



"Monitoring the FP7 contribution to the EU's SD objectives – facts & figures (update 2013)"

FP7-4-SD.eu policy brief No. 7 from June 2013

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Overall, research called for and carried out in the Specific Programme (SP) 'Cooperation' (since 2007) has a positive impact on the renewed EU Sustainable Development Strategy (EU SDS) and its 78 operational objectives. About 75 % of the topics, 69 % of the projects and 75 % of the funding (i.e. € 12.4 billion out of € 16.6 billion) provided by the SP 'Cooperation' live up to the Programme's objective of "contributing to sustainable development".

Among the ten themes of the SP 'Cooperation', TRANSPORT is the one which comprises, so far, the largest number of topics with positive expected impacts on EU SDS objectives, closely followed by HEALTH and Agriculture (KBBE - 'Knowledge based Bio-economy'). In budgetary terms (EC contribution to projects), the themes HEALTH, ICT, Materials (NMP) and TRANSPORT constitute the main sources for funding SD-relevant research¹. In relation to the allocation of budget between the ten 'Cooperation' themes, the themes HEALTH, ENERGY and ENVIRONMENT contribute a disproportionately high share to the 78 EU SDS operational objectives.

Research carried out under the FP7 Specific Programme 'Cooperation' addresses societal challenges well. EU SDS objectives related to public health are addressed most prominently, mainly through research from the theme HEALTH, which gathers about 34.5 % of the overall EC contribution spent so far in FP7 Cooperation SP (€ 5.7 billion out of € 16.6 billion). Other important challenges addressed by FP7 research projects are related to climate change and energy as well as to natural resources.

The share of SD-relevant research in SP Cooperation increased between 2007 and 2009, reaching a maximum of about 80 % in 2009. The share has however declined since then, mainly driven by changes in the themes Materials (NMP), Agriculture (KBBE) and ENVIRONMENT. Regarding the geographical spread of the "centres of excellence" in Europe, most SD-relevant projects are coordinated by countries such as Germany, France, Italy and the UK whereas Eastern Europe is still underrepresented.

¹ In this policy brief, terms such as "SD-relevant" or "contributing to sustainable development" are used synonymously for "contributing to at least one of the 78 objectives of the renewed EU SDS".

Introduction: what is the monitoring system FP7-4-SD about?

Monitoring the FP7 impacts on EU SDS objectives in order to support accountability, transparency and governance in research

The Seventh Framework Programme for Research and Technological Development (FP7) is the EU's main programme for funding research across Europe. An overarching aim of FP7, and in particular of its Specific Programme (SP) 'Cooperation', is to contribute to sustainable development (SD), as called for in the 2006 EU Sustainable Development Strategy (EU SDS)². Against this background, DG Research and Innovation has set up a monitoring system to (i) monitor the contribution of FP7-funded research to EU SDS objectives (*accountability*), (ii) convey the value of FP7 to the public (*transparency*), and (iii) foster the governance of FP7 (*steering effect*).

The monitoring system is based on a cross-referencing between topics called for in the annual FP7 Work Programmes of the SP 'Cooperation' and the 78 operational objectives outlined in the EU SDS from 2006. Experts from WU Vienna and TU Delft have been contracted for assessing - based on scientific evidence - the FP7 impacts on EU SDS objectives for the whole Programme period 2007-2012. The system enables to identify the bulk of FP7 topics, projects, project participants and EC budgetary contribution to sustainable development. In addition, the interactive database www.fp7-4-sd.eu allows conducting customised analyses from various points of view, including the setting of filter options according to specific needs and personal interests.

How does FP7 contribute to sustainable development?

More than two thirds of FP7-funded research contributes to EU SDS objectives

Overall, about 69 % of the projects (i.e. 3,193 out of 4,613) that have been funded so far by FP7 under the 'Cooperation' Work Programmes 2007 to 2012 contribute to one or more of the 78 EU SDS operational objectives. The share is even higher when looking at the number of topics (called for in the annual Work Programmes) and the amount of funding provided by FP7 (total EC contribution), accounting for 75 % (i.e. 2,432 out of 3,234 topics) and 75 % (i.e. € 12.4 billion out of € 16.6 billion) respectively. The variation is due to differences in the number and size of projects funded in the different SP 'Cooperation' themes.

In a nutshell: The FP7 'Cooperation' programme

3,234 research topics called for since 2007 have resulted in 4,613 research projects with an EU co-financing of € 16.6 billion

The Specific Programme (SP) 'Cooperation' is at the core of FP7, representing about two thirds of the overall FP7 budget (i.e. € 32 billion out of € 50 billion) over the period 2007 to 2013. It fosters collaborative research across Europe and other partner countries, through projects by transnational consortia of industry, academia and civil society, in ten thematic areas (see Table 1 below).

² Review of the EU Sustainable Development Strategy (EU SDS) - Renewed Strategy (DOC 10917/06).

Since the start of FP7 in 2007, a total of 3,234 topics have been called for so far in the annual Work Programmes (WPs). Under these topics, 4,613 projects³ have been or are being carried out by almost 15,500 institutions from academia, business and civil society organisations with a total EC contribution (that is, the co-financing provided by FP7) of € 16.6 billion. The EC contribution accounts for 70% of the total project costs (i.e. the co-financing provided by FP7 plus other funding sources) of € 23.6 billion.

Table 1: Overview of 'Cooperation' Work Programmes 2007-2012⁴ by Theme

Theme	Number of topics	Number of projects	Number of project participations	Total project costs (€)	Total EC contribution (€)
HEALTH	447	698	7,939	4,335.3	3,212.0
Agriculture (KBBE)	476	343	4,880	1,491.4	1,107.5
ICT	238	1,498	14,516	7,235.2	5,048.4
Materials (NMP)	294	514	6,429	2,916.1	2,035.7
ENERGY	304	246	2,794	1,662.0	1,040.7
ENVIRONMENT	354	345	4,837	1,446.3	1,085.7
TRANSPORT	596	454	5,955	2,405.3	1,579.5
Social Sciences (SSH)	185	177	1,819	501.5	366.3
SPACE	75	155	1,695	606.7	423.9
SECURITY	265	183	2,201	1,049.2	735.4
Total	3,234	4,613	53,065	23,649.0	16,635.1

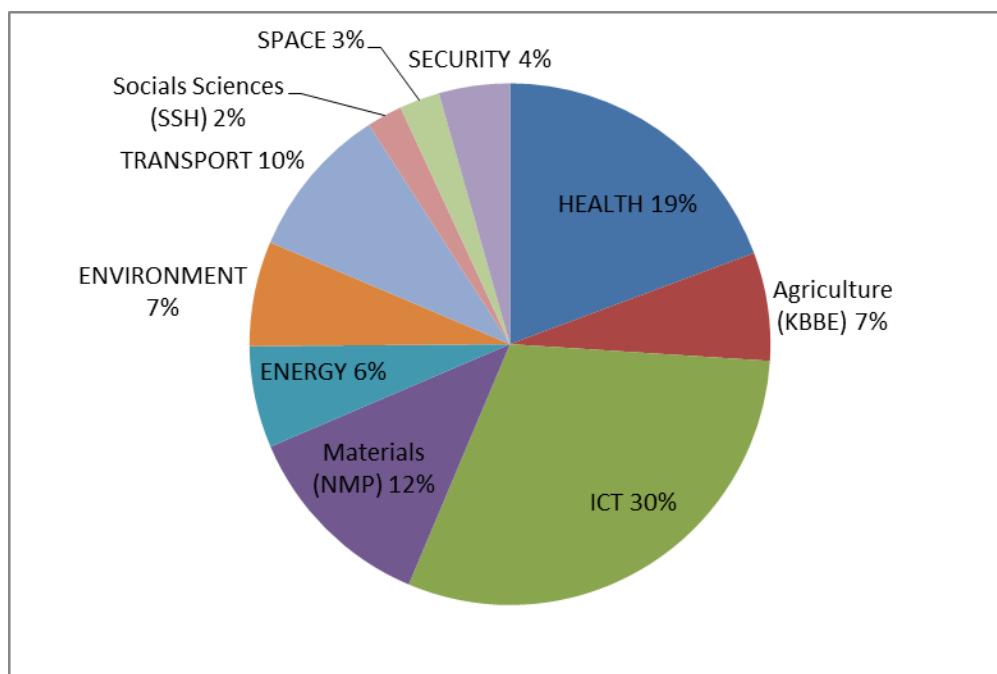


Figure 1: Share of total EC contribution (€) allocated to the ten 'Cooperation' themes (WPs 2007-2012)

³ It is important to note that not all topics called for are being translated into action by funding of projects: in the Work Programmes 2007-2012, projects are being funded under some 1,878 topics only (67 % of all topics called for). However, more than one project may be funded under one topic.

⁴ The number of topics refers to the period 2007 to 2013 (i.e. it is based on complete set of Work Programmes published under SP 'Cooperation'), whereas the other columns refer to project data up to WP 2012 only (because no projects have yet been funded under WP 2013).

How do the ten 'Cooperation' themes contribute to SD?

**The themes
TRANSPORT, HEALTH
and KBBE comprise
the largest number of
topics with impacts on
EU SDS objectives**

As shown in Figure 2 below, the theme TRANSPORT comprises the largest number of topics (i.e. research that has been called for in the annual Work Programmes 2007-2013) with positive expected impacts on EU SDS objectives (415 topics), closely followed by the themes HEALTH (413 topics) and Agriculture (KBBE; 359 topics).

In relative terms, the themes HEALTH (93 %), ENERGY (90 %) and ENVIRONMENT (85 %) show the highest share of SD-relevant topics. Themes with a share of SD-relevant topics below 50 % are ICT (49 %) and SECURITY (38 %).

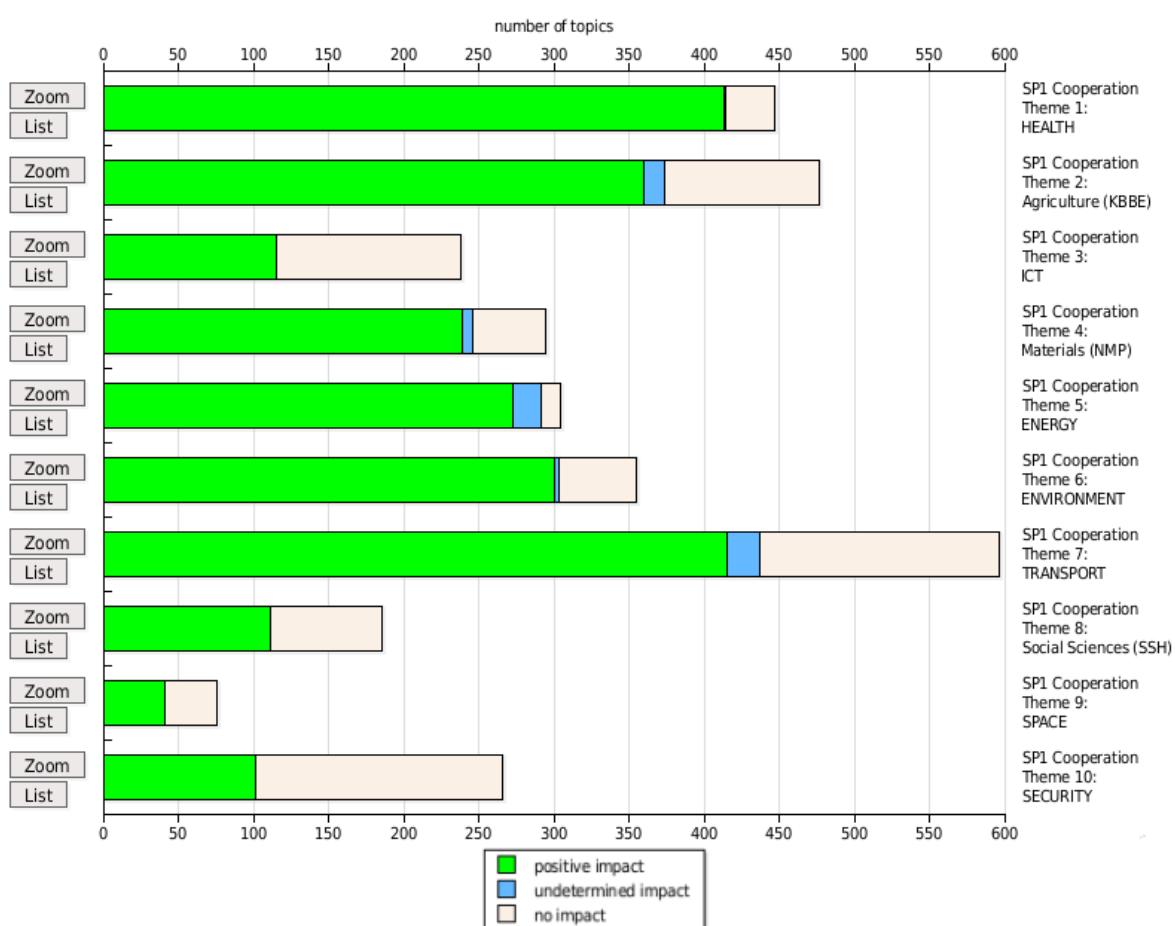


Figure 2: Number of topics with expected impacts in the ten 'Cooperation' themes (WPs 2007-2013)⁵

How big is the EU financial contribution to SD across the FP7 research themes?

**The themes HEALTH,
ICT, NMP and
TRANSPORT provide
the highest amount of
EC contribution (€) to**

The picture presented above changes when looking at the amount of co-financing ("total EC contribution") provided by FP7 (see Figure 3 below). Most striking is the fact that the theme ICT exceeds by far all other 'Cooperation' themes in terms of available budget. However, due to the rather moderate share of ICT topics having impacts on EU SDS objectives (about 49 %; see

⁵ Typology of impacts: "positive": supporting the EU SDS objectives; "undetermined": impacts that due to a lack of scientific evidence cannot yet be categorised as positive, negative or neutral.

SD-relevant research above) it is the theme HEALTH that shows the highest EC contribution to projects contributing to EU SDS objectives (€ 3 billion).

Besides ICT (ranking second with € 2.6 billion), a significant contribution comes from the themes Materials (NMP) and TRANSPORT, with € 1.7 billion and € 1.3 million respectively. At the other end of the scale, the themes Social Sciences (SSH), SPACE and SECURITY are the ones with the lowest available total budgets and consequently the lowest amount of EC contribution to SD-relevant projects.

Similar to above, the highest share of EC contribution dedicated to SD-relevant projects can be found in the themes ENERGY (94 %), HEALTH (92 %) and ENVIRONMENT (90 %).

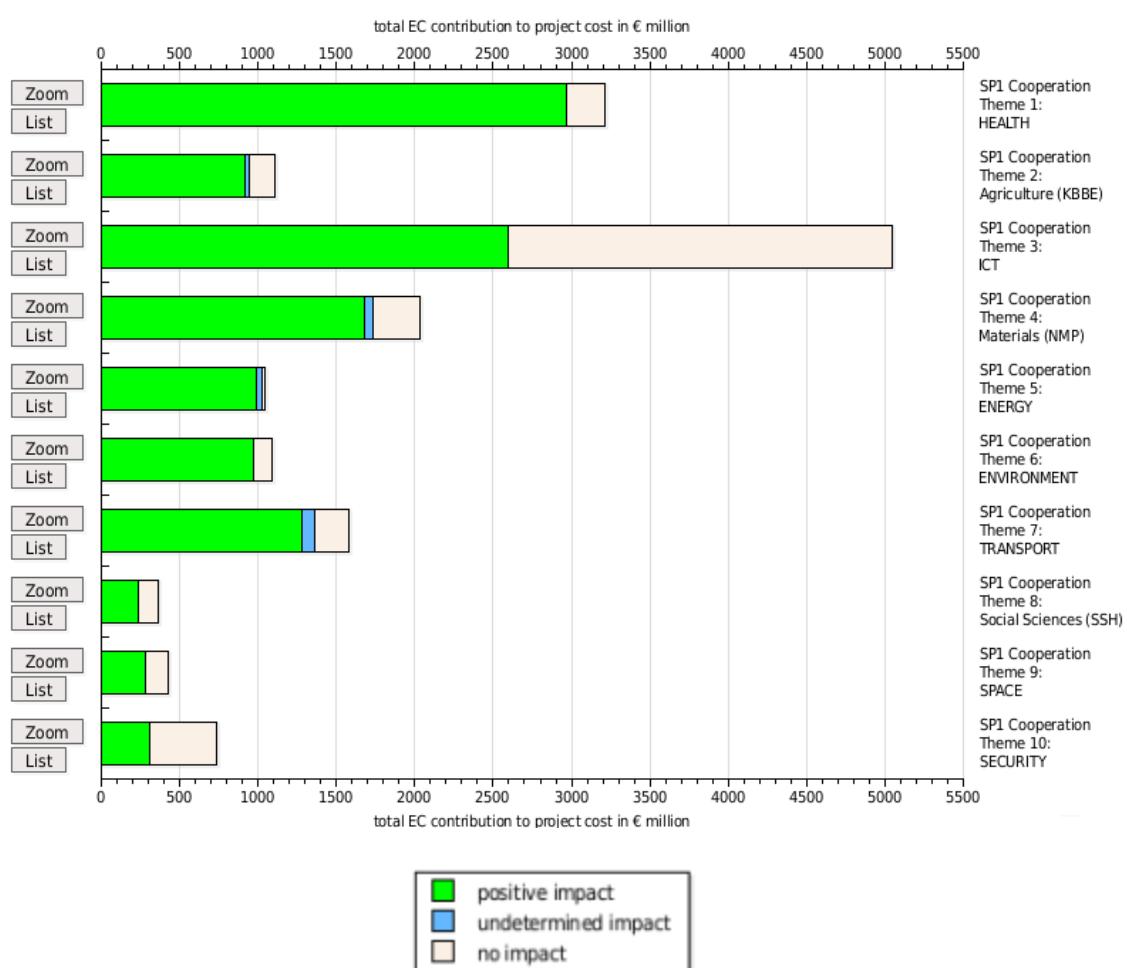


Figure 3: Total EC contribution (€) to projects with expected impacts in the ten 'Cooperation' themes (WPs 2007-2012)⁶

⁶ It is important to note that not all topics called for are being translated into action by funding of projects: in the Specific Programme 'Cooperation' from 2007-2012, projects are being funded under some 2,426 topics only (75 % of all topics called for). However, more than one project may be funded under one topic.

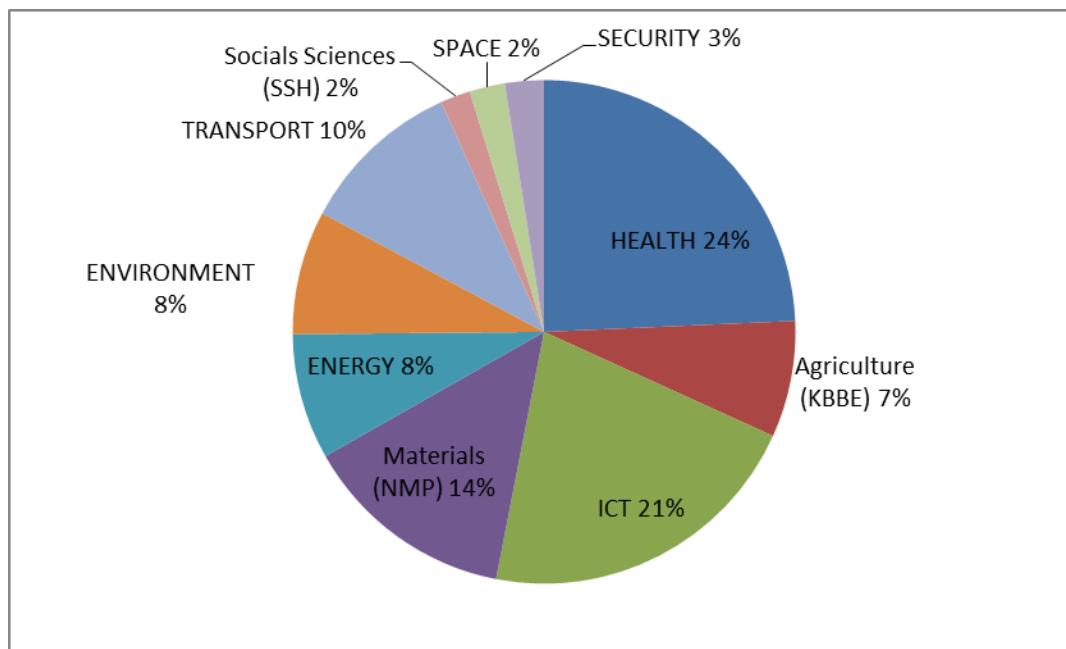


Figure 4: Share of total EC contribution (€) to projects with positive impacts on EU SDS objectives across the ten 'Cooperation' themes (WPs 2007-2012)

Which FP7 themes contribute disproportionately high/low shares to EU SDS objectives?

The themes **HEALTH**, **ENERGY** and **ENVIRONMENT** contribute a disproportionately high share to EU SDS objectives

A comparison of the budget (total EC contribution) allocated to the ten 'Cooperation' themes (see Figure 1 above) with the funding provided to projects with positive impacts on one or more of the 78 EU SDS objectives (see Figure 4) reveals that seven 'Cooperation' themes, in particular HEALTH, ENERGY and ENVIRONMENT, contribute disproportionately high to EU SDS objectives. This means that their share in the total EC contribution spent on projects with positive impacts on EU SDS objectives is higher than their share in the total EC contribution spent on all projects funded under SP 'Cooperation'.

On the other hand, the themes ICT, Social Sciences (SSH) and SECURITY contribute disproportionately low in relation to their share in the 'Cooperation' budget, which can be explained by the rather low share of SD-relevant research (around or below 50 %) funded under these three themes.

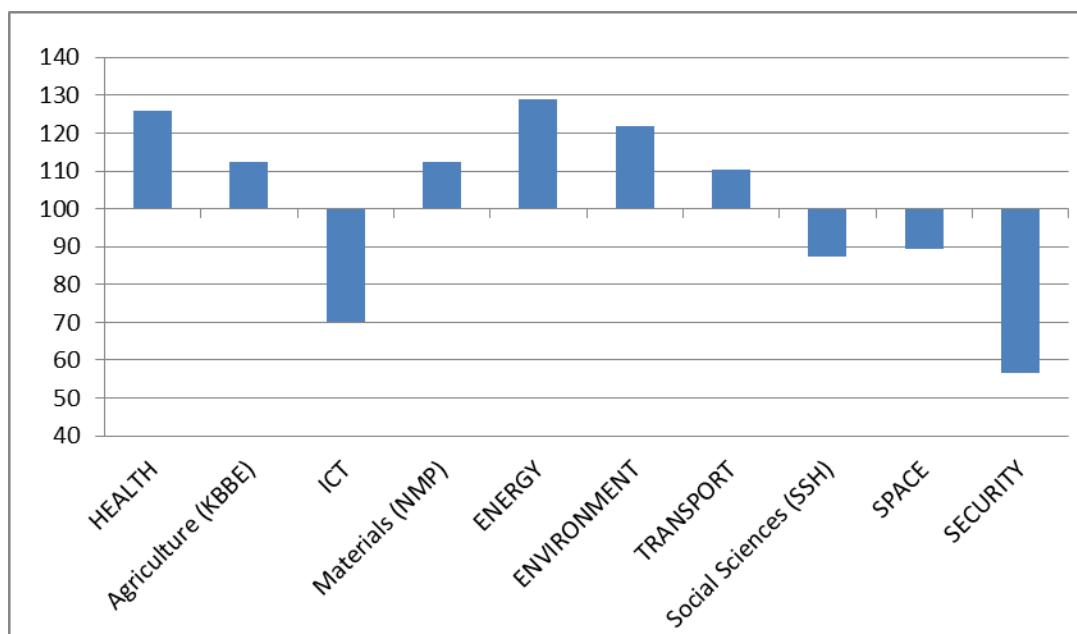


Figure 5: Analysis of total EC contribution to projects with positive impacts on EU SDS objectives in relation to total EC contribution per theme (Index basis = 100) (WPs 2007-2012)⁷

How are the EU SDS operational objectives addressed by FP7?

FP7-funded research mainly contributes to EU SDS objectives related to public health, climate change and natural resources

In order to complement the picture presented above, it is interesting to “switch the view” in order to investigate which of the seven EU SDS key challenges are actually affected by FP7 topics.

Figure 6 below shows that the key challenges “public health”, “conservation and management of natural resources” and “climate change and clean energy”⁸ are addressed most prominently by FP7 projects, with “public health” at the top, accounting for 864 topics projects contributing to the Strategy’s objectives related to health issues. The key challenges “climate change and clean energy” and “conservation and management of natural resources” are addressed by 772 and 757 topics respectively.

Research on the social pillar of SD receives lowest attention in terms of budget and topics

At the other end of the scale, the fewest impacts can be found in relation to the key challenges “social inclusion, demography and migration” and “global poverty and sustainable development challenges”, which are only addressed by 176 and 177 topics respectively.

⁷ An index above 100 means that the share of a theme’s budget spent on projects with positive impacts in relation to the total SP ‘Cooperation’ budget spent on projects with positive impacts is higher than the share of total budget allocated to the theme in general, or, in other words, that in relation to the theme’s budget its contribution to the EU SDS objectives is disproportionately high. Likewise, an index below 100 indicates a disproportionately low contribution to EU SDS objectives in relation to the budget allocated to the theme.

⁸ It has to be noted that the EU SDS key challenge “climate change and clean energy” mainly refers to energy-related objectives. The Europe 2020 strategy’s challenge of moving towards a “low carbon economy”, which was dealt with in Policy Brief No. 2, has a broader understanding of climate change, and is thus addressed even more by research under the FP7’s ‘Cooperation’ programme.

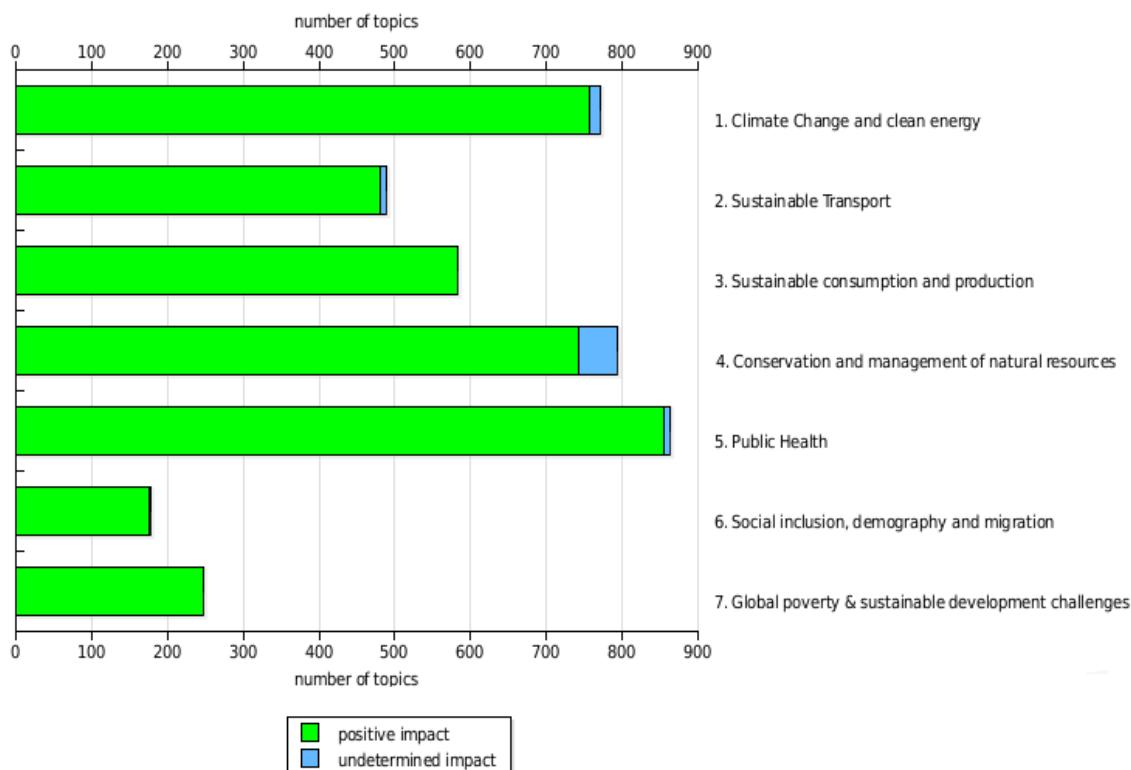


Figure 6: Number of topics contributing to the EU SDS key challenges (WPs 2007-2013)⁹

How is the EC contribution distributed across the EU SDS key challenges?

The highest amounts of FP7 funding are allocated to EU SDS objectives related to public health and climate change

In terms of EC funding provided to the research projects carried out under FP7's 'Cooperation' programme, Figure 7 shows a similar picture as presented above. Projects contributing to the key challenge "public health" receive a funding of € 5.5 billion, followed the key challenge "climate change and energy" with a total EC contribution of € 4.6 billion.

Again, projects contributing to the key challenges "social inclusion, demography and migration" and "global poverty and sustainable development challenges" range at the lower end of the scale, with a total EC contribution of € 742 million and € 1 billion respectively.

⁹ Since each project may have impacts on more than one operational objective and/or key challenge, the sub-totals (number of projects and amount of funding per key challenge) should not be added up as this would result in potentially overestimated figures!

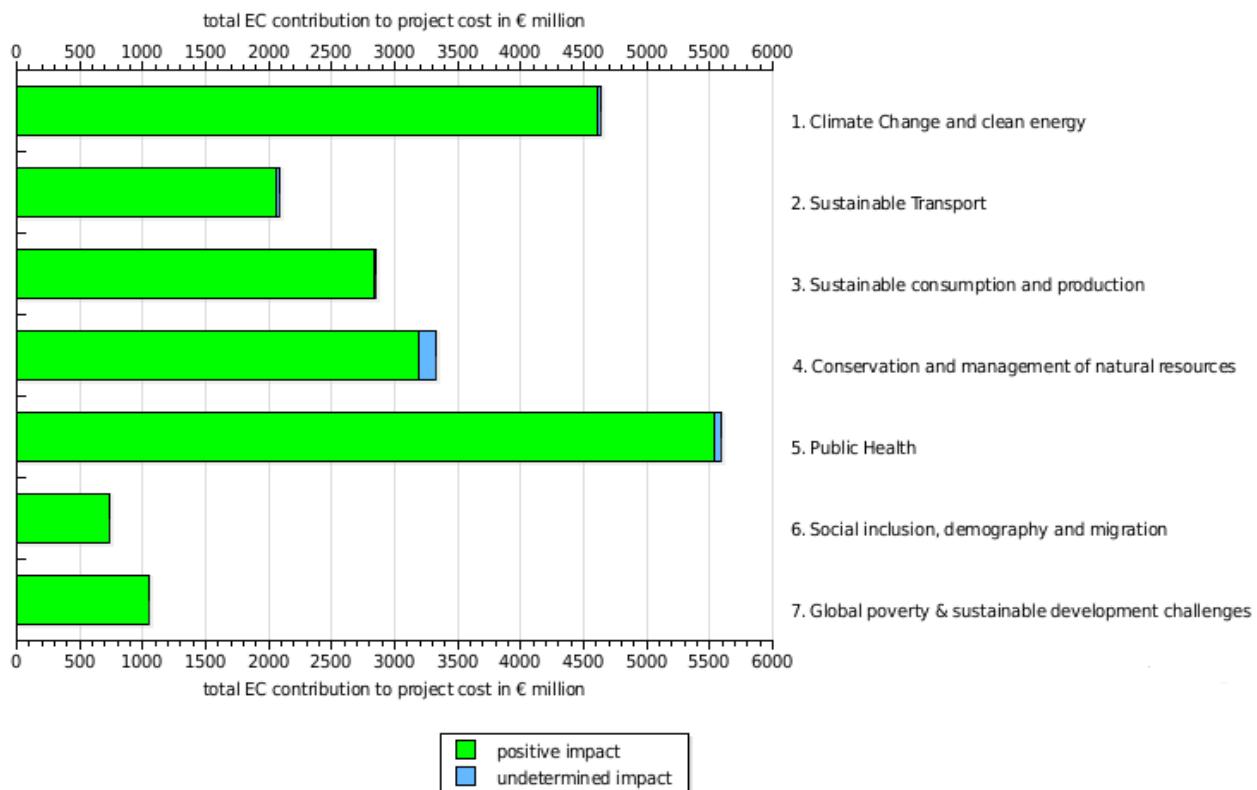


Figure 7: Total EC contribution to projects contributing to the EU SDS key challenges (€ million) (WPs 2007-2012)¹⁰

How did the FP7 contribution to SD change over time?

The share of SD relevant topics in FP7 peaked in 2009, but has generally fallen since then

As shown in Figure 8 the share of topics with positive impacts on EU SDS objectives rose from 2007 until 2009 to almost 80 %, but then fell more or less continuously below 70 % by 2013.

The drop since 2009 reflects strong fluctuations in the share of SD-relevant research of about 10 percentage points from one year to another, in particular in the themes Agriculture (KBBE), ENVIRONMENT and TRANSPORT. While these themes have experienced an overall fall in the proportion of SD-relevant research since 2009, the share has remained rather constant for the theme HEALTH (at around 90 %), and has increased for the themes Social Sciences (SSH) and SPACE.

The share of topics with undetermined impacts experienced a decline from 2.1 % in 2007 to 1.4 % in 2009, but has increased to 3.8 % since then.

¹⁰ It is important to note that not all topics called for are being translated into action by funding of projects: in the Specific Programme 'Cooperation' from 2007-2012, projects are being funded under some 2,426 topics only (75 % of all topics called for). However, more than one project may be funded under one topic. Since each project may have impacts on more than one operational objective and/or key challenge, the sub-totals (number of projects and amount of funding per key challenge) should not be added up as this would result in potentially overestimated figures!

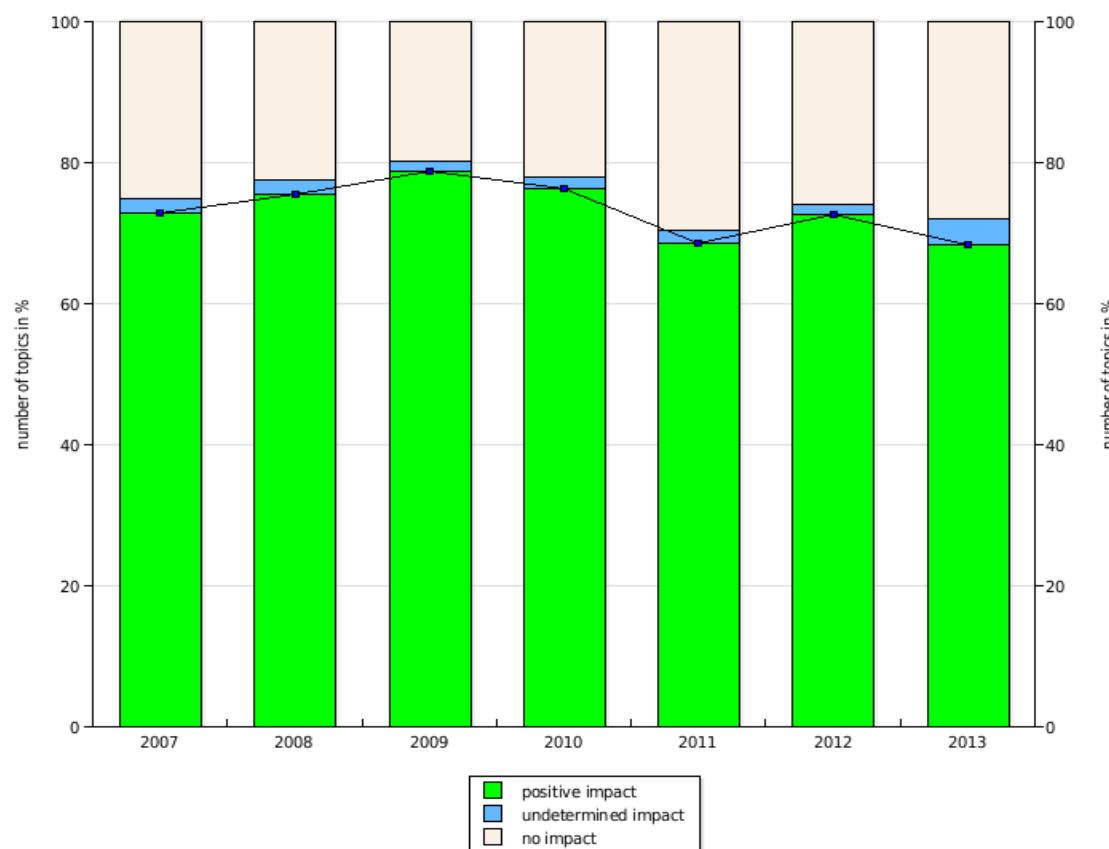


Figure 8: Share of topics contributing to EU SDS objectives in the Work Programmes 2007 to 2013

The share of EU co-financing to projects with positive impacts on EU SDS objectives has grown since 2007

Figure 9 shows the development of EC contribution allocated to projects with expected impacts on EU SDS objectives over the Work Programmes 2007 to 2012.

In the first two years of FP7 (from 2007 to 2008), the trends in total EC contribution and in the share of funding for projects with positive impacts moved in opposite directions; the total EC contribution dropped from € 4.4 billion in 2007 to € 2.7 billion in 2008, while the share of funding for projects with positive impacts jumped from below 60 % in 2007 to more than 80 % in the following year.

Since then, changes in total EC contribution and in the share of funding for SD-relevant research were much less pronounced, with trends in both figures pointing in an overall increasing direction (i.e. a higher budget in total and a higher share of funding for SD-relevant research).

At the same time, the share of EC contribution allocated to projects with undetermined impacts increased from 1 % in 2007 to 6 % in 2012.

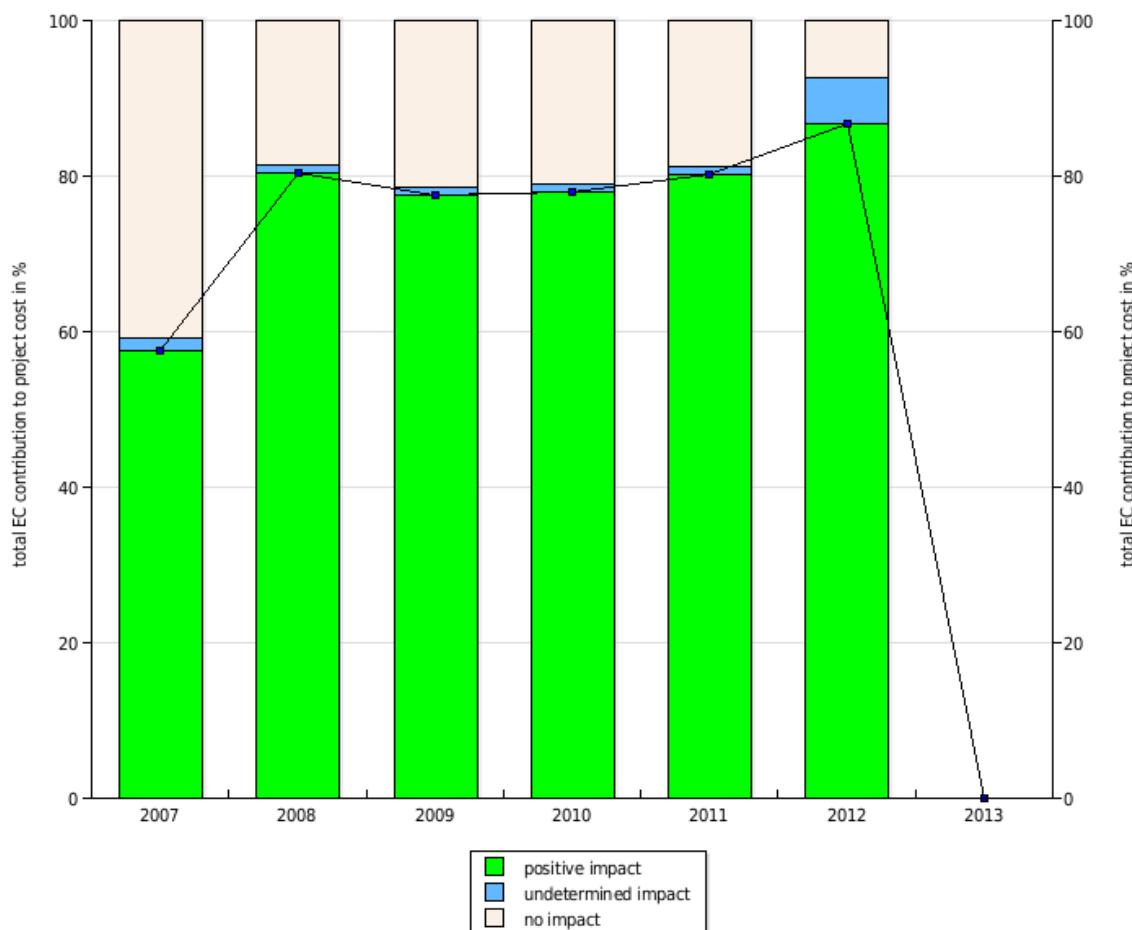


Figure 9: Share of EC contribution to projects contributing to EU SDS objectives in the Work Programmes 2007 to 2012¹¹

Where are the centres of excellence in SD-related research?

Germany, the United Kingdom and France are the centres of excellence in FP7 research contributing to EU SDS objectives

The map in Figure 10 shows the number of coordinated projects contributing to EU SDS objectives in EU Member States (MS) and Associated Countries. Countries which can be considered as centres of excellence for SD-relevant research¹² in FP7 (due to their large number of coordinated projects) are Germany (550 projects) followed by the United Kingdom (420 projects), France (347 projects) and Italy (330 projects). Notably, the share of projects coordinated by organisations from Eastern European countries is rather low.

¹¹ It is important to note that not all topics called for are being translated into action by funding of projects: in the Specific Programme 'Cooperation' from 2007-2012, projects are being funded under some 2,426 topics only (75 % of all topics called for). However, more than one project may be funded under one topic. Data on research projects and their respective EC contribution are available from 2007 to 2012.

¹² For the purpose of this analysis, it is assumed that institutions from countries which are responsible for the coordinating a project are characterized by an exceptional scientific knowledge base and the essential coordination skills to implement the respective project. Therefore countries with a high number of coordinated projects can be seen as leaders in the respective field of research.

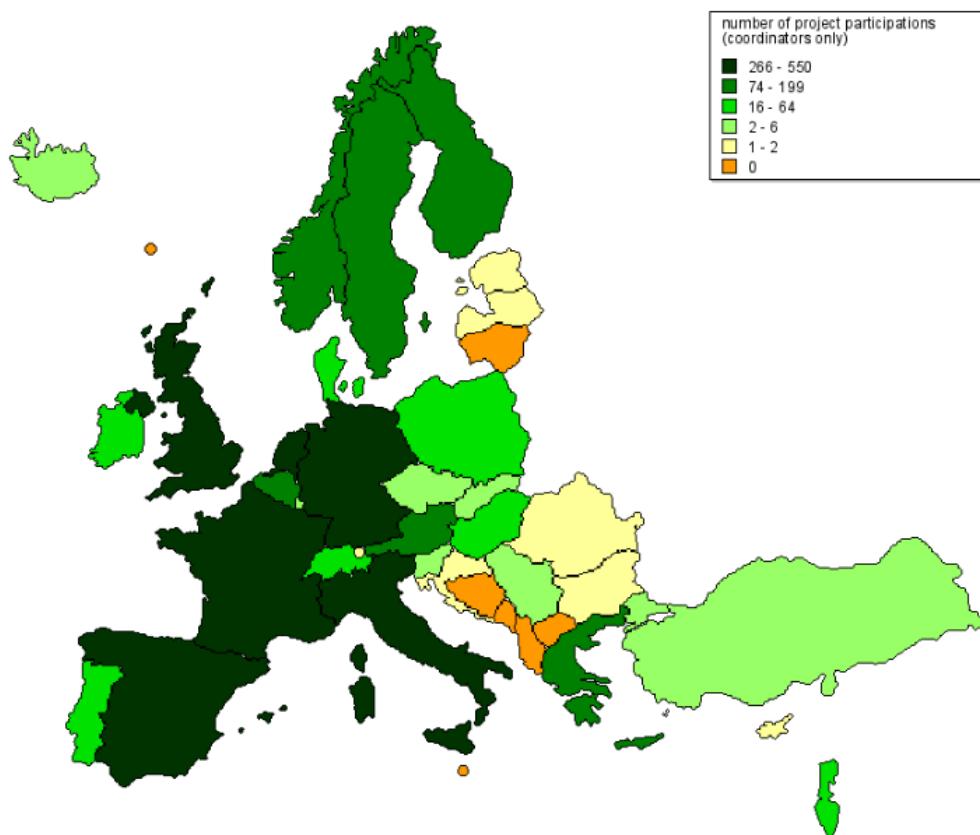


Figure 10: Geographical representation of coordinated projects impacting on the EU SDS objectives in EU Member States and associated countries (WPs 2007-2012)

Concluding overview of FP7 impacts on the EU SDS objectives

Similar thematic foci of FP7 and EU SDS in the areas of public health, sustainable transport and energy partly predetermine the number of impacts

To sum up, the Table 2 (see below) provides an overview of how the ten themes of the Specific Programme ‘Cooperation’ impact on the 78 operational objectives of the EU SDS. It shows clearly how the distribution of impacts addressing these objectives is at least partly predetermined by the thematic structure of the ‘Cooperation’ programme. The most prominent links (in terms of expected impacts) can be found between the theme HEALTH and the key challenge “public health” (12.2 % of all topics), between the theme TRANSPORT and the key challenge “sustainable transport” (11.6 % of all topics), and between the theme ENERGY and the key challenge “climate change and clean energy” (8.3 % of all topics).

“Public health” addressed by one quarter of all topics

The key challenge “public health” is addressed by almost one quarter (26.5 %) of all ‘Cooperation’ topics, mainly from the themes HEALTH and Agriculture (KBBE). “Climate change and clean energy” and “conservation and management of natural resources” present other prominent key challenges, with expected impacts from 23.4 % and 22.9 % of all ‘Cooperation’ topics, respectively, both having an important part of expected impacts from the themes ENERGY and ENVIRONMENT.

"Conservation and management of natural resources" is addressed in a cross-cutting way

While the key challenge "sustainable transport" is almost exclusively addressed by topics from the theme TRANSPORT, the key challenge "conservation and management of natural resources" is of a more cross-cutting nature by being related to several FP7 themes, including Agriculture (KBBE), Materials (NMP), ENERGY and, in particular, ENVIRONMENT.

Table 2: Share of topics of the ten 'Cooperation' themes (3,234 topics) with expected impacts on EU SDS objectives (%) (WPs 2007-2013)¹³

	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public Health	Social inclusion, demography and migration	Global poverty & sustainable development challenges
HEALTH	0,0%	0,0%	0,2%	0,1%	12,2%	1,4%	2,5%
KBBE	2,0%	0,1%	2,4%	5,0%	5,5%	0,1%	1,1%
ICT	2,2%	0,5%	0,8%	0,5%	1,0%	0,4%	0,0%
NMP	2,9%	0,5%	4,9%	4,7%	2,5%	0,1%	0,5%
ENERGY	8,3%	0,9%	4,3%	4,5%	0,3%	0,1%	0,4%
ENVIRONMENT	4,1%	0,5%	2,0%	5,3%	2,1%	0,2%	1,6%
TRANSPORT	1,9%	11,6%	2,4%	1,7%	0,8%	0,4%	0,2%
SSH	0,5%	0,2%	0,6%	0,4%	0,3%	2,1%	0,7%
SPACE	0,7%	0,2%	0,1%	0,6%	0,4%	0,1%	0,4%
SECURITY	0,9%	0,4%	0,4%	0,1%	1,4%	0,5%	0,2%
TOTAL	23,4%	14,8%	18,0%	22,9%	26,5%	5,4%	7,6%

"Public health" is addressed by one third of the total EC contribution

Data in Table 3 below re-emphasise the major role of the key challenge "public health", accounting for one third (34.5 %) of the total EC contribution provided by the ten 'Cooperation' themes. Table 3 below presents the same analysis as Table 2 above, but from the perspective of funding (total EC contribution) allocated to projects in terms of € million.

ICT is outperforming ENERGY in terms of EC contribution dedicated to "climate change and clean energy"

Notably, while in terms of number of topics (see Table 2 above) the impact of the ICT theme was relatively low, the picture changes dramatically when looking at the amount of funding provided to ICT projects. Due to the large budget for the ICT theme (see Figure 3 above), its projects prominently contribute to the key challenges "climate change and clean energy" and "public health" as well as to "social inclusion, demography and migration". It is quite surprising that the theme ICT – bearing in mind that only about 50 % of its projects actually contribute to EU SDS key challenges¹⁴ – is allocating more project funding than the theme ENERGY in order to address the key

¹³ A figure of „0%“ indicates "zero", i.e. no topics with expected impacts, whereas values of „0.0%“ indicate a share of topics of less than 0.05 %. The figures have been calculated without "weighting", i.e. they are based on the assumption that a topic, when impacting on more than one key challenge, contributes equally to all affected key challenges. For example, a topic from the theme HEALTH that contributes to the EU SDS key challenges "public health" and "global poverty" has been counted as contributing half (½) to each of them.

¹⁴ Despite the fact that ICT comprises about one third of total EC contribution (30 %, € 5 billion) within SP 'Cooperation', it only accounts for about 21 % (€ 3.5 billion) of the total EC contribution attributed to EU SDS key challenges.

challenge "climate change and clean energy".

Similar to Table 2 above, the project funding allocated to "sustainable transport" is almost exclusively originating from the theme TRANSPORT, accounting for 7.1% of the total EC contribution from SP 'Cooperation'. Moreover, looking at the other end of the scale, the key challenges "social inclusion, demography and migration" and "global poverty and sustainable development challenges" are addressed equally low in terms of number of topics and total EC contribution.

Table 3: Share of total EC contribution from the ten 'Cooperation' themes (€ 16.6 billion) to projects with expected impacts on EU SDS operational objectives (WPs 2007-2012)¹⁵

	Climate change and clean energy	Sustainable transport	Sustainable consumption and production	Conservation and management of natural resources	Public Health	Social inclusion, demography and migration	Global poverty & sustainable development challenges
HEALTH	0,0%	0,0%	0,0%	0,1%	19,2%	0,7%	2,3%
KBBE	0,7%	0,1%	0,8%	2,2%	3,1%	0,1%	0,4%
ICT	11,4%	1,8%	1,6%	0,7%	6,5%	2,2%	0,1%
NMP	1,9%	0,2%	4,0%	3,8%	2,4%	0,0%	0,3%
ENERGY	4,1%	0,4%	1,6%	1,7%	0,1%	0,0%	0,2%
ENVIRONMENT	2,5%	0,1%	1,0%	2,6%	1,0%	0,0%	0,4%
TRANSPORT	1,4%	7,1%	0,9%	0,8%	0,1%	0,1%	0,1%
SSH	0,2%	0,1%	0,3%	0,1%	0,1%	0,9%	0,4%
SPACE	0,8%	0,3%	0,2%	0,6%	0,6%	0,0%	0,4%
SECURITY	0,4%	0,3%	0,0%	0,0%	1,3%	0,1%	0,1%
TOTAL	23,4%	10,4%	10,3%	12,5%	34,5%	4,3%	4,6%

¹⁵ A figure of „0%“ indicates "zero", i.e. no projects with expected impacts, whereas values of „0,0%“ indicate a share of total EC contribution to projects of less than 0.05 %. The figures have been calculated without "weighting", i.e. they are based on the assumption that a topic, when impacting more than one key challenge, contributes equally to all affected key challenges. For example, a topic from the theme HEALTH that contributes to the EU SDS key challenges "public health" and "global poverty" has been counted as contributing half (½) to each of them.

Background & methodological notes

In order to assess how research funded within FP7 – in particular from the Specific Programme ‘Cooperation’, given its overall aim of “contributing to sustainable development” – contributes to the key challenges and objectives of the EU SDS, a monitoring system was set up by the [Vienna University of Economics and Business \(WU Vienna\)](#) in cooperation with [Delft University of Technology \(TU Delft\)](#) and [maystorm software GmbH](#) on behalf of [DG Research and Innovation](#). Since April 2010, the results of the monitoring of all Work Programmes published so far under FP7 (i.e. the Work Programmes 2007-2013) are available to the public via the public platform www.fp7-4-sd.eu.

The monitoring system consists of two main elements: (i) scientific evidence-based screening, and (ii) a public platform allowing users to interactively analyse the results from various points of view. These two main parts and the methodology behind them will be described in detail below.

Scientific evidence-based screening

The monitoring system combines two main features of European policy: FP7 on the one hand, with its themes and activities (mainly from the ‘Cooperation’ programme), and the key challenges and objectives of the EU SDS on the other. In order to make this combination operational, a **qualitative text analysis of the topic descriptions** (a ‘topic’ is the most precise point of the hierarchy applied within FP7, outlining the needs, aims and expected impacts of the research to be undertaken concerning a specific issue) that are published in the annual FP7 Work Programmes has been undertaken. The key challenges and operational objectives specified in the renewed EU SDS of 2006 have in this regard been used as a [referential framework](#)¹⁶.

The initial screening was conducted by experts from WU Vienna and TU Delft, with the aim of identifying positive (i.e. supporting the EU SDS objectives), negative (i.e. conflicting with EU SDS objectives) or undetermined (i.e. impacts which due to a lack of scientific evidence cannot yet be categorised as positive or negative) expected impacts. In order to ensure the quality and accuracy of the identified impacts, some 10 % of the topics (including those having negative or undetermined impacts) were additionally validated by thematic experts from [Ecologic Institute](#), [INFRAS Research & Consulting](#), and [ISI Fraunhofer](#).

When interpreting the results of the monitoring system, it is important to keep in mind that the results are based on **ex-ante evaluations of expected impacts** specified in the topic descriptions, and must not be understood as **ex-post impact assessments** of projects that are or have actually been carried out under a particular topic. However, as FP7 comprises a peer review process which ensures that the projects selected for funding actually meet the expected impacts outlined in the topic descriptions, the results provided by the monitoring system can nevertheless be seen as a “proxy” of actual impacts.

For a [more detailed description of the methodology behind the scientific evidence-based screening](#), please consult the monitoring system’s website www.fp7-4-sd.eu.

Interactive database at www.fp7-4-sd.eu

In order to make the results of the monitoring system available to the public, to allow customised analyses according to the interests of individual users, and to stimulate a public debate on particular issues, a public platform has been set up at www.fp7-4-sd.eu that – as one of its main features – includes an interactive

¹⁶ In addition to the seven EU SDS Key Challenges, an additional (eighth) category was introduced (“additional SD objectives”) containing a number of objectives that are not included in the EU SDS, but are stated in national SD strategies (NSDS), such as ‘sustainable regional development’, ‘sustainable tourism’, ‘SD governance’ or ‘public security & protection’. By including these additional objectives, the monitoring system allows to not only monitor the contribution of FP7 to the EU SDS, but also to the most common objectives stated in national SD strategies.

database which allows analysing the data of the monitoring system from various points of view. To this end, it offers four so-called "Views" producing graphs, maps and tables which can be manipulated by applying several filter options in order to focus the analysis on particular FP7 themes, Work Programmes and EU SDS objectives. The analyses presented in the subsequent section of this quarterly report have been produced by combining the available "Views" and filter options.

In addition to the topics included in the FP7 Work Programmes, information of projects which are or have actually been carried out within FP7 has been integrated into the interactive database in order to allow even more sophisticated analyses, such as analysing the amount of funding ("EC contribution") dedicated to research on "climate change", "low carbon economy", "SD governance", etc., to name only a few. Moreover, the analyses can be broken down to the national and regional levels, allowing for a comparison across EU Member States or between regions within a particular country.

The monitoring system currently (as January 2013) comprises information on about 3,243 topics (from the 'Cooperation' Work Programmes 2007 to 2013) and 4,613 projects (from the years 2007 to 2012) with more than 53,000 project participations and a total EC contribution of more than € 16.6 billion.

In order to stimulate a public debate, the database allows 'zooming' into the detailed screening results, i.e. the impacts a topic is expected to have on the key challenges and operational objectives of the EU SDS (see above), and additionally enables users to provide feedback.

For a [more detailed description of the monitoring system's interactive database](#), please consult the guideline at www.fp7-4-sd.eu.

