-0.32	-0.09	-0.13	-0.18
Biodiversity (protected areas, %)	21.96	22.13	22.56	22.56	22.75	22.39
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.12	0.11	0.00	0.15	0.09

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.12	0.10	0.23	0.20	0.16
Renewable water resources (%)	11.4	4.4	4.4	4.4	3.1	5.56
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.10	0.00	0.00	-0.19	-0.07
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.10	-0.43	-0.19	-0.25	-0.24
Consumption (global hectares)	4.79	3.41	3.34	2.80	3.30	3.53
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Consumption-Energy intensity		-0.22	-0.11	0.71	0.31	0.17
Stabilised synergy, Consumption-Energy intensity		-0.22	-0.87	-0.29	-0.58	-0.49
Energy use (toe/capita)	3.9	3.8	4.1	4.2	4.1	4.02
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Energy Use-Energy intensity		-0.59	0.44	-0.22	-0.33	-0.17
Stabilised synergy, Energy Use-Energy intensity		-0.59	0.16	0.58	0.27	0.11
Energy savings (change over 4 years, %)	-0.14	-0.09	-0.04	-0.11	-0.01	-0.08
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Energy Savings-Energy intensity		-0.18	-0.35	-0.07	-0.06	-0.16
Stabilised synergy, Energy Savings-Energy intensity		-0.18	-0.37	-0.51	-0.19	-0.31
Greenhouse gas emissions (ton CO_2 per capita)	12.52	11.54	13.21	13.79	12.20	12.65
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Green House Gases-Energy intensity		-0.82	0.77	-0.38	-0.47	-0.23
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.82	0.21	0.86	-0.14	0.03
Organic farming (%)	11.3	10.4	11.8	15.1	15.6	12.83
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Organic Farming-Energy intensity		-0.84	0.68	-0.41	0.67	0.02
Stabilised synergy, Organic Farming-Energy intensity		-0.84	0.16	0.36	0.47	0.04
Renewable energy (% of total)	7.21	8.77	9.63	12.46	15.25	10.66
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Renewable Energy-Energy intensity		0.29	0.53	-0.39	0.24	0.17
Stabilised synergy, Renewable Energy-Energy intensity		0.29	0.78	0.16	0.16	0.35
Genuine savings (%)	15.0	14.5	12.1	15.6	12.5	13.96
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Genuine Savings-Energy intensity		-0.53	-0.89	-0.39	-0.27	-0.52
Stabilised synergy, Genuine Savings-Energy intensity		-0.53	-0.74	0.34	-0.93	-0.47
GDP (US $)	16618	20971	17919	20380	23144	19806.45
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, GDP-Energy intensity		0.24	-0.78	-0.83	0.40	-0.24
Stabilised synergy, GDP-Energy intensity		0.24	0.30	0.52	0.46	0.38
Employment rate (%)	10.0	5.9	5.5	16.9	10.1	9.68
Energy intensity	331.1	352.2	417.9	370.3	390.5	372.40
Dynamic synergy, Employment-Energy intensity		-0.16	-0.36	-0.05	-0.14	-0.18
Stabilised synergy, Employment-Energy intensity		-0.16	-0.58	0.17	0.06	-0.13
Public debt (% of GDP)	5.0	4.4	4.5	6.7	9.7	6.07
Energy intensity	331.1	352.2	417.9	370.3	390.5	382.73
Dynamic synergy, Public Debt-Energy intensity		-0.52	0.16	-0.24	0.12	-0.12
Stabilised synergy, Public Debt-Energy intensity		-0.52	-0.37	0.36	0.19	-0.08

Finland

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity			:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	100.3	101.5	101.3	100.5	101.2	100.97
Energy Intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Education-Energy intensity		-0.12	-0.02	0.10	0.61	0.14
Stabilised synergy, Education-Energy intensity		-0.12	-0.84	-0.02	-0.12	-0.27
Healthy life years	71.1	71.9	72.4	72.4	73.2	72.19
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Healthy Life-Energy intensity		-0.12	0.07	0.00	0.98	0.23
Stabilised synergy, Healthy Life-Energy intensity		-0.12	-0.64	-0.21	-0.39	-0.34
Gender equality (gender Gap Index)	0.80	0.82	0.83	0.84	0.84	0.82
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Gender Equality-Energy intensity		-0.31	0.09	-0.20	0.40	-0.01
Stabilised synergy, Gender Equality-Energy intensity		-0.31	-0.30	-0.62	-0.77	-0.50
Income distribution (ratio value)	5.6	5.6	5.7	5.2	5.8	5.56
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.10	0.99	0.11	0.30
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.78	0.79	-0.35	-0.09
Population growth (over 5 years, %)	1.35	1.51	1.93	2.24	2.37	1.88
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Population Growth-Energy intensity		-0.81	0.33	-0.47	0.19	-0.19
Stabilised synergy, Population Growth-Energy intensity		-0.81	-0.03	-0.13	-0.10	-0.27
Good governance (total score World Bank)	11.97	10.99	10.58	11.11	11.20	11.17
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Good Governance-Energy intensity		0.87	-0.40	-0.66	0.68	0.12
Stabilised synergy, Good Governance-Energy intensity		0.87	0.10	0.83	0.85	0.66
Biodiversity of forest area (change over 10 years, %)	0.02	-0.02	-0.05	-0.07	-0.06	-0.03
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.05	0.06	-0.12	-0.06	-0.02
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.05	0.00	0.02	0.02	0.03
Biodiversity (protected areas, %)	8.44	8.49	8.49	8.49	8.49	8.48
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.06	0.00	0.00	0.00	-0.01

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.06	-0.46	-0.06	-0.07	-0.16
Renewable water resources (%)	2.1	4.4	4.4	4.4	3.1	3.69
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.08	0.00	0.00	-0.04	-0.03
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.08	-0.01	-0.08	-0.14	-0.08
Consumption (global hectares)	1.68	2.62	1.75	2.06	2.00	2.02
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Consumption-Energy intensity		-0.17	-0.28	-0.43	-0.42	-0.32
Stabilised synergy, Consumption-Energy intensity		-0.17	-0.26	-0.38	-0.39	-0.30
Energy use (toe/capita)	7.1	7.1	6.6	6.8	6.2	6.76
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Energy Use-Energy intensity		0.02	-0.68	-0.32	-0.12	-0.27
Stabilised synergy, Energy Use-Energy intensity		0.02	0.18	0.49	0.56	0.31
Energy savings (change over 4 years, %)	-0.14	-0.06	0.06	0.04	0.07	0.00
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Energy Savings-Energy intensity		0.16	-0.04	0.20	0.01	0.08
Stabilised synergy, Energy Savings-Energy intensity		0.16	0.01	0.07	0.05	0.07
Greenhouse gas emissions (ton CO_2 per capita)	10.51	12.63	10.60	11.64	9.13	10.90
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Green House Gases-Energy intensity		-0.47	-0.57	-0.78	-0.05	-0.47
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.47	-0.81	-0.80	0.58	-0.38
Organic farming (%)	23.6	23.3	25.8	25.4	29.8	25.57
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Organic Farming-Energy intensity		0.14	0.86	0.18	0.07	0.31
Stabilised synergy, Organic Farming-Energy intensity		0.14	-0.12	-0.90	-0.29	-0.29
Renewable energy (% of total)	6.68	6.49	6.56	7.38	8.65	7.15
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Renewable Energy-Energy intensity		0.30	0.12	-0.60	0.07	-0.03
Stabilised synergy, Renewable Energy-Energy intensity		0.30	0.65	-0.82	-0.26	-0.03
Genuine savings (%)	15.6	17.1	15.3	9.7	7.6	13.07
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Genuine Savings-Energy intensity		-0.94	-0.83	0.21	-0.05	-0.40
Stabilised synergy, Genuine Savings-Energy intensity		-0.94	0.55	0.23	0.15	0.00
GDP (US $)	30459	35284	33181	36236	35617	34155.39
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, GDP-Energy intensity		-0.60	-0.65	-0.82	-0.67	-0.68
Stabilised synergy, GDP-Energy intensity		-0.60	-0.13	-0.45	-0.45	-0.41
Employment rate (%)	8.8	7.6	6.3	8.4	7.6	7.74
Energy intensity	200.8	181.8	198.5	183.5	185.6	190.04
Dynamic synergy, Employment-Energy intensity		0.69	-0.54	-0.23	-0.12	-0.05
Stabilised synergy, Employment-Energy intensity		0.69	0.04	0.53	0.56	0.45
Public debt (% of GDP)	44.4	39.6	33.9	48.7	53.6	44.04
Energy intensity	200.8	181.8	198.5	183.5	185.6	187.35
Dynamic synergy, Public Debt-Energy intensity		0.88	-0.64	-0.17	0.11	0.05
Stabilised synergy, Public Debt-Energy intensity		0.88	0.05	-0.89	-0.37	-0.08

France

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	91.0	94.7	94.5	94.4	93.8	93.69
Energy Intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Education-Energy intensity		-0.75	0.56	0.01	0.13	-0.01
Stabilised synergy, Education-Energy intensity		-0.75	-0.95	-0.41	-0.23	-0.58
Healthy life years	72.0	73.0	73.7	73.3	74.6	73.32
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Healthy Life-Energy intensity		-0.46	-0.53	0.11	-0.38	-0.31
Stabilised synergy, Healthy Life-Energy intensity		-0.46	-0.67	-0.20	-0.27	-0.40
Gender equality (gender Gap Index)	0.65	0.73	0.70	0.70	0.71	0.70
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Gender Equality-Energy intensity		-0.24	0.12	0.02	-0.21	-0.08
Stabilised synergy, Gender Equality-Energy intensity		-0.24	-0.46	-0.85	-0.66	-0.55
Income distribution (ratio value)	9.1	9.1	9.0	7.1	8.3	8.52
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.35	0.27	-0.27	0.09
Stabilised synergy, Income Distribution-Energy intensity		0.00	0.42	0.40	0.63	0.37
Population growth (over 5 years, %)	3.72	3.69	3.42	2.92	2.60	3.27
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Population Growth-Energy intensity		0.28	0.07	0.39	0.43	0.29
Stabilised synergy, Population Growth-Energy intensity		0.28	0.44	0.42	0.44	0.40
Good governance (total score World Bank)	6.89	6.87	7.45	7.62	7.07	7.18
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Good Governance-Energy intensity		0.10	-0.06	-0.42	0.65	0.07
Stabilised synergy, Good Governance-Energy intensity		0.10	-0.44	-0.84	-0.19	-0.34
Biodiversity of forest area (change over 10 years, %)	0.19	0.18	0.16	0.15	0.14	0.17
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.59	0.06	0.57	0.81	0.51
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.59	0.26	0.41	0.53	0.45
Biodiversity (protected areas, %)	16.47	16.48	17.10	17.10	17.10	16.85
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.01	-0.14	0.00	0.00	-0.04

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.01	-0.93	-0.43	-0.29	-0.41
Renewable water resources (%)	15.5	4.4	4.4	4.4	3.1	6.37
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Renewable Water Resources-Energy intensity		0.04	0.00	0.00	0.17	0.05
Stabilised synergy, Renewable Water Resources-Energy intensity		0.04	0.05	0.13	0.17	0.10
Consumption (global hectares)	2.46	2.54	2.58	2.67	2.90	2.63
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Consumption-Energy intensity		-0.94	-0.29	-0.59	-0.55	-0.59
Stabilised synergy, Consumption-Energy intensity		-0.94	-0.69	-0.96	-0.74	-0.83
Energy use (toe/capita)	4.3	4.2	4.1	4.0	3.9	4.11
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Energy Use-Energy intensity		0.83	0.28	0.42	0.91	0.61
Stabilised synergy, Energy Use-Energy intensity		0.83	0.81	0.74	0.80	0.80
Energy savings (change over 4 years, %)	-0.04	0.01	0.04	0.04	0.07	0.02
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Energy Savings-Energy intensity		0.03	0.00	0.62	-0.08	0.14
Stabilised synergy, Energy Savings-Energy intensity		0.03	0.02	0.04	0.05	0.03
Greenhouse gas emissions (ton CO_2 per capita)	6.17	5.99	5.73	5.48	5.10	5.69
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Green House Gases-Energy intensity		0.96	0.12	0.77	0.69	0.63
Stabilised synergy, Greenhouse Gases-Energy intensity		0.96	0.50	0.81	0.77	0.76
Organic farming (%)	5.7	5.9	7.1	7.9	8.4	6.99
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Organic Farming-Energy intensity		-0.93	-0.03	-0.46	-0.92	-0.58
Stabilised synergy, Organic Farming-Energy intensity		-0.93	-0.14	-0.23	-0.28	-0.40
Renewable energy (% of total)	2.00	2.02	2.13	3.08	3.76	2.60
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Renewable Energy-Energy intensity		-0.46	-0.10	-0.13	-0.21	-0.22
Stabilised synergy, Renewable Energy-Energy intensity		-0.46	-0.54	-0.16	-0.15	-0.33
Genuine savings (%)	11.2	12.3	11.3	8.5	9.9	10.64
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Genuine Savings-Energy intensity		-0.30	0.06	0.23	-0.29	-0.08
Stabilised synergy, Genuine Savings-Energy intensity		-0.30	-0.17	0.38	0.86	0.19
GDP (US $)	30406	33470	33238	35156	35784	33610.91
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, GDP-Energy intensity		-0.30	0.75	-0.97	-0.38	-0.22
Stabilised synergy, GDP-Energy intensity		-0.30	-0.38	-0.57	-0.75	-0.50
Employment rate (%)	9.2	8.8	7.4	9.3	9.9	8.92
Energy intensity	138.5	134.3	133.6	126.1	120.1	130.52
Dynamic synergy, Employment-Energy intensity		0.70	0.03	-0.22	-0.74	-0.06
Stabilised synergy, Employment-Energy intensity		0.70	0.18	-0.12	-0.57	0.05
Public debt (% of GDP)	65.2	64.1	68.2	82.4	90.2	74.02
Energy intensity	138.5	134.3	133.6	126.1	120.1	128.53
Dynamic synergy, Public Debt-Energy intensity		0.57	-0.08	-0.27	-0.50	-0.07
Stabilised synergy, Public Debt-Energy intensity		0.57	-0.77	-0.34	-0.35	-0.22

Germany

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	92.6	94.5	94.5	95.2	90.5	93.46
Energy Intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Education-Energy intensity		-0.26	-0.13	-0.09	0.75	0.07
Stabilised synergy, Education-Energy intensity		-0.26	-0.27	-0.18	0.13	-0.15
Healthy life years	71.8	72.4	73.1	73.3	74.3	72.97
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Healthy Life-Energy intensity		-0.11	0.44	-0.03	-0.37	-0.02
Stabilised synergy, Healthy Life-Energy intensity		-0.11	-0.23	-0.13	-0.19	-0.17
Gender equality (gender Gap Index)	0.75	0.74	0.75	0.76	0.76	0.75
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Gender Equality-Energy intensity		0.22	0.21	-0.10	0.02	0.09
Stabilised synergy, Gender Equality-Energy intensity		0.22	-0.01	-0.06	-0.04	0.03
Income distribution (ratio value)	6.9	6.9	6.9	7.1	7.3	7.03
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.23	-0.33	-0.92	-0.25
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.01	-0.18	-0.34	-0.13
Population growth (over 5 years, %)	0.31	0.03	-0.51	-0.84	-2.24	-0.65
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Population Growth-Energy intensity		0.09	0.00	-0.13	-0.02	-0.02
Stabilised synergy, Population Growth-Energy intensity		0.09	0.03	0.04	0.02	0.05
Good governance (total score World Bank)	9.05	9.11	9.02	8.62	8.68	8.90
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Good Governance-Energy intensity		-0.08	-0.39	0.54	-0.21	-0.03
Stabilised synergy, Good Governance-Energy intensity		-0.08	0.05	0.31	0.22	0.12
Biodiversity of forest area (change over 10 years, %)	0.05	0.03	0.02	0.00	0.00	0.02
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.24	-0.01	0.08	#DIV/0!	#DIV/0!
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.24	0.12	0.15	0.18	0.17
Biodiversity (protected areas, %)	40.97	41.85	42.29	42.29	42.29	41.94
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.27	0.37	0.00	0.00	0.03

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.27	-0.42	-0.21	-0.18	-0.27
Renewable water resources (%)	25.4	4.4	4.4	4.4	3.1	8.36
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Renewable Water Resources-Energy intensity		0.10	0.00	0.00	0.13	0.06
Stabilised synergy, Renewable Water Resources-Energy intensity		0.10	0.09	0.18	0.21	0.15
Consumption (global hectares)	1.88	1.96	2.23	2.08	2.20	2.07
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Consumption-Energy intensity		-0.59	0.03	0.86	-0.63	-0.08
Stabilised synergy, Consumption-Energy intensity		-0.59	-0.40	-0.71	-0.94	-0.66
Energy use (toe/capita)	4.1	4.2	4.0	4.0	3.8	4.03
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Energy Use-Energy intensity		-0.27	-0.10	0.09	0.78	0.12
Stabilised synergy, Energy Use-Energy intensity		-0.27	0.25	0.17	0.39	0.14
Energy savings (change over 4 years, %)	0.00	-0.02	0.02	0.05	0.05	0.02
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Energy Savings-Energy intensity		-0.02	0.00	-0.06	-0.24	-0.08
Stabilised synergy, Energy Savings-Energy intensity		-0.02	0.02	0.01	0.02	0.01
Greenhouse gas emissions (ton CO_2 per capita)	9.70	9.86	9.57	9.42	9.22	9.55
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Green House Gases-Energy intensity		-0.20	-0.14	0.20	0.56	0.11
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.20	0.17	0.19	0.27	0.10
Organic farming (%)	5.1	5.9	7.0	8.6	10.6	7.46
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Organic Farming-Energy intensity		-0.49	0.02	-0.36	-0.16	-0.25
Stabilised synergy, Organic Farming-Energy intensity		-0.49	-0.20	-0.22	-0.17	-0.27
Renewable energy (% of total)	4.74	5.10	5.35	5.93	6.19	5.46
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Renewable Energy-Energy intensity		-0.96	0.08	-0.76	-0.84	-0.62
Stabilised synergy, Renewable Energy-Energy intensity		-0.96	-0.59	-0.61	-0.60	-0.69
Genuine savings (%)	11.0	15.6	14.5	13.2	15.8	14.01
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Genuine Savings-Energy intensity		-0.19	-0.06	0.89	-0.19	0.11
Stabilised synergy, Genuine Savings-Energy intensity		-0.19	-0.24	-0.76	-0.42	-0.40
GDP (US $)	30221	34567	34330	37897	40007	35404.33
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, GDP-Energy intensity		-0.56	-0.56	-0.79	-0.67	-0.64
Stabilised synergy, GDP-Energy intensity		-0.56	-0.56	-0.60	-0.57	-0.57
Employment rate (%)	10.3	10.3	7.5	7.1	5.4	8.12
Energy intensity	139.8	128.6	129.1	118.5	114.1	126.02
Dynamic synergy, Employment-Energy intensity		0.00	-0.01	0.65	0.16	0.20
Stabilised synergy, Employment-Energy intensity		0.00	0.28	0.49	0.39	0.29
Public debt (% of GDP)	66.2	67.9	66.8	82.4	81.9	73.05
Energy intensity	139.8	128.6	129.1	118.5	114.1	122.58
Dynamic synergy, Public Debt-Energy intensity		-0.32	-0.24	-0.35	0.18	-0.18
Stabilised synergy, Public Debt-Energy intensity		-0.32	-0.12	-0.62	-0.78	-0.46

Greece

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	3.0	3.0	4.0	5.0	5.0	4.00
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Sufficient Food-Energy intensity		0.00	0.00	0.55	0.00	0.14
Stabilised synergy, Sufficient Food-Energy intensity		0.00	-0.06	0.17	0.02	0.03
Sufficient to drink (%)	99.8	99.8	99.8	99.8	99.8	99.80
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	98.6	98.6	98.6	98.6	98.6	98.60
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	93.4	100.5	98.6	98.6	98.6	97.93
Energy Intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Education-Energy intensity		-0.27	-0.08	0.00	0.00	-0.09
Stabilised synergy, Education-Energy intensity		-0.27	-0.34	0.48	0.27	0.04
Healthy life years	71.0	72.1	72.5	72.7	73.1	72.29
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Healthy Life-Energy intensity		-0.74	0.25	0.02	-0.06	-0.13
Stabilised synergy, Healthy Life-Energy intensity		-0.74	-0.89	0.21	0.52	-0.22
Gender equality (gender Gap Index)	0.65	0.67	0.69	0.69	0.68	0.68
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Gender Equality-Energy intensity		-0.73	0.06	0.01	0.21	-0.11
Stabilised synergy, Gender Equality-Energy intensity		-0.73	-0.34	0.49	0.42	-0.04
Income distribution (ratio value)	10.0	10.2	10.4	9.8	8.7	9.81
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Income Distribution-Energy intensity		-0.96	0.08	-0.44	0.80	-0.13
Stabilised synergy, Income Distribution-Energy intensity		-0.96	-0.48	-0.20	-0.12	-0.44
Population growth (over 5 years, %)	1.61	1.61	1.53	0.55	-0.63	0.93
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Population Growth-Energy intensity		-0.06	-0.03	-0.21	0.04	-0.06
Stabilised synergy, Population Growth-Energy intensity		-0.06	0.38	-0.18	-0.01	0.03
Good governance (total score World Bank)	4.16	3.67	3.42	2.45	1.37	3.01
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Good Governance-Energy intensity		0.18	-0.02	-0.49	0.20	-0.03
Stabilised synergy, Good Governance-Energy intensity		0.18	0.11	-0.28	-0.02	-0.01
Biodiversity of forest area (change over 10 years, %)	0.07	0.07	0.07	0.07	0.07	0.07
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.20	0.39	0.02	-0.02	0.05
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.20	-0.42	0.10	0.86	0.09
Biodiversity (protected areas, %)	7.28	8.39	9.59	9.90	9.90	9.01
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.14	0.01	0.23	0.00	0.03

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.14	-0.06	0.32	0.04	0.04
Renewable water resources (%)	13.4	4.4	4.4	4.4	3.1	5.94
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Renewable Water Resources-Energy intensity		0.03	0.00	0.00	0.31	0.09
Stabilised synergy, Renewable Water Resources-Energy intensity		0.03	0.03	-0.17	-0.02	-0.03
Consumption (global hectares)	2.43	2.43	2.42	2.39	2.50	2.44
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Consumption-Energy intensity		0.15	-0.70	-0.08	-0.49	-0.28
Stabilised synergy, Consumption-Energy intensity		0.15	0.28	-0.14	0.57	0.21
Energy use (toe/capita)	2.7	2.7	2.7	2.5	2.4	2.60
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Energy Use-Energy intensity		-0.55	0.80	-0.65	0.37	-0.01
Stabilised synergy, Energy Use-Energy intensity		-0.55	-0.67	-0.67	-0.14	-0.51
Energy savings (change over 4 years, %)	-0.08	-0.05	-0.01	0.09	0.12	0.01
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Energy Savings-Energy intensity		0.06	0.00	-0.02	-0.26	-0.05
Stabilised synergy, Energy Savings-Energy intensity		0.06	0.02	-0.06	-0.01	0.01
Greenhouse gas emissions (ton CO_2 per capita)	8.57	8.46	8.43	7.55	6.99	8.00
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Green House Gases-Energy intensity		0.63	-0.44	-0.76	0.82	0.06
Stabilised synergy, Greenhouse Gases-Energy intensity		0.63	0.86	-0.97	-0.08	0.11
Organic farming (%)	5.4	5.9	5.6	7.7	9.3	6.79
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Organic Farming-Energy intensity		-0.24	-0.04	0.37	-0.46	-0.09
Stabilised synergy, Organic Farming-Energy intensity		-0.24	-0.50	0.27	0.02	-0.11
Renewable energy (% of total)	3.46	3.38	3.84	3.74	5.59	4.00
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Renewable Energy-Energy intensity		0.85	0.01	-0.18	-0.18	0.13
Stabilised synergy, Renewable Energy-Energy intensity		0.85	-0.18	0.69	0.03	0.35
Genuine savings (%)	2.1	0.0	-3.4	-6.7	-4.3	-2.46
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Genuine Savings-Energy intensity		0.02	0.00	0.14	0.26	0.10
Stabilised synergy, Genuine Savings-Energy intensity		0.02	0.01	-0.03	0.00	0.00
GDP (US $)	25076	28587	28403	26294	24012	26474.56
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, GDP-Energy intensity		-0.15	-0.24	-0.54	0.96	0.01
Stabilised synergy, GDP-Energy intensity		-0.15	-0.14	0.42	-0.36	-0.06
Employment rate (%)	10.5	8.9	7.7	12.5	24.2	12.76
Energy intensity	130.1	127.4	127.6	145.2	132.1	132.48
Dynamic synergy, Employment-Energy intensity		0.14	-0.01	0.22	-0.10	0.06
Stabilised synergy, Employment-Energy intensity		0.14	0.07	0.61	0.01	0.21
Public debt (% of GDP)	98.9	107.5	112.9	148.3	156.9	124.88
Energy intensity	130.1	127.4	127.6	145.2	132.1	133.08
Dynamic synergy, Public Debt-Energy intensity		-0.24	0.03	0.44	-0.64	-0.10
Stabilised synergy, Public Debt-Energy intensity		-0.24	-0.14	0.23	0.03	-0.03

Hungary

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	1.0	0.0	0.0	0.0	0.0	0.20
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Sufficient Food-Energy intensity		0.04	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.04	0.02	0.10	0.18	0.09
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	87.3	90.2	89.9	89.4	89.6	89.28
Energy Intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Education-Energy intensity		-0.76	-0.12	0.06	-0.03	-0.21
Stabilised synergy, Education-Energy intensity		-0.76	-0.61	-0.23	-0.14	-0.43
Healthy life years	64.9	65.7	66.3	66.6	67.7	66.25
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Healthy Life-Energy intensity		-0.29	0.36	-0.05	-0.18	-0.04
Stabilised synergy, Healthy Life-Energy intensity		-0.29	-0.80	-0.25	-0.24	-0.39
Gender equality (gender Gap Index)	0.67	0.69	0.67	0.66	0.67	0.67
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Gender Equality-Energy intensity		-0.59	-0.81	0.13	-0.17	-0.36
Stabilised synergy, Gender Equality-Energy intensity		-0.59	-0.19	0.08	-0.04	-0.18
Income distribution (ratio value)	5.5	5.5	6.9	4.8	6.3	5.79
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.10	0.29	-0.29	0.03
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.07	0.83	-0.75	0.00
Population growth (over 5 years, %)	-1.21	-1.14	-0.90	-0.86	-1.35	-1.09
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Population Growth-Energy intensity		0.71	-0.13	0.49	-0.15	0.23
Stabilised synergy, Population Growth-Energy intensity		0.71	0.07	0.36	-0.60	0.14
Good governance (total score World Bank)	5.38	4.78	4.88	4.48	3.85	4.67
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Good Governance-Energy intensity		0.38	0.78	0.92	0.62	0.68
Stabilised synergy, Good Governance-Energy intensity		0.38	0.19	0.63	0.64	0.46
Biodiversity of forest area (change over 10 years, %)	0.03	0.03	0.03	0.03	0.03	0.03
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.70	-0.68	0.22	0.55	-0.15
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.70	-0.64	0.08	0.30	-0.24
Biodiversity (protected areas, %)	5.12	5.13	5.14	5.14	5.15	5.14
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.05	0.11	0.00	-0.03	0.01

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.05	-0.28	-0.05	-0.04	-0.10
Renewable water resources (%)	5.6	4.4	4.4	4.4	3.1	4.40
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Renewable Water Resources-Energy intensity		0.20	0.00	0.00	0.30	0.13
Stabilised synergy, Renewable Water Resources-Energy intensity		0.20	0.08	0.49	0.41	0.30
Consumption (global hectares)	1.52	2.03	1.32	1.96	1.60	1.69
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Consumption-Energy intensity		-0.13	-0.07	-0.18	0.47	0.02
Stabilised synergy, Consumption-Energy intensity		-0.13	0.13	-0.36	-0.29	-0.16
Energy use (toe/capita)	2.6	2.7	2.6	2.6	2.4	2.57
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Energy Use-Energy intensity		-0.82	-0.93	0.29	0.91	-0.14
Stabilised synergy, Energy Use-Energy intensity		-0.82	-0.79	0.04	0.45	-0.28
Energy savings (change over 4 years, %)	-0.05	-0.08	-0.02	0.05	0.10	0.00
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Energy Savings-Energy intensity		-0.10	-0.04	0.03	-0.09	-0.05
Stabilised synergy, Energy Savings-Energy intensity		-0.10	0.03	0.05	0.06	0.01
Greenhouse gas emissions (ton CO_2 per capita)	5.59	5.53	5.28	4.89	4.39	5.14
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Green House Gases-Energy intensity		0.26	-0.59	0.83	0.84	0.33
Stabilised synergy, Greenhouse Gases-Energy intensity		0.26	0.32	0.84	0.85	0.57
Organic farming (%)	4.3	4.5	6.0	7.6	7.6	6.01
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Organic Farming-Energy intensity		-0.97	0.08	-0.33	0.03	-0.30
Stabilised synergy, Organic Farming-Energy intensity		-0.97	-0.04	-0.14	-0.24	-0.35
Renewable energy (% of total)	3.01	2.89	2.90	3.02	3.09	2.98
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Renewable Energy-Energy intensity		0.95	0.17	-0.44	-0.27	0.10
Stabilised synergy, Renewable Energy-Energy intensity		0.95	0.49	-0.01	-0.14	0.32
Genuine savings (%)	6.4	5.5	6.4	12.9	12.4	8.73
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Genuine Savings-Energy intensity		0.28	0.15	-0.09	0.42	0.19
Stabilised synergy, Genuine Savings-Energy intensity		0.28	0.29	-0.10	-0.20	0.07
GDP (US $)	16968	18805	18331	19591	20065	18752.13
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, GDP-Energy intensity		-0.40	-0.96	-0.77	-0.28	-0.60
Stabilised synergy, GDP-Energy intensity		-0.40	-0.22	-0.68	-1.00	-0.57
Employment rate (%)	6.1	7.5	7.8	11.2	10.9	8.70
Energy intensity	266.2	254.8	261.5	238.3	217.7	247.70
Dynamic synergy, Employment-Energy intensity		-0.19	0.66	-0.20	0.31	0.14
Stabilised synergy, Employment-Energy intensity		-0.19	-0.06	-0.13	-0.23	-0.15
Public debt (% of GDP)	59.4	65.9	73.0	81.8	79.2	71.86
Energy intensity	266.2	254.8	261.5	238.3	217.7	243.08
Dynamic synergy, Public Debt-Energy intensity		-0.39	0.25	-0.73	0.38	-0.12
Stabilised synergy, Public Debt-Energy intensity		-0.39	-0.08	-0.28	-0.55	-0.32

Ireland

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	99.8	99.8	99.9	99.9	99.9	99.86
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	-0.11	0.00	0.00	-0.03
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.23	-0.01	-0.01	0.05
Safe sanitation (%)	98.9	99.0	99.0	99.0	99.0	98.98
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Safe Sanitation-Energy Intensity		0.08	0.00	0.00	0.00	0.02
Stabilised synergy, Safe Sanitation-Energy intensity		0.08	0.23	-0.01	-0.01	0.07
Education (enrolment rate, %)	95.9	96.9	100.0	102.5	106.0	100.27
Energy Intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Education-Energy intensity		0.74	-0.27	-0.31	-0.34	-0.04
Stabilised synergy, Education-Energy intensity		0.74	0.11	-0.88	-0.62	-0.16
Healthy life years	69.8	70.8	71.7	73.5	74.8	72.10
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Healthy Life-Energy intensity		0.94	-0.69	-0.30	-0.17	-0.06
Stabilised synergy, Healthy Life-Energy intensity		0.94	0.16	-0.68	-0.42	0.00
Gender equality (gender Gap Index)	0.73	0.75	0.78	0.78	0.78	0.77
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Gender Equality-Energy intensity		0.53	-0.26	-0.09	0.01	0.05
Stabilised synergy, Gender Equality-Energy intensity		0.53	0.07	-0.87	-0.39	-0.16
Income distribution (ratio value)	9.7	9.4	9.4	9.4	9.0	9.37
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Income Distribution-Energy intensity		-0.43	0.25	0.03	0.38	0.06
Stabilised synergy, Income Distribution-Energy intensity		-0.43	-0.13	0.46	0.42	0.08
Population growth (over 5 years, %)	9.32	10.55	12.34	9.62	4.27	9.22
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Population Growth-Energy intensity		0.10	-0.05	0.37	0.18	0.15
Stabilised synergy, Population Growth-Energy intensity		0.10	0.01	-0.41	0.31	0.00
Good governance (total score World Bank)	8.99	9.58	9.59	8.73	8.51	9.08
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Good Governance-Energy intensity		0.20	-0.08	0.91	0.25	0.32
Stabilised synergy, Good Governance-Energy intensity		0.20	0.07	0.37	0.31	0.24
Biodiversity of forest area (change over 10 years, %)	0.04	0.03	0.03	0.03	0.03	0.03
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.16	0.08	0.61	0.29	0.20
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.16	-0.02	0.26	0.53	0.15
Biodiversity (protected areas, %)	0.80	1.21	1.21	1.21	1.21	1.13
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.03	0.00	0.00	0.00	0.01

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.03	0.01	-0.15	-0.33	-0.11
Renewable water resources (%)	2.4	4.4	4.4	4.4	3.1	3.75
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Renewable Water Resources-Energy intensity		0.02	0.00	0.00	0.35	0.09
Stabilised synergy, Renewable Water Resources-Energy intensity		0.02	0.01	-0.09	-0.55	-0.16
Consumption (global hectares)	2.31	2.43	2.42	2.47	2.50	2.43
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Consumption-Energy intensity		0.24	0.58	-0.25	-0.12	0.11
Stabilised synergy, Consumption-Energy intensity		0.24	0.09	-0.91	-0.49	-0.27
Energy use (toe/capita)	3.6	3.4	3.3	3.1	2.9	3.25
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Energy Use-Energy intensity		-0.32	0.26	0.59	0.78	0.33
Stabilised synergy, Energy Use-Energy intensity		-0.32	-0.06	0.65	0.91	0.29
Energy savings (change over 4 years, %)	0.01	0.08	0.07	0.08	0.12	0.07
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Energy Savings-Energy intensity		0.00	0.18	-0.84	-0.19	-0.21
Stabilised synergy, Energy Savings-Energy intensity		0.00	0.00	-0.01	-0.02	-0.01
Greenhouse gas emissions (ton CO_2 per capita)	10.56	10.52	9.74	8.53	7.74	9.42
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Green House Gases-Energy intensity		-0.26	0.12	0.66	0.91	0.36
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.26	-0.06	0.40	0.64	0.18
Organic farming (%)	2.6	2.9	3.9	4.6	6.2	4.04
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Organic Farming-Energy intensity		0.10	-0.03	-0.43	-0.30	-0.16
Stabilised synergy, Organic Farming-Energy intensity		0.10	0.01	-0.09	-0.12	-0.03
Renewable energy (% of total)	0.84	0.99	1.08	1.16	1.31	1.07
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Renewable Energy-Energy intensity		0.07	-0.10	-0.85	-0.77	-0.41
Stabilised synergy, Renewable Energy-Energy intensity		0.07	0.02	-0.20	-0.30	-0.10
Genuine savings (%)	22.2	18.5	14.0	3.5	10.9	13.81
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Genuine Savings-Energy intensity		-0.08	0.04	0.11	-0.05	0.00
Stabilised synergy, Genuine Savings-Energy intensity		-0.08	-0.01	0.09	0.33	0.08
GDP (US $)	38662	43341	39311	39639	39547	40099.97
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, GDP-Energy intensity		0.11	0.09	-0.10	0.02	0.03
Stabilised synergy, GDP-Energy intensity		0.11	0.26	-0.33	-0.13	-0.02
Employment rate (%)	4.5	4.4	6.0	13.9	14.7	8.70
Energy intensity	90.3	91.5	90.7	83.3	74.9	86.14
Dynamic synergy, Employment-Energy intensity		-0.60	-0.02	-0.06	-0.57	-0.31
Stabilised synergy, Employment-Energy intensity		-0.60	0.01	-0.04	-0.08	-0.17
Public debt (% of GDP)	29.6	24.8	44.3	91.2	117.4	61.47
Energy intensity	90.3	91.5	90.7	83.3	74.9	85.10
Dynamic synergy, Public Debt-Energy intensity		-0.08	-0.01	-0.08	-0.35	-0.13
Stabilised synergy, Public Debt-Energy intensity		-0.08	0.01	-0.04	-0.06	-0.04

Italy

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	88.4	90.8	91.0	90.8	89.9	90.17
Energy Intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Education-Energy intensity		-0.53	-0.39	0.04	0.13	-0.19
Stabilised synergy, Education-Energy intensity		-0.53	-0.70	-0.40	-0.13	-0.44
Healthy life years	72.7	73.3	74.5	74.1	75.5	74.03
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Healthy Life-Energy intensity		-0.62	-0.39	0.12	-0.26	-0.29
Stabilised synergy, Healthy Life-Energy intensity		-0.62	-0.81	-0.28	-0.28	-0.50
Gender equality (gender Gap Index)	0.65	0.68	0.68	0.68	0.69	0.67
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Gender Equality-Energy intensity		-0.27	0.54	-0.10	-0.18	0.00
Stabilised synergy, Gender Equality-Energy intensity		-0.27	-0.42	-0.78	-0.49	-0.49
Income distribution (ratio value)	11.6	11.6	11.7	9.1	13.5	11.49
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Income Distribution-Energy intensity		0.00	-0.72	0.22	-0.15	-0.16
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.22	0.31	-0.83	-0.18
Population growth (over 5 years, %)	1.80	2.05	2.64	2.26	1.88	2.13
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Population Growth-Energy intensity		-0.10	-0.02	0.33	0.44	0.16
Stabilised synergy, Population Growth-Energy intensity		-0.10	-0.04	-0.27	-0.33	-0.19
Good governance (total score World Bank)	4.40	3.58	3.28	3.10	2.87	3.45
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Good Governance-Energy intensity		0.08	0.08	0.88	0.96	0.50
Stabilised synergy, Good Governance-Energy intensity		0.08	0.08	0.23	0.39	0.19
Biodiversity of forest area (change over 10 years, %)	0.19	0.19	0.19	0.19	0.19	0.19
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.30	-0.69	-0.07	-0.03	-0.27
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.30	-0.43	-0.18	-0.10	-0.25
Biodiversity (protected areas, %)	15.86	15.86	15.86	15.86	15.86	15.86
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00
Renewable water resources (%)	23.7	4.4	4.4	4.4	3.1	8.01
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Renewable Water Resources-Energy intensity		0.02	0.00	0.00	0.25	0.07
Stabilised synergy, Renewable Water Resources-Energy intensity		0.02	0.02	0.08	0.16	0.07
Consumption (global hectares)	2.19	2.27	2.20	2.13	2.30	2.22
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Consumption-Energy intensity		-0.37	0.21	0.65	-0.94	-0.11
Stabilised synergy, Consumption-Energy intensity		-0.37	-0.37	0.36	-0.39	-0.19
Energy use (toe/capita)	3.1	3.1	2.9	2.8	2.6	2.91
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Energy Use-Energy intensity		0.99	0.13	0.85	0.97	0.74
Stabilised synergy, Energy Use-Energy intensity		0.99	0.34	0.68	0.81	0.71
Energy savings (change over 4 years, %)	-0.04	-0.02	0.06	0.09	0.11	0.04
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Energy Savings-Energy intensity		0.03	0.00	-0.11	-0.23	-0.08
Stabilised synergy, Energy Savings-Energy intensity		0.03	0.01	0.02	0.03	0.02
Greenhouse gas emissions (ton CO_2 per capita)	7.86	7.71	7.27	6.60	6.15	7.12
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Green House Gases-Energy intensity		0.74	0.11	0.52	0.93	0.57
Stabilised synergy, Greenhouse Gases-Energy intensity		0.74	0.27	0.42	0.62	0.51
Organic farming (%)	6.3	6.8	7.6	10.6	13.1	8.89
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Organic Farming-Energy intensity		-0.16	-0.05	-0.12	-0.31	-0.16
Stabilised synergy, Organic Farming-Energy intensity		-0.16	-0.09	-0.10	-0.12	-0.12
Renewable energy (% of total)	8.42	9.03	7.87	8.74	9.12	8.63
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Renewable Energy-Energy intensity		-0.20	0.05	-0.43	-0.60	-0.29
Stabilised synergy, Renewable Energy-Energy intensity		-0.20	0.31	-0.57	-0.62	-0.27
Genuine savings (%)	8.4	9.0	6.6	7.5	3.3	6.97
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Genuine Savings-Energy intensity		-0.21	0.02	-0.39	0.13	-0.11
Stabilised synergy, Genuine Savings-Energy intensity		-0.21	0.10	0.60	0.22	0.18
GDP (US $)	28079	30646	29121	30464	30289	29719.79
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, GDP-Energy intensity		-0.15	0.13	-0.97	0.08	-0.23
Stabilised synergy, GDP-Energy intensity		-0.15	-0.55	-0.79	-0.58	-0.52
Employment rate (%)	7.9	6.8	6.7	8.4	10.7	8.10
Energy intensity	113.2	111.6	110.9	105.6	97.9	107.84
Dynamic synergy, Employment-Energy intensity		0.10	0.43	-0.19	-0.27	0.02
Stabilised synergy, Employment-Energy intensity		0.10	0.13	-0.94	-0.38	-0.27
Public debt (% of GDP)	103.7	106.3	106.1	119.3	127.0	112.48
Energy intensity	113.2	111.6	110.9	105.6	97.9	106.50
Dynamic synergy, Public Debt-Energy intensity		-0.56	0.39	-0.38	-0.88	-0.36
Stabilised synergy, Public Debt-Energy intensity		-0.56	-0.89	-0.45	-0.60	-0.62

Latvia

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	4.0	3.0	3.0	1.0	1.0	2.40
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Sufficient Food-Energy intensity		0.28	0.00	0.17	0.00	0.11
Stabilised synergy, Sufficient Food-Energy intensity		0.28	-0.45	0.02	0.10	-0.01
Sufficient to drink (%)	98.4	98.4	98.4	98.4	98.4	98.40
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	78.6	78.6	78.6	78.6	78.6	78.60
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	90.9	90.2	87.9	82.4	88.7	88.03
Energy Intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Education-Energy intensity		0.12	-0.13	0.56	-0.85	-0.08
Stabilised synergy, Education-Energy intensity		0.12	-0.30	0.14	0.31	0.07
Healthy life years	62.8	63.9	63.5	65.9	66.5	64.53
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Healthy Life-Energy intensity		-0.26	-0.04	-0.33	-0.14	-0.19
Stabilised synergy, Healthy Life-Energy intensity		-0.26	0.10	-0.27	-0.75	-0.30
Gender equality (gender Gap Index)	0.71	0.74	0.74	0.74	0.76	0.74
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Gender Equality-Energy intensity		-0.61	0.02	0.04	-0.43	-0.25
Stabilised synergy, Gender Equality-Energy intensity		-0.61	0.43	-0.30	-0.94	-0.36
Income distribution (ratio value)	9.2	11.6	10.7	13.3	9.0	10.75
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Income Distribution-Energy intensity		-0.27	-0.40	-0.47	0.21	-0.23
Stabilised synergy, Income Distribution-Energy intensity		-0.27	0.69	-0.03	0.28	0.17
Population growth (over 5 years, %)	-5.44	-5.08	-4.84	-6.31	-7.54	-5.84
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Population Growth-Energy intensity		0.92	-0.25	-0.37	-0.34	-0.01
Stabilised synergy, Population Growth-Energy intensity		0.92	-0.99	-0.08	-0.20	-0.09
Good governance (total score World Bank)	3.87	4.07	3.91	3.98	3.92	3.95
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Good Governance-Energy intensity		-0.73	-0.20	-0.18	0.24	-0.22
Stabilised synergy, Good Governance-Energy intensity		-0.73	0.08	-0.45	-0.17	-0.32
Biodiversity of forest area (change over 10 years, %)	0.02	0.02	0.03	0.03	0.03	0.03
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.64	0.52	-0.82	-0.06	-0.25
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.64	0.50	-0.04	-0.23	-0.10
Biodiversity (protected areas, %)	16.13	16.13	16.14	16.38	16.43	16.24
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	-0.14	-0.04	-0.04

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	-0.85	-0.23	-0.27
Renewable water resources (%)	1.2	4.4	4.4	4.4	3.1	3.51
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.03	0.00	0.00	0.23	0.05
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.03	0.04	0.00	-0.05	-0.01
Consumption (global hectares)	2.81	3.36	3.82	2.47	2.70	3.03
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Consumption-Energy intensity		-0.36	0.69	0.32	-0.71	-0.02
Stabilised synergy, Consumption-Energy intensity		-0.36	0.31	0.11	0.51	0.14
Energy use (toe/capita)	2.0	2.1	2.1	2.2	2.2	2.11
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Energy Use-Energy intensity		-0.90	-0.02	-0.45	0.29	-0.27
Stabilised synergy, Energy Use-Energy intensity		-0.90	0.66	-0.10	-0.73	-0.27
Energy savings (change over 4 years, %)	-0.21	-0.20	-0.07	-0.05	-0.03	-0.11
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Energy Savings-Energy intensity		0.86	-0.31	0.31	0.19	0.26
Stabilised synergy, Energy Savings-Energy intensity		0.86	-0.17	0.02	0.09	0.20
Greenhouse gas emissions (ton CO_2 per capita)	3.38	3.61	3.64	3.86	3.45	3.59
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Green House Gases-Energy intensity		-0.97	0.03	-0.54	0.62	-0.21
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.97	0.67	-0.09	-0.24	-0.16
Organic farming (%)	32.6	30.5	30.0	33.8	37.4	32.86
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Organic Farming-Energy intensity		0.92	-0.08	-0.90	-0.62	-0.17
Stabilised synergy, Organic Farming-Energy intensity		0.92	-0.70	-0.36	-0.53	-0.17
Renewable energy (% of total)	6.11	8.48	9.11	9.38	10.77	8.77
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Renewable Energy-Energy intensity		-0.18	0.38	-0.26	-0.44	-0.13
Stabilised synergy, Renewable Energy-Energy intensity		-0.18	0.23	-0.02	-0.10	-0.02
Genuine savings (%)	9.3	10.1	9.5	10.5	11.0	10.07
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Genuine Savings-Energy intensity		-0.79	-0.34	-0.99	-0.63	-0.69
Stabilised synergy, Genuine Savings-Energy intensity		-0.79	0.16	-0.10	-0.43	-0.29
GDP (US $)	13181	17149	14221	15662	19120	15866.56
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, GDP-Energy intensity		-0.23	-0.87	-0.90	-0.30	-0.58
Stabilised synergy, GDP-Energy intensity		-0.23	0.70	-0.07	-0.17	0.06
Employment rate (%)	9.9	6.8	7.4	18.7	14.9	11.54
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.66
Dynamic synergy, Employment-Energy intensity		0.23	0.45	-0.07	0.32	0.23
Stabilised synergy, Employment-Energy intensity		0.23	-0.44	-0.01	-0.15	-0.10
Public debt (% of GDP)	16.0	9.9	17.2	39.7	36.4	23.86
Energy intensity	234.0	217.5	260.2	230.9	215.7	231.08
Dynamic synergy, Public Debt-Energy intensity		0.18	0.27	-0.09	0.79	0.29
Stabilised synergy, Public Debt-Energy intensity		0.18	0.64	-0.01	-0.06	0.19

Lithuania

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	1.0	0.0	0.0	0.0	0.0	0.20
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Sufficient Food-Energy intensity		0.05	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.05	0.19	0.24	0.33	0.20
Sufficient to drink (%)	92.6	93.4	94.2	95.0	95.9	94.22
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Sufficient to Drink-Energy Intensity		-0.18	-0.06	-0.17	-0.08	-0.12
Stabilised synergy, Sufficient to Drink-Energy intensity		-0.18	-0.09	-0.11	-0.11	-0.12
Safe sanitation (%)	90.5	91.5	92.4	93.4	94.3	92.42
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Safe Sanitation-Energy Intensity		-0.23	-0.06	-0.21	-0.08	-0.15
Stabilised synergy, Safe Sanitation-Energy intensity		-0.23	-0.11	-0.14	-0.13	-0.15
Education (enrolment rate, %)	92.8	92.8	91.4	90.7	96.5	92.84
Energy Intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Education-Energy intensity		0.00	0.09	0.15	-0.54	-0.07
Stabilised synergy, Education-Energy intensity		0.00	0.07	0.09	-0.12	0.01
Healthy life years	63.3	64.1	63.0	64.8	65.6	64.17
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Healthy Life-Energy intensity		-0.26	0.11	-0.54	-0.11	-0.20
Stabilised synergy, Healthy Life-Energy intensity		-0.26	0.02	-0.10	-0.11	-0.11
Gender equality (gender Gap Index)	0.71	0.72	0.71	0.71	0.73	0.72
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Gender Equality-Energy intensity		-0.43	0.08	0.00	-0.21	-0.14
Stabilised synergy, Gender Equality-Energy intensity		-0.43	-0.04	-0.03	-0.10	-0.15
Income distribution (ratio value)	7.9	10.4	10.1	14.4	9.7	10.51
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Income Distribution-Energy intensity		-0.15	0.16	-0.12	0.36	0.06
Stabilised synergy, Income Distribution-Energy intensity		-0.15	-0.68	-0.29	-0.68	-0.45
Population growth (over 5 years, %)	-5.06	-5.79	-6.35	-6.78	-7.54	-6.30
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Population Growth-Energy intensity		-0.33	-0.63	-0.76	-0.94	-0.66
Stabilised synergy, Population Growth-Energy intensity		-0.33	-0.76	-0.69	-0.67	-0.61
Good governance (total score World Bank)	4.30	4.30	4.12	4.35	4.70	4.36
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Good Governance-Energy intensity		0.00	0.27	-0.93	-0.69	-0.34
Stabilised synergy, Good Governance-Energy intensity		0.00	0.21	-0.05	-0.29	-0.03
Biodiversity of forest area (change over 10 years, %)	0.03	0.03	0.03	0.03	0.03	0.03
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.44	-0.05	-0.15	0.73	0.02
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.44	-0.60	-0.53	-0.08	-0.41
Biodiversity (protected areas, %)	14.11	14.40	14.40	14.40	14.40	14.34
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.44	0.00	0.00	0.00	-0.11

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.44	-0.11	-0.09	-0.06	-0.17
Renewable water resources (%)	11.1	4.4	4.4	4.4	3.1	5.49
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Renewable Water Resources-Energy intensity		0.08	0.00	0.00	0.42	0.12
Stabilised synergy, Renewable Water Resources-Energy intensity		0.08	0.32	0.39	0.46	0.31
Consumption (global hectares)	2.42	2.51	2.87	2.80	2.80	2.68
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Consumption-Energy intensity		-0.78	-0.94	0.54	-0.01	-0.30
Stabilised synergy, Consumption-Energy intensity		-0.78	-0.96	-0.66	-0.48	-0.72
Energy use (toe/capita)	2.8	2.7	3.0	2.3	2.5	2.63
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Energy Use-Energy intensity		0.86	-0.75	0.22	-0.71	-0.10
Stabilised synergy, Energy Use-Energy intensity		0.86	-0.36	0.77	0.34	0.40
Energy savings (change over 4 years, %)	-0.36	-0.04	-0.07	0.15	0.17	-0.03
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Energy Savings-Energy intensity		0.05	-0.16	0.02	-0.71	-0.20
Stabilised synergy, Energy Savings-Energy intensity		0.05	0.24	0.17	0.22	0.17
Greenhouse gas emissions (ton CO_2 per capita)	4.06	4.15	4.45	4.30	4.46	4.28
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Green House Gases-Energy intensity		-0.50	-0.46	0.65	-0.31	-0.15
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.50	-0.49	-0.25	-0.30	-0.39
Organic farming (%)	10.0	10.7	10.7	15.1	15.7	12.44
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Organic Farming-Energy intensity		-0.66	-0.04	-0.13	-0.36	-0.29
Stabilised synergy, Organic Farming-Energy intensity		-0.66	-0.40	-0.46	-0.56	-0.52
Renewable energy (% of total)	2.31	4.55	4.61	5.42	5.40	4.46
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Renewable Energy-Energy intensity		-0.05	-0.10	-0.29	0.04	-0.10
Stabilised synergy, Renewable Energy-Energy intensity		-0.05	-0.20	-0.18	-0.24	-0.17
Genuine savings (%)	7.7	8.2	5.5	10.4	9.1	8.18
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Genuine Savings-Energy intensity		-0.75	0.47	-0.06	0.95	0.15
Stabilised synergy, Genuine Savings-Energy intensity		-0.75	0.67	-0.69	-0.52	-0.32
GDP (US $)	14286	18169	16627	18856	22747	18136.82
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, GDP-Energy intensity		-0.17	0.55	-0.38	-0.58	-0.15
Stabilised synergy, GDP-Energy intensity		-0.17	-0.84	-0.74	-0.55	-0.58
Employment rate (%)	11.3	5.6	5.8	17.8	13.2	10.74
Energy intensity	300.8	286.6	242.2	229.9	202.5	252.40
Dynamic synergy, Employment-Energy intensity		0.09	-0.23	-0.02	0.46	0.07
Stabilised synergy, Employment-Energy intensity		0.09	0.40	-0.41	-0.51	-0.11
Public debt (% of GDP)	19.3	17.9	15.5	38.4	41.1	26.47
Energy intensity	300.8	286.6	242.2	229.9	202.5	240.30
Dynamic synergy, Public Debt-Energy intensity		0.67	0.87	-0.03	-0.60	0.23
Stabilised synergy, Public Debt-Energy intensity		0.67	0.99	-0.24	-0.29	0.28

Luxembourg

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	76.3	76.4	75.5	75.5	75.5	75.84
Energy Intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Education-Energy intensity		-0.02	-0.14	-0.01	0.00	-0.04
Stabilised synergy, Education-Energy intensity		-0.02	0.13	0.08	0.04	0.06
Healthy life years	71.5	72.0	73.6	73.0	74.2	72.85
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Healthy Life-Energy intensity		-0.07	0.08	0.14	-0.12	0.01
Stabilised synergy, Healthy Life-Energy intensity		-0.07	-0.34	-0.15	-0.15	-0.18
Gender equality (gender Gap Index)	0.67	0.68	0.72	0.72	0.74	0.71
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Gender Equality-Energy intensity		-0.22	0.03	0.04	-0.20	-0.09
Stabilised synergy, Gender Equality-Energy intensity		-0.22	-0.97	-0.59	-0.43	-0.55
Income distribution (ratio value)	7.8	9.3	9.3	6.2	6.2	7.76
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Income Distribution-Energy intensity		-0.46	0.00	0.17	-0.01	-0.07
Stabilised synergy, Income Distribution-Energy intensity		-0.46	-0.45	0.68	0.81	0.14
Population growth (over 5 years, %)	6.61	7.05	8.20	8.99	10.62	8.29
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Population Growth-Energy intensity		-0.74	0.01	-0.60	-0.74	-0.52
Stabilised synergy, Population Growth-Energy intensity		-0.74	-0.36	-0.39	-0.42	-0.48
Good governance (total score World Bank)	11.38	10.87	10.22	10.27	10.28	10.60
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Good Governance-Energy intensity		0.51	-0.03	-0.08	0.00	0.10
Stabilised synergy, Good Governance-Energy intensity		0.51	0.85	0.70	0.38	0.61
Biodiversity of forest area (change over 10 years, %)	0.02	0.02	0.02	0.00	0.00	0.01
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.05	0.49	0.06	-0.01	0.12
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.05	-0.09	0.14	0.25	0.07
Biodiversity (protected areas, %)	20.01	20.05	20.05	20.05	20.64	20.16
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.02	0.00	0.00	-0.22	-0.06

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.02	-0.02	-0.01	-0.12	-0.04
Renewable water resources (%)	1.9	4.4	4.4	4.4	3.1	3.66
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.07	0.00	0.00	0.47	0.10
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.07	-0.07	-0.11	-0.41	-0.16
Consumption (global hectares)	5.58	2.99	3.69	4.26	4.62	4.23
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Consumption-Energy intensity		0.19	0.01	-0.38	-0.63	-0.20
Stabilised synergy, Consumption-Energy intensity		0.19	0.26	0.59	0.67	0.43
Energy use (toe/capita)	9.3	9.2	8.6	8.3	7.7	8.61
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Energy Use-Energy intensity		0.22	-0.03	0.59	0.55	0.33
Stabilised synergy, Energy Use-Energy intensity		0.22	0.91	0.79	0.69	0.65
Energy savings (change over 4 years, %)	-0.22	-0.12	0.08	0.09	0.11	-0.01
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Energy Savings-Energy intensity		0.20	0.00	-0.33	-0.98	-0.28
Stabilised synergy, Energy Savings-Energy intensity		0.20	0.06	0.10	0.17	0.13
Greenhouse gas emissions (ton CO_2 per capita)	24.43	23.66	21.54	20.78	19.21	21.93
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Green House Gases-Energy intensity		0.36	-0.02	0.61	0.56	0.38
Stabilised synergy, Greenhouse Gases-Energy intensity		0.36	0.73	0.93	0.84	0.71
Organic farming (%)	1.6	1.8	3.2	3.0	3.4	2.60
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Organic Farming-Energy intensity		-0.84	0.00	0.73	-0.80	-0.23
Stabilised synergy, Organic Farming-Energy intensity		-0.84	-0.09	-0.16	-0.24	-0.33
Renewable energy (% of total)	2.51	2.58	2.70	2.84	3.00	2.73
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Renewable Energy-Energy intensity		-0.32	0.04	-0.91	-0.41	-0.40
Stabilised synergy, Renewable Energy-Energy intensity		-0.32	-0.87	-0.95	-0.76	-0.73
Genuine savings (%)	26.3	27.0	19.4	9.1	8.3	18.03
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Genuine Savings-Energy intensity		-0.31	-0.01	0.11	0.67	0.12
Stabilised synergy, Genuine Savings-Energy intensity		-0.31	0.33	0.21	0.37	0.15
GDP (US $)	70628	81357	77364	80119	78670	77627.52
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, GDP-Energy intensity		-0.58	-0.04	-0.62	0.13	-0.27
Stabilised synergy, GDP-Energy intensity		-0.58	-0.91	-0.97	-0.45	-0.72
Employment rate (%)	5.1	4.7	5.1	4.4	5.1	4.88
Energy intensity	127.2	116.0	116.2	109.5	94.8	112.74
Dynamic synergy, Employment-Energy intensity		0.89	0.02	0.42	-0.84	0.12
Stabilised synergy, Employment-Energy intensity		0.89	0.00	0.99	0.00	0.47
Public debt (% of GDP)	6.4	6.7	14.4	19.2	20.8	13.50
Energy intensity	127.2	116.0	116.2	109.5	94.8	109.13
Dynamic synergy, Public Debt-Energy intensity		-0.59	0.00	-0.17	-0.60	-0.34
Stabilised synergy, Public Debt-Energy intensity		-0.59	-0.07	-0.07	-0.11	-0.21

Malta

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	78.5	78.5	76.3	81.9	80.6	79.16
Energy Intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Education-Energy intensity		0.00	0.65	-0.03	0.09	0.18
Stabilised synergy, Education-Energy intensity		0.00	0.50	-0.76	-0.13	-0.10
Healthy life years	71.4	72.1	72.3	72.5	73.2	72.30
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Healthy Life-Energy intensity		-0.76	-0.06	-0.95	-0.07	-0.46
Stabilised synergy, Healthy Life-Energy intensity		-0.76	-0.23	-0.26	-0.12	-0.34
Gender equality (gender Gap Index)	0.65	0.66	0.67	0.67	0.68	0.67
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Gender Equality-Energy intensity		-0.75	-0.22	0.38	-0.10	-0.17
Stabilised synergy, Gender Equality-Energy intensity		-0.75	-0.49	-0.37	-0.18	-0.45
Income distribution (ratio value)	49.0	52.2	52.2	6.5	6.5	33.27
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Income Distribution-Energy intensity		-0.20	0.00	0.00	-0.04	-0.06
Stabilised synergy, Income Distribution-Energy intensity		-0.20	-0.85	0.07	0.24	-0.19
Population growth (over 5 years, %)	5.89	3.12	2.71	2.64	3.13	3.50
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Population Growth-Energy intensity		0.03	0.32	0.09	-0.88	-0.11
Stabilised synergy, Population Growth-Energy intensity		0.03	0.10	0.10	0.45	0.17
Good governance (total score World Bank)	7.75	7.83	7.54	7.27	7.04	7.48
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Good Governance-Energy intensity		-0.77	0.88	0.06	0.20	0.09
Stabilised synergy, Good Governance-Energy intensity		-0.77	0.50	0.93	0.44	0.27
Biodiversity of forest area (change over 10 years, %)	0.00	0.00	0.00	0.00	0.00	0.00
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		:	:	:	:	:
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		:	:	:	:	:
Biodiversity (protected areas, %)	1.52	1.61	1.67	1.67	1.67	1.62
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.23	-0.86	0.00	0.00	-0.27

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.23	-0.57	-0.59	-0.46	-0.46
Renewable water resources (%)	71.3	4.4	4.4	4.4	3.1	17.53
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Renewable Water Resources-Energy intensity		0.01	0.00	0.00	0.56	0.14
Stabilised synergy, Renewable Water Resources-Energy intensity		0.01	0.06	0.06	0.22	0.09
Consumption (global hectares)	2.22	2.13	2.22	1.83	1.83	2.05
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Consumption-Energy intensity		0.34	-0.96	0.01	0.01	-0.15
Stabilised synergy, Consumption-Energy intensity		0.34	0.00	0.33	0.83	0.38
Energy use (toe/capita)	2.1	2.1	2.0	2.0	1.6	1.96
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Energy Use-Energy intensity		0.37	0.13	0.31	0.74	0.39
Stabilised synergy, Energy Use-Energy intensity		0.37	0.19	0.20	0.93	0.42
Energy savings (change over 4 years, %)	-0.17	-0.11	0.01	0.01	0.22	-0.01
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Energy Savings-Energy intensity		0.04	0.04	0.01	0.00	0.02
Stabilised synergy, Energy Savings-Energy intensity		0.04	0.05	0.06	0.09	0.06
Greenhouse gas emissions (ton CO_2 per capita)	6.70	6.36	6.27	5.95	6.02	6.26
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Green House Gases-Energy intensity		0.27	0.32	0.04	-0.07	0.14
Stabilised synergy, Greenhouse Gases-Energy intensity		0.27	0.88	0.51	0.48	0.54
Organic farming (%)	0.1	0.1	0.2	0.3	1.4	0.45
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Organic Farming-Energy intensity		-0.08	-0.19	0.00	-0.05	-0.08
Stabilised synergy, Organic Farming-Energy intensity		-0.08	-0.13	-0.03	-0.02	-0.06
Renewable energy (% of total)	0.14	0.12	0.12	0.23	0.25	0.17
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Renewable Energy-Energy intensity		0.09	0.00	0.00	-0.47	-0.10
Stabilised synergy, Renewable Energy-Energy intensity		0.09	0.37	-0.08	-0.25	0.03
Genuine savings (%)	0.4	0.4	0.4	0.4	5.2	1.35
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Genuine Savings-Energy intensity		0.00	0.00	0.00	-0.01	0.00
Stabilised synergy, Genuine Savings-Energy intensity		0.00	0.00	0.00	-0.02	0.00
GDP (US $)	20701	23300	23958	25428	27840	24245.51
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, GDP-Energy intensity		-0.11	-0.66	-0.03	-0.59	-0.35
Stabilised synergy, GDP-Energy intensity		-0.11	-0.35	-0.25	-0.61	-0.33
Employment rate (%)	7.3	6.9	6.0	6.9	6.4	6.70
Energy intensity	150.1	148.1	141.8	141.5	118.6	140.02
Dynamic synergy, Employment-Energy intensity		0.24	0.33	-0.01	0.45	0.25
Stabilised synergy, Employment-Energy intensity		0.24	0.31	0.96	0.59	0.52
Public debt (% of GDP)	69.8	62.5	60.9	67.3	71.6	66.43
Energy intensity	150.1	148.1	141.8	141.5	118.6	137.50
Dynamic synergy, Public Debt-Energy intensity		0.13	0.59	-0.02	-0.39	0.08
Stabilised synergy, Public Debt-Energy intensity		0.13	0.43	0.62	-0.12	0.26

Netherlands

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	96.9	97.7	99.2	99.4	105.7	99.80
Energy Intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Education-Energy intensity		-0.15	0.25	-0.03	-0.97	-0.22
Stabilised synergy, Education-Energy intensity		-0.15	0.03	-0.39	-0.73	-0.31
Healthy life years	71.2	72.2	72.7	73.4	73.9	72.68
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Healthy Life-Energy intensity		-0.25	0.13	-0.13	-0.12	-0.09
Stabilised synergy, Healthy Life-Energy intensity		-0.25	0.03	-0.46	-0.31	-0.25
Gender equality (gender Gap Index)	0.72	0.74	0.74	0.75	0.76	0.74
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Gender Equality-Energy intensity		-0.37	0.10	-0.05	-0.30	-0.16
Stabilised synergy, Gender Equality-Energy intensity		-0.37	0.03	-0.46	-0.40	-0.30
Income distribution (ratio value)	9.2	9.2	9.2	5.6	11.5	8.93
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Income Distribution-Energy intensity		0.00	-0.07	0.17	-0.06	0.01
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.17	0.17	-0.49	-0.12
Population growth (over 5 years, %)	2.48	1.87	1.36	1.81	2.28	1.96
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Population Growth-Energy intensity		0.23	-0.22	-0.20	-0.24	-0.11
Stabilised synergy, Population Growth-Energy intensity		0.23	0.00	0.25	0.65	0.28
Good governance (total score World Bank)	10.25	9.95	10.04	9.91	10.32	10.09
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Good Governance-Energy intensity		0.52	0.16	0.20	-0.68	0.05
Stabilised synergy, Good Governance-Energy intensity		0.52	-0.04	0.50	-0.06	0.23
Biodiversity of forest area (change over 10 years, %)	0.00	0.00	0.00	0.00	0.00	0.00
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.37	-0.22	0.18	0.31	0.16
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.37	0.00	0.11	0.18	0.16
Biodiversity (protected areas, %)	14.53	14.55	15.16	15.16	15.16	14.91
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.03	0.70	0.00	0.00	0.17

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.03	0.02	-0.66	-0.35	-0.25
Renewable water resources (%)	9.8	4.4	4.4	4.4	3.1	5.24
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Renewable Water Resources-Energy intensity		0.10	0.00	0.00	0.21	0.08
Stabilised synergy, Renewable Water Resources-Energy intensity		0.10	0.00	0.12	0.18	0.10
Consumption (global hectares)	3.36	2.99	3.18	3.19	3.60	3.26
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Consumption-Energy intensity		0.50	0.93	-0.06	-0.48	0.22
Stabilised synergy, Consumption-Energy intensity		0.50	-0.01	0.75	-0.58	0.16
Energy use (toe/capita)	4.9	4.7	4.8	5.0	4.7	4.82
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Energy Use-Energy intensity		0.58	0.49	-0.57	0.93	0.36
Stabilised synergy, Energy Use-Energy intensity		0.58	-0.19	-0.51	0.28	0.04
Energy savings (change over 4 years, %)	-0.06	0.00	0.00	-0.07	0.03	-0.02
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Energy Savings-Energy intensity		0.06	-0.02	0.00	0.04	0.02
Stabilised synergy, Energy Savings-Energy intensity		0.06	0.00	-0.31	0.08	-0.04
Greenhouse gas emissions (ton CO_2 per capita)	11.04	10.91	11.12	11.26	10.37	10.94
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Green House Gases-Energy intensity		0.20	0.32	-0.18	0.78	0.28
Stabilised synergy, Greenhouse Gases-Energy intensity		0.20	0.10	-0.30	0.49	0.12
Organic farming (%)	2.7	3.0	3.5	3.8	4.4	3.47
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Organic Farming-Energy intensity		-0.67	0.33	-0.96	-0.38	-0.42
Stabilised synergy, Organic Farming-Energy intensity		-0.67	0.00	-0.18	-0.21	-0.26
Renewable energy (% of total)	2.54	2.46	2.61	2.40	2.49	2.50
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Renewable Energy-Energy intensity		0.57	0.93	0.80	-0.64	0.42
Stabilised synergy, Renewable Energy-Energy intensity		0.57	0.02	0.84	0.15	0.39
Genuine savings (%)	13.9	16.6	12.7	12.8	16.9	14.60
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Genuine Savings-Energy intensity		-0.29	-0.26	-0.12	-0.20	-0.22
Stabilised synergy, Genuine Savings-Energy intensity		-0.29	-0.01	0.85	-0.58	-0.01
GDP (US $)	35021	39821	40057	42183	41711	39758.59
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, GDP-Energy intensity		-0.41	0.10	-0.79	0.18	-0.23
Stabilised synergy, GDP-Energy intensity		-0.41	0.01	-0.32	-0.65	-0.34
Employment rate (%)	4.6	3.9	2.8	4.5	5.3	4.22
Energy intensity	136.2	128.6	136.3	127.2	119.4	129.54
Dynamic synergy, Employment-Energy intensity		0.37	-0.21	-0.11	-0.34	-0.08
Stabilised synergy, Employment-Energy intensity		0.37	0.00	0.33	-0.81	-0.03
Public debt (% of GDP)	52.4	47.4	58.5	63.4	71.3	58.58
Energy intensity	136.2	128.6	136.3	127.2	119.4	127.88
Dynamic synergy, Public Debt-Energy intensity		0.58	0.26	-0.79	-0.49	-0.11
Stabilised synergy, Public Debt-Energy intensity		0.58	0.01	-0.31	-0.34	-0.02

Poland

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	1.0	0.0	0.0	0.0	0.0	0.20
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Sufficient Food-Energy intensity		0.09	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.09	0.13	0.21	0.27	0.17
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	89.6	89.5	89.5	89.5	89.5	89.52
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Safe Sanitation-Energy Intensity		0.01	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.01	0.01	0.01	0.00	0.01
Education (enrolment rate, %)	86.2	87.3	87.6	88.0	90.3	87.89
Energy Intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Education-Energy intensity		-0.14	-0.09	-0.05	-0.34	-0.16
Stabilised synergy, Education-Energy intensity		-0.14	-0.13	-0.10	-0.18	-0.14
Healthy life years	65.8	66.7	66.6	67.4	68.4	66.99
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Healthy Life-Energy intensity		-0.14	0.04	-0.14	-0.19	-0.11
Stabilised synergy, Healthy Life-Energy intensity		-0.14	-0.10	-0.12	-0.15	-0.13
Gender equality (gender Gap Index)	0.68	0.70	0.70	0.70	0.70	0.70
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Gender Equality-Energy intensity		-0.23	-0.36	0.00	0.01	-0.15
Stabilised synergy, Gender Equality-Energy intensity		-0.23	-0.28	-0.17	-0.13	-0.20
Income distribution (ratio value)	8.6	8.8	9.1	7.8	8.7	8.59
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Income Distribution-Energy intensity		-0.25	-0.88	0.68	-0.73	-0.30
Stabilised synergy, Income Distribution-Energy intensity		-0.25	-0.43	0.43	-0.03	-0.07
Population growth (over 5 years, %)	-0.24	-0.28	-0.21	0.05	1.09	0.08
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Population Growth-Energy intensity		-0.64	0.13	0.07	0.00	-0.11
Stabilised synergy, Population Growth-Energy intensity		-0.64	0.82	0.17	0.05	0.10
Good governance (total score World Bank)	2.95	2.90	3.77	4.84	5.04	3.90
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Good Governance-Energy intensity		0.18	-0.11	-0.32	-0.52	-0.19
Stabilised synergy, Good Governance-Energy intensity		0.18	-0.45	-0.32	-0.38	-0.24
Biodiversity of forest area (change over 10 years, %)	0.05	0.06	0.06	0.07	0.07	0.06
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.99	-0.41	-0.85	0.01	-0.56
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.99	-0.67	-0.73	-0.96	-0.84
Biodiversity (protected areas, %)	21.81	21.81	21.81	21.81	21.81	21.81
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00
Renewable water resources (%)	20.8	4.4	4.4	4.4	3.1	7.44
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Renewable Water Resources-Energy intensity		0.12	0.00	0.00	0.27	0.10
Stabilised synergy, Renewable Water Resources-Energy intensity		0.12	0.16	0.26	0.31	0.21
Consumption (global hectares)	1.55	1.70	1.97	1.92	2.20	1.87
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Consumption-Energy intensity		-0.98	-0.21	0.26	-0.54	-0.37
Stabilised synergy, Consumption-Energy intensity		-0.98	-0.47	-0.86	-0.64	-0.74
Energy use (toe/capita)	2.4	2.5	2.6	2.6	2.5	2.53
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Energy Use-Energy intensity		-0.68	-0.27	-0.18	0.36	-0.19
Stabilised synergy, Energy Use-Energy intensity		-0.68	-0.59	-0.45	-0.23	-0.49
Energy savings (change over 4 years, %)	-0.03	-0.10	-0.07	-0.03	0.01	-0.04
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Energy Savings-Energy intensity		-0.04	0.15	0.14	0.05	0.08
Stabilised synergy, Energy Savings-Energy intensity		-0.04	-0.07	0.12	0.19	0.05
Greenhouse gas emissions (ton CO_2 per capita)	7.68	7.98	7.86	7.95	7.62	7.82
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Green House Gases-Energy intensity		-0.42	0.44	-0.13	0.54	0.11
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.42	-0.19	-0.18	0.03	-0.19
Organic farming (%)	4.9	4.8	5.7	7.2	8.8	6.28
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Organic Farming-Energy intensity		0.04	-0.20	-0.33	-0.36	-0.21
Stabilised synergy, Organic Farming-Energy intensity		0.04	-0.74	-0.42	-0.33	-0.36
Renewable energy (% of total)	1.08	1.85	2.03	3.37	4.28	2.52
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Renewable Energy-Energy intensity		-0.13	-0.35	-0.14	-0.29	-0.23
Stabilised synergy, Renewable Energy-Energy intensity		-0.13	-0.14	-0.10	-0.09	-0.12
Genuine savings (%)	7.7	9.8	9.5	7.4	7.9	8.42
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Genuine Savings-Energy intensity		-0.35	0.87	0.41	-0.86	0.02
Stabilised synergy, Genuine Savings-Energy intensity		-0.35	-0.53	0.19	-0.10	-0.20
GDP (US $)	13580	16370	18035	20334	21214	17906.74
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, GDP-Energy intensity		-0.46	-0.34	-0.72	-0.56	-0.52
Stabilised synergy, GDP-Energy intensity		-0.46	-0.38	-0.41	-0.47	-0.43
Employment rate (%)	19.0	13.8	7.1	9.6	10.1	11.92
Energy intensity	318.2	288.2	278.3	252.8	233.3	274.16
Dynamic synergy, Employment-Energy intensity		0.34	0.07	-0.26	-0.68	-0.13
Stabilised synergy, Employment-Energy intensity		0.34	0.20	0.42	0.57	0.38
Public debt (% of GDP)	45.7	47.7	47.1	54.8	55.6	50.19
Energy intensity	318.2	288.2	278.3	252.8	233.3	263.15
Dynamic synergy, Public Debt-Energy intensity		-0.48	0.39	-0.56	-0.18	-0.21
Stabilised synergy, Public Debt-Energy intensity		-0.48	-0.25	-0.97	-0.81	-0.63

Portugal

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	98.6	98.9	99.2	99.5	99.8	99.20
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Sufficient to Drink-Energy Intensity		-0.05	-0.09	-0.11	-0.79	-0.26
Stabilised synergy, Sufficient to Drink-Energy intensity		-0.05	-0.07	-0.08	-0.11	-0.08
Safe sanitation (%)	99.1	99.8	100.0	100.0	100.0	99.78
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Safe Sanitation-Energy Intensity		-0.13	-0.06	0.00	0.00	-0.05
Stabilised synergy, Safe Sanitation-Energy intensity		-0.13	-0.10	-0.08	-0.08	-0.10
Education (enrolment rate, %)	88.0	89.4	94.4	95.6	95.6	92.59
Energy Intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Education-Energy intensity		-0.28	-0.59	-0.46	0.00	-0.33
Stabilised synergy, Education-Energy intensity		-0.28	-0.83	-0.77	-0.74	-0.65
Healthy life years	69.2	70.0	71.0	71.4	72.9	70.89
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Healthy Life-Energy intensity		-0.21	-0.43	-0.19	-0.18	-0.25
Stabilised synergy, Healthy Life-Energy intensity		-0.21	-0.30	-0.28	-0.46	-0.31
Gender equality (gender Gap Index)	0.69	0.71	0.72	0.71	0.71	0.71
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Gender Equality-Energy intensity		-0.34	-0.52	0.13	0.31	-0.10
Stabilised synergy, Gender Equality-Energy intensity		-0.34	-0.42	-0.29	-0.17	-0.30
Income distribution (ratio value)	15.0	15.0	14.9	9.2	15.0	13.81
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.20	0.07	-0.01	0.07
Stabilised synergy, Income Distribution-Energy intensity		0.00	0.08	0.29	0.00	0.09
Population growth (over 5 years, %)	2.07	1.54	0.95	0.66	-0.27	0.99
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Population Growth-Energy intensity		0.22	0.09	0.09	0.00	0.10
Stabilised synergy, Population Growth-Energy intensity		0.22	0.16	0.17	0.10	0.16
Good governance (total score World Bank)	7.13	6.04	6.51	5.73	5.55	6.19
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Good Governance-Energy intensity		0.36	-0.42	0.23	0.12	0.07
Stabilised synergy, Good Governance-Energy intensity		0.36	1.00	0.57	0.52	0.61
Biodiversity of forest area (change over 10 years, %)	0.02	0.01	0.01	0.01	0.01	0.01
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.34	0.18	0.12	-0.29	0.09
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.34	0.27	0.24	0.25	0.28
Biodiversity (protected areas, %)	5.59	5.76	6.13	6.13	6.12	5.94
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.56	-0.52	0.00	0.17	-0.23

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.56	-0.89	-0.86	-0.83	-0.79
Renewable water resources (%)	12.3	4.4	4.4	4.4	3.1	5.74
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Renewable Water Resources-Energy intensity		0.09	0.00	0.00	0.01	0.02
Stabilised synergy, Renewable Water Resources-Energy intensity		0.09	0.13	0.17	0.16	0.14
Consumption (global hectares)	2.41	2.32	2.23	2.11	2.50	2.31
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Consumption-Energy intensity		0.66	0.90	0.51	-0.02	0.51
Stabilised synergy, Consumption-Energy intensity		0.66	0.83	0.91	-0.33	0.52
Energy use (toe/capita)	2.5	2.4	2.3	2.2	2.0	2.28
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Energy Use-Energy intensity		0.61	0.68	0.57	0.05	0.48
Stabilised synergy, Energy Use-Energy intensity		0.61	0.64	0.90	0.65	0.70
Energy savings (change over 4 years, %)	-0.02	0.05	0.06	0.07	0.13	0.06
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Energy Savings-Energy intensity		0.02	-0.16	-0.10	0.00	-0.06
Stabilised synergy, Energy Savings-Energy intensity		0.02	0.03	0.03	0.02	0.02
Greenhouse gas emissions (ton CO_2 per capita)	5.95	5.43	5.08	4.52	4.34	5.06
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Green House Gases-Energy intensity		0.64	0.51	0.26	0.09	0.37
Stabilised synergy, Greenhouse Gases-Energy intensity		0.64	0.59	0.47	0.43	0.53
Organic farming (%)	13.1	16.7	17.5	23.2	20.5	18.24
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Organic Farming-Energy intensity		-0.20	-0.70	-0.09	0.03	-0.24
Stabilised synergy, Organic Farming-Energy intensity		-0.20	-0.26	-0.15	-0.21	-0.20
Renewable energy (% of total)	5.75	6.61	6.08	5.79	5.97	6.04
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Renewable Energy-Energy intensity		-0.37	0.41	0.59	-0.12	0.13
Stabilised synergy, Renewable Energy-Energy intensity		-0.37	-0.66	-0.06	-0.34	-0.36
Genuine savings (%)	1.9	1.0	-1.9	-3.1	8.7	1.33
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Genuine Savings-Energy intensity		0.11	0.01	-0.05	0.00	0.02
Stabilised synergy, Genuine Savings-Energy intensity		0.11	0.04	0.04	-0.03	0.04
GDP (US $)	20712	22697	22701	23361	23068	22507.89
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, GDP-Energy intensity		-0.58	-0.01	-0.97	0.30	-0.31
Stabilised synergy, GDP-Energy intensity		-0.58	-0.90	-0.88	-0.98	-0.84
Employment rate (%)	6.7	7.7	7.6	10.8	15.6	9.68
Energy intensity	147.8	139.6	135.0	131.2	130.7	136.86
Dynamic synergy, Employment-Energy intensity		-0.37	0.39	-0.07	-0.01	-0.01
Stabilised synergy, Employment-Energy intensity		-0.37	-0.64	-0.18	-0.09	-0.32
Public debt (% of GDP)	57.5	63.7	71.7	94.0	123.8	82.13
Energy intensity	147.8	139.6	135.0	131.2	130.7	134.13
Dynamic synergy, Public Debt-Energy intensity		-0.51	-0.26	-0.09	-0.01	-0.22
Stabilised synergy, Public Debt-Energy intensity		-0.51	-0.35	-0.18	-0.10	-0.28

Romania

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	1.0	0.0	0.0	0.0	0.0	0.20
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Sufficient Food-Energy intensity		0.14	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.14	0.17	0.20	0.31	0.21
Sufficient to drink (%)	87.7	87.7	87.7	87.7	87.7	87.70
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	72.1	72.1	72.1	72.1	72.1	72.10
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	76.3	78.8	83.4	83.7	80.6	80.54
Energy Intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Education-Energy intensity		-0.23	-0.60	-0.11	0.26	-0.17
Stabilised synergy, Education-Energy intensity		-0.23	-0.54	-0.49	-0.18	-0.36
Healthy life years	63.1	64.2	65.0	65.6	66.8	64.92
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Healthy Life-Energy intensity		-0.12	-0.35	-0.36	-0.12	-0.24
Stabilised synergy, Healthy Life-Energy intensity		-0.12	-0.17	-0.20	-0.18	-0.17
Gender equality (gender Gap Index)	0.68	0.68	0.68	0.68	0.69	0.68
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Gender Equality-Energy intensity		0.04	-0.26	0.07	-0.10	-0.06
Stabilised synergy, Gender Equality-Energy intensity		0.04	-0.02	-0.01	-0.05	-0.01
Income distribution (ratio value)	8.1	7.5	8.0	10.2	5.3	7.80
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Income Distribution-Energy intensity		0.52	-0.54	-0.11	0.30	0.04
Stabilised synergy, Income Distribution-Energy intensity		0.52	0.07	-0.78	0.89	0.18
Population growth (over 5 years, %)	-5.01	-4.24	-4.80	-5.03	-3.86	-4.59
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Population Growth-Energy intensity		0.94	-0.27	-0.60	0.62	0.17
Stabilised synergy, Population Growth-Energy intensity		0.94	0.23	-0.03	0.73	0.47
Good governance (total score World Bank)	-0.16	0.69	1.07	1.11	0.34	0.61
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Good Governance-Energy intensity		0.03	-0.07	-0.71	0.21	-0.14
Stabilised synergy, Good Governance-Energy intensity		0.03	0.02	0.02	0.10	0.04
Biodiversity of forest area (change over 10 years, %)	0.00	0.01	0.03	0.05	0.06	0.03
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.06	-0.03	-0.05	-0.94	-0.27
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.06	-0.03	-0.02	-0.02	-0.03
Biodiversity (protected areas, %)	5.49	7.75	7.75	7.75	7.79	7.31
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.35	0.00	0.00	-0.03	-0.09

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.35	-0.42	-0.48	-0.75	-0.50
Renewable water resources (%)	4.2	4.4	4.4	4.4	3.1	4.12
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.29	0.00	0.00	0.50	0.05
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.29	-0.24	-0.21	0.82	0.02
Consumption (global hectares)	1.57	1.77	1.28	1.61	1.40	1.52
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Consumption-Energy intensity		-0.88	0.13	-0.11	0.90	0.01
Stabilised synergy, Consumption-Energy intensity		-0.88	0.94	-0.14	0.34	0.06
Energy use (toe/capita)	1.8	1.9	1.9	1.7	1.7	1.82
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Energy Use-Energy intensity		-0.31	-0.66	0.28	-0.04	-0.18
Stabilised synergy, Energy Use-Energy intensity		-0.31	-0.40	0.20	0.11	-0.10
Energy savings (change over 4 years, %)	-0.12	-0.07	-0.07	0.08	0.10	-0.02
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Energy Savings-Energy intensity		0.39	0.69	0.01	-0.72	0.09
Stabilised synergy, Energy Savings-Energy intensity		0.39	0.43	0.12	0.17	0.28
Greenhouse gas emissions (ton CO_2 per capita)	4.43	4.56	4.51	3.73	3.93	4.23
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Green House Gases-Energy intensity		-0.21	0.34	0.17	-0.39	-0.02
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.21	-0.10	0.81	0.36	0.21
Organic farming (%)	12.8	12.0	13.5	16.7	14.9	13.97
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Organic Farming-Energy intensity		0.45	-0.28	-0.12	0.77	0.21
Stabilised synergy, Organic Farming-Energy intensity		0.45	-0.31	-0.64	-0.51	-0.25
Renewable energy (% of total)	0.67	0.96	1.02	1.33	2.10	1.21
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Renewable Energy-Energy intensity		-0.33	-0.54	-0.09	-0.25	-0.30
Stabilised synergy, Renewable Energy-Energy intensity		-0.33	-0.33	-0.20	-0.15	-0.25
Genuine savings (%)	4.4	10.1	11.4	16.2	7.0	9.82
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Genuine Savings-Energy intensity		-0.11	-0.28	-0.07	0.25	-0.05
Stabilised synergy, Genuine Savings-Energy intensity		-0.11	-0.11	-0.07	-0.54	-0.21
GDP (US $)	9410	11494	11945	12476	13396	11744.28
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, GDP-Energy intensity		-0.65	-0.91	-0.64	-0.51	-0.68
Stabilised synergy, GDP-Energy intensity		-0.65	-0.65	-0.61	-0.74	-0.66
Employment rate (%)	7.7	7.3	5.8	7.3	7.0	7.02
Energy intensity	342.1	293.0	282.5	274.4	234.7	285.34
Dynamic synergy, Employment-Energy intensity		0.36	0.17	-0.11	0.28	0.18
Stabilised synergy, Employment-Energy intensity		0.36	0.71	0.26	0.29	0.41
Public debt (% of GDP)	21.1	12.6	13.6	31.1	38.2	23.33
Energy intensity	342.1	293.0	282.5	274.4	234.7	271.15
Dynamic synergy, Public Debt-Energy intensity		0.36	-0.44	-0.02	-0.64	-0.19
Stabilised synergy, Public Debt-Energy intensity		0.36	0.49	-0.42	-0.39	0.01

Slovakia

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	5.0	7.0	5.0	4.0	4.0	5.00
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Sufficient Food-Energy intensity		-0.43	0.06	0.53	0.00	0.04
Stabilised synergy, Sufficient Food-Energy intensity		-0.43	0.00	0.73	0.62	0.23
Sufficient to drink (%)	99.9	99.9	100.0	100.0	100.0	99.96
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	-0.06	0.00	0.00	-0.01
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	-0.01	0.00	0.00	0.00
Safe sanitation (%)	99.7	99.7	99.7	99.7	99.7	99.70
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	74.6	77.2	79.3	80.2	81.8	78.62
Energy Intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Education-Energy intensity		-0.20	-0.63	-0.10	-0.30	-0.31
Stabilised synergy, Education-Energy intensity		-0.20	-0.34	-0.28	-0.30	-0.28
Healthy life years	66.2	67.0	67.1	67.6	68.7	67.33
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Healthy Life-Energy intensity		-0.07	-0.08	-0.08	-0.24	-0.11
Stabilised synergy, Healthy Life-Energy intensity		-0.07	-0.07	-0.08	-0.12	-0.09
Gender equality (gender Gap Index)	0.68	0.68	0.68	0.68	0.69	0.68
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Gender Equality-Energy intensity		-0.06	0.38	-0.03	-0.13	0.04
Stabilised synergy, Gender Equality-Energy intensity		-0.06	-0.02	-0.02	-0.05	-0.04
Income distribution (ratio value)	6.7	6.7	6.7	6.1	5.5	6.33
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Income Distribution-Energy intensity		0.00	-0.08	0.92	0.75	0.40
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.01	0.35	0.56	0.23
Population growth (over 5 years, %)	-0.30	-0.11	0.11	0.35	0.61	0.13
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Population Growth-Energy intensity		0.27	0.01	-0.05	-0.09	0.04
Stabilised synergy, Population Growth-Energy intensity		0.27	0.14	0.13	0.10	0.16
Good governance (total score World Bank)	4.17	4.30	4.67	4.68	4.41	4.44
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Good Governance-Energy intensity		-0.18	-0.21	-0.02	0.83	0.11
Stabilised synergy, Good Governance-Energy intensity		-0.18	-0.64	-0.45	-0.18	-0.36
Biodiversity of forest area (change over 10 years, %)	0.00	0.00	0.00	0.00	0.00	0.00
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.53	-0.30	-0.53	0.42	-0.24
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.53	-0.46	-0.57	-0.73	-0.57
Biodiversity (protected areas, %)	23.18	23.18	23.18	23.18	23.18	23.18
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00
Renewable water resources (%)	2.3	4.4	4.4	4.4	3.1	3.74
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.19	0.00	0.00	0.24	0.01
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.19	-0.21	-0.31	-0.93	-0.41
Consumption (global hectares)	1.43	1.92	1.83	2.38	1.70	1.85
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Consumption-Energy intensity		-0.51	0.39	-0.35	0.24	-0.06
Stabilised synergy, Consumption-Energy intensity		-0.51	-0.68	-0.41	-0.58	-0.54
Energy use (toe/capita)	3.4	3.5	3.4	3.3	3.1	3.32
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Energy Use-Energy intensity		-0.08	0.90	0.29	0.90	0.50
Stabilised synergy, Energy Use-Energy intensity		-0.08	0.03	0.14	0.30	0.10
Energy savings (change over 4 years, %)	-0.04	0.01	0.01	0.05	0.09	0.02
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Energy Savings-Energy intensity		0.14	0.12	-0.01	-0.08	0.04
Stabilised synergy, Energy Savings-Energy intensity		0.14	0.16	0.12	0.09	0.13
Greenhouse gas emissions (ton CO_2 per capita)	7.07	6.95	6.74	6.49	5.90	6.63
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Green House Gases-Energy intensity		0.10	0.60	0.36	0.75	0.45
Stabilised synergy, Greenhouse Gases-Energy intensity		0.10	0.25	0.30	0.52	0.29
Organic farming (%)	4.3	4.5	5.1	7.4	8.2	5.90
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Organic Farming-Energy intensity		-0.25	-0.12	-0.24	-0.69	-0.33
Stabilised synergy, Organic Farming-Energy intensity		-0.25	-0.97	-0.37	-0.36	-0.49
Renewable energy (% of total)	4.80	6.09	7.27	9.01	8.79	7.19
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Renewable Energy-Energy intensity		-0.64	-0.09	-0.44	0.35	-0.21
Stabilised synergy, Renewable Energy-Energy intensity		-0.64	-0.36	-0.31	-0.39	-0.42
Genuine savings (%)	5.0	9.1	7.8	10.4	6.1	7.70
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Genuine Savings-Energy intensity		-0.21	0.12	-0.32	0.17	-0.06
Stabilised synergy, Genuine Savings-Energy intensity		-0.21	-0.34	-0.26	-0.66	-0.37
GDP (US $)	16031	20342	21032	23304	24605	21062.82
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, GDP-Energy intensity		-0.64	-0.53	-0.98	-0.81	-0.74
Stabilised synergy, GDP-Energy intensity		-0.64	-0.60	-0.60	-0.60	-0.61
Employment rate (%)	18.1	13.3	9.6	14.4	13.9	13.86
Energy intensity	324.7	269.0	264.2	236.3	220.1	262.86
Dynamic synergy, Employment-Energy intensity		0.65	0.06	-0.21	0.51	0.25
Stabilised synergy, Employment-Energy intensity		0.65	0.40	0.75	0.72	0.63
Public debt (% of GDP)	41.5	30.5	27.9	41.0	52.1	38.58
Energy intensity	324.7	269.0	264.2	236.3	220.1	247.40
Dynamic synergy, Public Debt-Energy intensity		0.65	0.21	-0.22	-0.25	0.09
Stabilised synergy, Public Debt-Energy intensity		0.65	0.57	0.04	-0.80	0.12

Slovenia

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	3.0	3.0	3.0	0.0	0.0	1.80
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Sufficient Food-Energy intensity		0.00	0.00	0.02	:	:
Stabilised synergy, Sufficient Food-Energy intensity		0.00	0.00	0.05	0.11	0.04
Sufficient to drink (%)	99.6	99.6	99.6	99.6	99.6	99.60
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	92.9	92.6	93.7	94.2	94.4	93.56
Energy Intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Education-Energy intensity		0.09	0.83	-0.28	-0.04	0.15
Stabilised synergy, Education-Energy intensity		0.09	-0.29	-0.29	-0.14	-0.16
Healthy life years	69.5	70.5	71.5	71.4	72.4	71.04
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Healthy Life-Energy intensity		-0.34	0.97	0.09	-0.20	0.13
Stabilised synergy, Healthy Life-Energy intensity		-0.34	-0.97	-0.57	-0.36	-0.56
Gender equality (gender Gap Index)	0.67	0.69	0.70	0.70	0.72	0.70
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Gender Equality-Energy intensity		-0.68	0.91	0.05	-0.23	0.01
Stabilised synergy, Gender Equality-Energy intensity		-0.68	-0.62	-0.93	-0.53	-0.69
Income distribution (ratio value)	5.9	5.9	7.2	4.9	8.3	6.46
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.06	0.06	-0.10	0.01
Stabilised synergy, Income Distribution-Energy intensity		0.00	-0.12	0.28	-0.28	-0.03
Population growth (over 5 years, %)	0.58	0.74	1.28	2.40	1.93	1.39
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Population Growth-Energy intensity		-0.15	0.02	-0.02	0.36	0.05
Stabilised synergy, Population Growth-Energy intensity		-0.15	-0.02	-0.01	-0.05	-0.06
Good governance (total score World Bank)	5.87	5.72	5.85	5.48	5.31	5.65
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Good Governance-Energy intensity		0.61	0.62	0.31	0.44	0.50
Stabilised synergy, Good Governance-Energy intensity		0.61	0.10	0.71	0.83	0.56
Biodiversity of forest area (change over 10 years, %)	0.01	0.01	0.01	0.00	0.00	0.01
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.30	-0.09	0.10	-0.03	0.07
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.30	0.10	0.11	0.27	0.20
Biodiversity (protected areas, %)	12.34	12.34	13.07	13.07	13.07	12.77
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.25	0.00	0.00	0.06

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	-0.47	-0.79	-0.52	-0.45
Renewable water resources (%)	2.9	4.4	4.4	4.4	3.1	3.85
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.08	0.00	0.00	0.25	0.04
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.08	-0.05	-0.09	-0.71	-0.23
Consumption (global hectares)	1.85	1.78	2.00	2.00	1.50	1.83
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Consumption-Energy intensity		0.88	0.12	0.02	0.29	0.33
Stabilised synergy, Consumption-Energy intensity		0.88	-0.36	-0.61	0.60	0.13
Energy use (toe/capita)	3.6	3.6	3.8	3.5	3.4	3.60
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Energy Use-Energy intensity		-0.51	0.30	0.26	0.52	0.14
Stabilised synergy, Energy Use-Energy intensity		-0.51	-0.39	0.23	0.41	-0.06
Energy savings (change over 4 years, %)	-0.11	-0.07	-0.07	0.03	0.11	-0.02
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Energy Savings-Energy intensity		0.11	0.15	0.01	-0.03	0.06
Stabilised synergy, Energy Savings-Energy intensity		0.11	0.08	0.04	0.06	0.07
Greenhouse gas emissions (ton CO_2 per capita)	7.79	7.92	8.28	7.51	7.11	7.72
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Green House Gases-Energy intensity		-0.39	0.32	0.21	0.76	0.23
Stabilised synergy, Greenhouse Gases-Energy intensity		-0.39	-0.45	0.76	0.76	0.17
Organic farming (%)	10.6	10.5	11.0	14.2	14.9	12.25
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Organic Farming-Energy intensity		0.21	0.30	-0.07	-0.60	-0.04
Stabilised synergy, Organic Farming-Energy intensity		0.21	-0.71	-0.14	-0.29	-0.23
Renewable energy (% of total)	4.84	6.00	6.10	6.28	7.60	6.16
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Renewable Energy-Energy intensity		-0.17	0.83	-0.69	-0.34	-0.09
Stabilised synergy, Renewable Energy-Energy intensity		-0.17	-0.11	-0.16	-0.20	-0.16
Genuine savings (%)	15.0	17.5	14.9	13.3	9.5	14.05
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Genuine Savings-Energy intensity		-0.26	-0.10	0.18	0.25	0.02
Stabilised synergy, Genuine Savings-Energy intensity		-0.26	0.27	0.41	0.31	0.18
GDP (US $)	23367	27992	27471	28642	27900	27074.24
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, GDP-Energy intensity		-0.21	-0.78	-0.46	0.36	-0.27
Stabilised synergy, GDP-Energy intensity		-0.21	-0.16	-0.21	-0.59	-0.29
Employment rate (%)	6.3	6.0	4.4	7.2	8.8	6.54
Energy intensity	208.4	199.7	202.6	198.6	184.5	198.76
Dynamic synergy, Employment-Energy intensity		0.88	-0.05	-0.03	-0.32	0.12
Stabilised synergy, Employment-Energy intensity		0.88	0.09	-0.33	-0.29	0.09
Public debt (% of GDP)	27.3	26.4	22.0	38.7	52.8	33.46
Energy intensity	208.4	199.7	202.6	198.6	184.5	196.35
Dynamic synergy, Public Debt-Energy intensity		0.80	-0.09	-0.03	-0.19	0.12
Stabilised synergy, Public Debt-Energy intensity		0.80	0.14	-0.11	-0.12	0.18

Spain

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	94.2	96.5	98.7	100.0	105.6	99.00
Energy Intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Education-Energy intensity		-0.39	-0.48	0.57	-0.66	-0.24
Stabilised synergy, Education-Energy intensity		-0.39	-0.44	-0.71	-0.73	-0.57
Healthy life years	72.6	73.4	73.6	74.5	75.4	73.90
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Healthy Life-Energy intensity		-0.17	-0.05	0.56	-0.13	0.05
Stabilised synergy, Healthy Life-Energy intensity		-0.17	-0.13	-0.30	-0.23	-0.21
Gender equality (gender Gap Index)	0.73	0.73	0.76	0.76	0.73	0.74
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Gender Equality-Energy intensity		0.08	-0.79	0.15	0.48	-0.02
Stabilised synergy, Gender Equality-Energy intensity		0.08	-0.30	-0.41	0.04	-0.14
Income distribution (ratio value)	9.0	10.3	10.2	17.2	9.0	11.15
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Income Distribution-Energy intensity		-0.45	0.14	0.03	0.18	-0.02
Stabilised synergy, Income Distribution-Energy intensity		-0.45	-0.80	-0.10	0.00	-0.33
Population growth (over 5 years, %)	8.42	8.93	8.93	6.70	3.39	7.27
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Population Growth-Energy intensity		-0.95	0.02	-0.09	0.17	-0.21
Stabilised synergy, Population Growth-Energy intensity		-0.95	-0.56	0.43	0.28	-0.20
Good governance (total score World Bank)	6.86	5.52	5.69	5.34	5.17	5.72
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Good Governance-Energy intensity		0.33	-0.67	-0.38	0.38	-0.08
Stabilised synergy, Good Governance-Energy intensity		0.33	0.64	0.40	0.68	0.51
Biodiversity of forest area (change over 10 years, %)	0.53	0.43	0.36	0.29	0.32	0.39
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.35	0.30	-0.12	-0.87	-0.08
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.35	0.35	0.20	0.43	0.33
Biodiversity (protected areas, %)	7.63	7.63	7.63	7.63	7.63	7.63
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		0.00	0.00	0.00	0.00	0.00
Renewable water resources (%)	32.8	4.4	4.4	4.4	3.1	9.84
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Renewable Water Resources-Energy intensity		0.07	0.00	0.00	0.30	0.09
Stabilised synergy, Renewable Water Resources-Energy intensity		0.07	0.13	0.10	0.18	0.12
Consumption (global hectares)	2.63	2.34	2.59	2.35	2.40	2.46
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Consumption-Energy intensity		0.59	-0.44	-0.25	-0.24	-0.09
Stabilised synergy, Consumption-Energy intensity		0.59	0.13	0.83	0.52	0.52
Energy use (toe/capita)	3.3	3.2	3.1	2.8	2.7	3.00
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Energy Use-Energy intensity		0.18	0.91	-0.25	0.26	0.28
Stabilised synergy, Energy Use-Energy intensity		0.18	0.58	0.59	0.99	0.58
Energy savings (change over 4 years, %)	-0.08	-0.03	0.06	0.14	0.11	0.04
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Energy Savings-Energy intensity		0.11	0.02	0.02	0.45	0.15
Stabilised synergy, Energy Savings-Energy intensity		0.11	0.06	0.03	0.07	0.07
Greenhouse gas emissions (ton CO_2 per capita)	7.82	7.53	6.96	5.81	5.77	6.78
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Green House Gases-Energy intensity		0.58	0.62	-0.14	0.08	0.28
Stabilised synergy, Greenhouse Gases-Energy intensity		0.58	0.98	0.34	0.64	0.63
Organic farming (%)	5.9	6.5	7.6	11.7	12.8	8.89
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Organic Farming-Energy intensity		-0.70	-0.27	0.04	-0.92	-0.46
Stabilised synergy, Organic Farming-Energy intensity		-0.70	-0.38	-0.09	-0.14	-0.33
Renewable energy (% of total)	2.51	3.23	4.54	5.85	6.40	4.51
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Renewable Energy-Energy intensity		-0.22	-0.12	0.08	-0.92	-0.29
Stabilised synergy, Renewable Energy-Energy intensity		-0.22	-0.13	-0.07	-0.11	-0.13
Genuine savings (%)	10.6	9.2	7.4	9.2	5.9	8.44
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Genuine Savings-Energy intensity		0.48	0.24	0.09	0.24	0.26
Stabilised synergy, Genuine Savings-Energy intensity		0.48	0.36	0.68	0.37	0.47
GDP (US $)	27524	30472	29665	30626	29851	29627.50
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, GDP-Energy intensity		-0.60	0.56	0.72	0.29	0.24
Stabilised synergy, GDP-Energy intensity		-0.60	-0.72	-0.78	-0.51	-0.65
Employment rate (%)	11.1	8.6	11.5	20.2	25.2	15.32
Energy intensity	135.2	126.5	120.5	123.3	112.7	123.64
Dynamic synergy, Employment-Energy intensity		0.29	-0.14	0.03	-0.35	-0.04
Stabilised synergy, Employment-Energy intensity		0.29	-0.33	-0.11	-0.13	-0.07
Public debt (% of GDP)	46.3	39.7	40.2	61.7	85.9	54.73
Energy intensity	135.2	126.5	120.5	123.3	112.7	120.75
Dynamic synergy, Public Debt-Energy intensity		0.45	-0.26	0.04	-0.22	0.00
Stabilised synergy, Public Debt-Energy intensity		0.45	0.83	-0.26	-0.19	0.21

Sweden

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	96.1	94.6	92.7	92.8	91.7	93.56
Energy Intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Education-Energy intensity		0.48	-0.82	-0.03	0.17	-0.05
Stabilised synergy, Education-Energy intensity		0.48	0.24	0.68	0.39	0.45
Healthy life years	73.3	74.0	74.3	74.5	74.7	74.17
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Healthy Life-Energy intensity		-0.31	0.15	-0.05	-0.05	-0.06
Stabilised synergy, Healthy Life-Energy intensity		-0.31	-0.63	-0.31	-0.17	-0.35
Gender equality (gender Gap Index)	0.81	0.81	0.80	0.80	0.81	0.81
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Gender Equality-Energy intensity		-0.03	-0.58	-0.06	-0.15	-0.20
Stabilised synergy, Gender Equality-Energy intensity		-0.03	0.64	0.22	0.00	0.21
Income distribution (ratio value)	6.1	6.2	6.2	5.5	5.5	5.89
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Income Distribution-Energy intensity		-0.51	-0.22	0.39	0.00	-0.08
Stabilised synergy, Income Distribution-Energy intensity		-0.51	-0.79	0.51	0.85	0.02
Population growth (over 5 years, %)	1.77	2.07	2.92	3.86	4.06	2.94
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Population Growth-Energy intensity		-0.19	0.06	-0.13	-0.74	-0.25
Stabilised synergy, Population Growth-Energy intensity		-0.19	-0.01	-0.04	-0.09	-0.08
Good governance (total score World Bank)	10.69	10.70	10.47	10.59	10.95	10.68
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Good Governance-Energy intensity		-0.03	-0.87	-0.28	-0.48	-0.41
Stabilised synergy, Good Governance-Energy intensity		-0.03	0.42	0.18	-0.21	0.09
Biodiversity of forest area (change over 10 years, %)	0.18	0.21	0.21	0.20	0.16	0.19
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		-0.16	-0.86	0.54	0.35	-0.03
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		-0.16	-0.05	-0.34	0.68	0.03
Biodiversity (protected areas, %)	9.79	9.88	10.02	10.02	10.02	9.95
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.30	0.59	0.00	0.00	0.07

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.30	-0.36	-0.48	-0.21	-0.34
Renewable water resources (%)	1.5	4.4	4.4	4.4	3.1	3.58
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Renewable Water Resources-Energy intensity		-0.02	0.00	0.00	0.24	0.06
Stabilised synergy, Renewable Water Resources-Energy intensity		-0.02	0.00	-0.03	-0.11	-0.04
Consumption (global hectares)	2.88	4.66	3.23	2.71	2.70	3.23
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Consumption-Energy intensity		-0.05	-0.08	0.26	0.04	0.04
Stabilised synergy, Consumption-Energy intensity		-0.05	-0.07	0.82	0.55	0.31
Energy use (toe/capita)	5.8	5.5	5.4	5.4	5.3	5.49
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Energy Use-Energy intensity		0.60	-0.91	-0.21	0.42	-0.03
Stabilised synergy, Energy Use-Energy intensity		0.60	0.11	0.70	0.85	0.56
Energy savings (change over 4 years, %)	-0.09	0.05	0.08	0.02	0.02	0.02
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Energy Savings-Energy intensity		0.02	0.04	0.05	-0.57	-0.11
Stabilised synergy, Energy Savings-Energy intensity		0.02	0.00	0.04	0.09	0.04
Greenhouse gas emissions (ton CO_2 per capita)	5.58	5.29	4.82	5.03	4.25	4.99
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Green House Gases-Energy intensity		0.63	-0.28	-0.93	0.44	-0.03
Stabilised synergy, Greenhouse Gases-Energy intensity		0.63	0.06	0.52	0.49	0.42
Organic farming (%)	28.7	28.7	31.5	33.4	36.9	31.84
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Organic Farming-Energy intensity		0.10	0.25	-0.70	-0.65	-0.25
Stabilised synergy, Organic Farming-Energy intensity		0.10	-0.09	-0.31	-0.41	-0.18
Renewable energy (% of total)	6.98	9.89	10.79	14.07	15.58	11.46
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Renewable Energy-Energy intensity		-0.08	0.27	-0.14	-0.64	-0.15
Stabilised synergy, Renewable Energy-Energy intensity		-0.08	-0.02	-0.05	-0.09	-0.06
Genuine savings (%)	19.1	22.0	21.4	17.0	17.8	19.46
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Genuine Savings-Energy intensity		-0.21	-0.91	0.21	-0.63	-0.39
Stabilised synergy, Genuine Savings-Energy intensity		-0.21	-0.07	0.48	0.58	0.19
GDP (US $)	33146	37481	35938	40394	41188	37629.46
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, GDP-Energy intensity		-0.25	-0.60	-0.34	-0.28	-0.37
Stabilised synergy, GDP-Energy intensity		-0.25	-0.10	-0.23	-0.48	-0.26
Employment rate (%)	6.6	7.1	6.3	8.6	8.0	7.32
Energy intensity	138.8	134.3	137.6	131.8	122.7	133.04
Dynamic synergy, Employment-Energy intensity		-0.43	-0.22	-0.12	0.99	0.06
Stabilised synergy, Employment-Energy intensity		-0.43	0.19	-0.17	-0.55	-0.24
Public debt (% of GDP)	50.3	45.3	38.8	39.4	38.3	42.42
Energy intensity	138.8	134.3	137.6	131.8	122.7	131.60
Dynamic synergy, Public Debt-Energy intensity		0.32	-0.17	-0.39	0.43	0.05
Stabilised synergy, Public Debt-Energy intensity		0.32	0.04	0.23	0.48	0.27

United Kingdom

Indicators/synergy analysis types	2006	2008	2010	2012	2014	Average
Sufficient food (% under-nourished)	0.0	0.0	0.0	0.0	0.0	0.00
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Stabilised synergy, Sufficient Food-Energy intensity		:	:	:	:	:
Sufficient to drink (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Sufficient to Drink-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Sufficient to Drink-Energy intensity		0.00	0.00	0.00	0.00	0.00
Safe sanitation (%)	100.0	100.0	100.0	100.0	100.0	100.00
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Safe Sanitation-Energy Intensity		0.00	0.00	0.00	0.00	0.00
Stabilised synergy, Safe Sanitation-Energy intensity		0.00	0.00	0.00	0.00	0.00
Education (enrolment rate, %)	92.4	89.1	88.9	90.1	89.3	89.96
Energy Intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Education-Energy intensity		0.53	0.46	-0.20	0.08	0.21
Stabilised synergy, Education-Energy intensity		0.53	0.52	0.18	0.14	0.34
Healthy life years	70.6	71.4	71.9	72.6	73.9	72.08
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Healthy Life-Energy intensity		-0.17	-0.95	-0.16	-0.15	-0.36
Stabilised synergy, Healthy Life-Energy intensity		-0.17	-0.25	-0.22	-0.20	-0.21
Gender equality (gender Gap Index)	0.74	0.74	0.75	0.75	0.74	0.74
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Gender Equality-Energy intensity		0.00	-0.47	0.00	0.03	-0.11
Stabilised synergy, Gender Equality-Energy intensity		0.00	-0.18	-0.10	-0.04	-0.08
Income distribution (ratio value)	13.8	13.8	13.6	9.2	14.0	12.88
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Income Distribution-Energy intensity		0.00	0.36	0.21	-0.22	0.09
Stabilised synergy, Income Distribution-Energy intensity		0.00	0.23	0.40	-0.06	0.14
Population growth (over 5 years, %)	2.56	2.92	3.62	3.92	3.87	3.38
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Population Growth-Energy intensity		-0.47	-0.03	-0.81	0.10	-0.30
Stabilised synergy, Population Growth-Energy intensity		-0.47	-0.17	-0.25	-0.46	-0.34
Good governance (total score World Bank)	9.59	9.21	8.87	8.27	8.23	8.83
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Good Governance-Energy intensity		0.60	0.16	0.99	0.04	0.45
Stabilised synergy, Good Governance-Energy intensity		0.60	0.96	0.97	0.60	0.78
Biodiversity of forest area (change over 10 years, %)	0.04	0.03	0.03	0.02	0.02	0.03
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Biodiversity of Forest Area-Energy intensity		0.55	0.04	0.34	0.30	0.30
Stabilised synergy, Biodiversity of Forest Area-Energy intensity		0.55	0.27	0.33	0.55	0.42
Biodiversity (protected areas, %)	17.91	18.04	18.06	18.06	18.06	18.03
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Biodiversity, Protected Area-Energy intensity		-0.11	-0.19	0.00	0.00	-0.07

Stabilised synergy, Biodiversity, Protected Area-Energy intensity		-0.11	-0.12	-0.06	-0.04	-0.08
Renewable water resources (%)	10.6	4.4	4.4	4.4	3.1	5.39
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Renewable Water Resources-Energy intensity		0.11	0.00	0.00	0.41	0.13
Stabilised synergy, Renewable Water Resources-Energy intensity		0.11	0.12	0.23	0.33	0.20
Consumption (global hectares)	2.07	2.11	2.10	2.06	2.10	2.09
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Consumption-Energy intensity		-0.34	0.86	0.26	-0.15	0.16
Stabilised synergy, Consumption-Energy intensity		-0.34	-0.22	0.01	-0.07	-0.15
Energy use (toe/capita)	3.7	3.6	3.4	3.2	3.0	3.39
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Energy Use-Energy intensity		0.36	0.09	0.62	0.58	0.41
Stabilised synergy, Energy Use-Energy intensity		0.36	0.81	0.95	0.79	0.73
Energy savings (change over 4 years, %)	0.02	0.02	0.09	0.10	0.11	0.07
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Energy Savings-Energy intensity		0.36	0.00	-0.38	-0.05	-0.01
Stabilised synergy, Energy Savings-Energy intensity		0.36	-0.02	-0.04	-0.06	0.06
Greenhouse gas emissions (ton CO_2 per capita)	8.85	8.83	8.20	7.61	7.18	8.13
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Green House Gases-Energy intensity		0.04	0.08	0.92	0.48	0.38
Stabilised synergy, Greenhouse Gases-Energy intensity		0.04	0.99	0.95	0.80	0.69
Organic farming (%)	1.8	1.9	2.6	3.4	4.4	2.82
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Organic Farming-Energy intensity		-0.73	-0.02	-0.23	-0.40	-0.35
Stabilised synergy, Organic Farming-Energy intensity		-0.73	-0.15	-0.15	-0.16	-0.30
Renewable energy (% of total)	3.84	4.23	4.57	4.34	3.43	4.08
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Renewable Energy-Energy intensity		-0.66	-0.07	0.78	0.56	0.15
Stabilised synergy, Renewable Energy-Energy intensity		-0.66	-0.38	-0.97	0.45	-0.39
Genuine savings (%)	6.3	8.1	7.5	1.8	3.0	5.35
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Genuine Savings-Energy intensity		-0.23	0.09	0.09	-0.17	-0.06
Stabilised synergy, Genuine Savings-Energy intensity		-0.23	-0.36	0.19	0.46	0.01
GDP (US $)	32090	35751	34460	36090	37307	35139.47
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, GDP-Energy intensity		-0.58	0.17	-0.71	-0.29	-0.35
Stabilised synergy, GDP-Energy intensity		-0.58	-0.98	-0.93	-0.69	-0.80
Employment rate (%)	4.7	5.5	5.4	7.8	7.9	6.26
Energy intensity	124.9	116.6	115.9	108.2	95.6	112.24
Dynamic synergy, Employment-Energy intensity		-0.39	0.33	-0.15	-0.11	-0.08
Stabilised synergy, Employment-Energy intensity		-0.39	-0.48	-0.20	-0.34	-0.36
Public debt (% of GDP)	47.2	42.8	51.9	78.5	88.8	61.82
Energy intensity	124.9	116.6	115.9	108.2	95.6	109.08
Dynamic synergy, Public Debt-Energy intensity		0.71	-0.03	-0.13	-0.88	-0.08
Stabilised synergy, Public Debt-Energy intensity		0.71	-0.72	-0.20	-0.27	-0.12