

“Monitoring the FP7 contribution to the EU’s SD objectives – facts & figures (update 2011)”

FP7-4-SD.eu policy brief No. 4 from April 2011

Summary

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

Overall, research called for and carried out in the first five years of the FP7 Specific Programme (SP) ‘Cooperation’ (between 2007 and 2011) has a positive impact on the renewed EU Sustainable Development Strategy (EU SDS) and its 78 operational objectives. About 76 % of the topics, 67 % of the projects and 71 % of the funding (i.e. € 7.5 billion out of € 10.5 billion) provided by the SP ‘Cooperation’ live up to the Programme’s objective of “contributing to sustainable development”.

How does FP7 contribute to sustainable development?

Among the ten themes of the SP ‘Cooperation’, HEALTH is the one which comprises, so far, the largest number of topics with positive expected impacts on EU SDS objectives, closely followed by TRANSPORT 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.

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

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

How are the EU SDS operational objectives addressed by FP7?

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 33.2 % of the overall EC contribution spent so far in FP7 Cooperation SP (€ 3.3 billion out of € 10.5 billion). Other important challenges addressed by FP7 research projects are related to climate change and energy as well as to natural resources.

How is the EC contribution distributed across EU SDS objectives?

How did the FP7 contribution to SD change over time?

The share of SD-relevant research in SP Cooperation increased between 2007 and 2009 to about 80 %, but has declined since then (down to 70 % in 2011). This development was mainly driven by changes in the themes Materials (NMP), Agriculture (KBBE) and – to a lesser extent – ENVIRONMENT. Regarding the geographical spread of the “centres of excellence” in Europe, most SD-relevant projects are coordinated by the big European countries Germany, France, Italy and the UK, whereas Eastern Europe is still underrepresented.

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

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 from the EU's budget. An overarching aim of FP7, and in particular of its Specific Programme (SP) 'Cooperation', is to contribute to sustainable development, 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 in order 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 2007-2013. 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 67 % of the projects (i.e. 1991 out of 2987) that have been funded so far by FP7 under the 'Cooperation' Work Programmes 2007 to 2010³ contribute to at least one 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 76 % (i.e. 1828 out of 2409 topics) and 71 % (i.e. € 7.5 billion out of € 10.5 billion) respectively. The variation is due to differences in the number and size of projects funded by the individual 'Cooperation' themes.

In a nutshell: The FP7 'Cooperation' programme

2409 research topics called for since 2007 have resulted in 2987 research projects with

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 2007-2013. It fosters collaborative research across Europe and other partner countries, through projects by transnational consortia of

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

³ Data on the number of projects stemming the Work Programme 2010 are still not complete, and projects from the Work Programme 2011 are not included as they are still under negotiation.

an EU co-financing of € 10.5 billion industry, academia and civil society, in ten thematic areas (see Table 1 below).

Since the start of FP7 in 2007, a total of 2409 topics have been called for so far in the annual Work Programmes (WPs). Under these topics, 2987 projects⁴ have been or are being carried out by almost 11 000 institutions from academia, business and civil society organisations with a total EC contribution (that is, the co-financing provided by FP7) of € 10.5 billion. The EC contribution accounts for about two thirds of the total project costs (i.e. the co-financing provided by FP7 plus other funding sources) of € 15.1 billion.

Table 1: Overview of ‘Cooperation’ Work Programmes 2007-2011 by Theme

Theme	Number of topics	Number of projects	Number of project participations	Total project costs (€)	Total EC contribution (€)
HEALTH		371	435	4673	2471.6
Agriculture (KBBE)		358	195	2569	851.3
ICT		185	1090	10088	5218.8
Materials (NMP)		193	323	4025	1826.5
ENERGY		235	183	2058	1212.6
ENVIRONMENT		293	202	2870	839.2
TRANSPORT		439	291	3880	1594.7
Social Sciences (SSH)		130	134	1214	316.1
SPACE		44	45	679	285.2
SECURITY		161	89	1028	463.1
Total		2409	2987	33084	15079.1

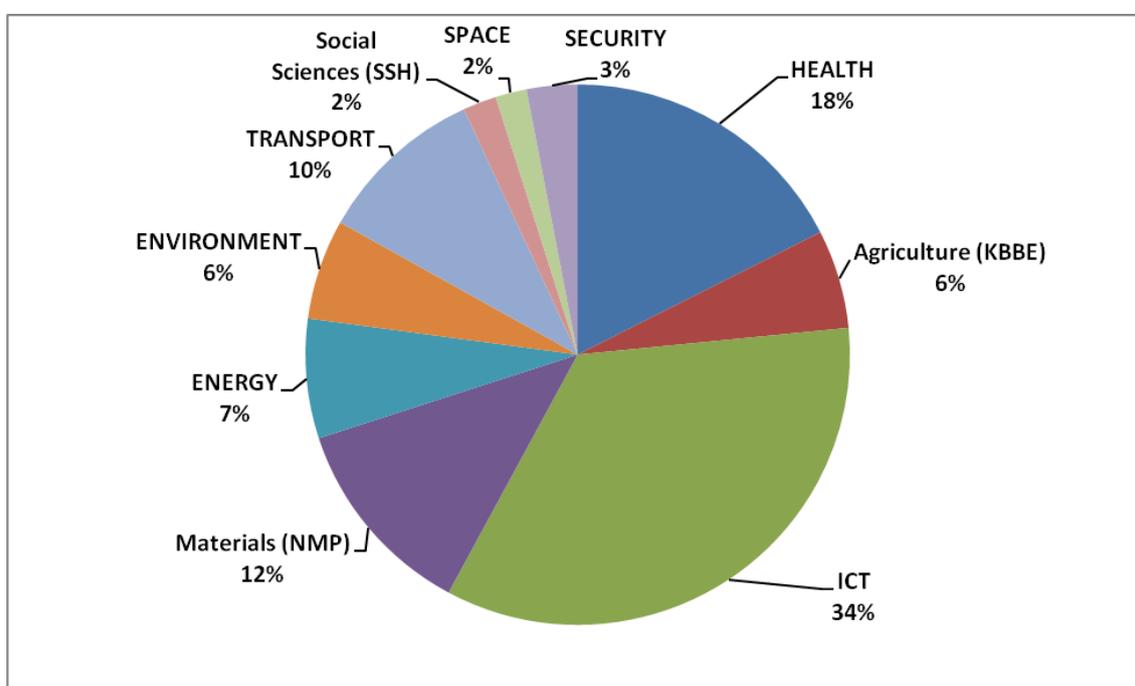


Figure 1: Share of total EC contribution (€) to the ten ‘Cooperation’ themes

⁴ It is important to note that not all topics called for are being translated into action by funding of projects: in the Work Programmes 2007-2009, projects are being funded under some 1126 topics only (76 % of all topics called for). However, more than one project may be funded under one topic.

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

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

As shown in Figure 2 below, the theme HEALTH comprises the largest number of topics with positive expected impacts on EU SDS objectives (345 topics), closely followed by the themes TRANSPORT (313 topics) and Agriculture (KBBE; 273 topics). In relative terms, the themes HEALTH (93%), ENERGY (89%) 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 (34%).

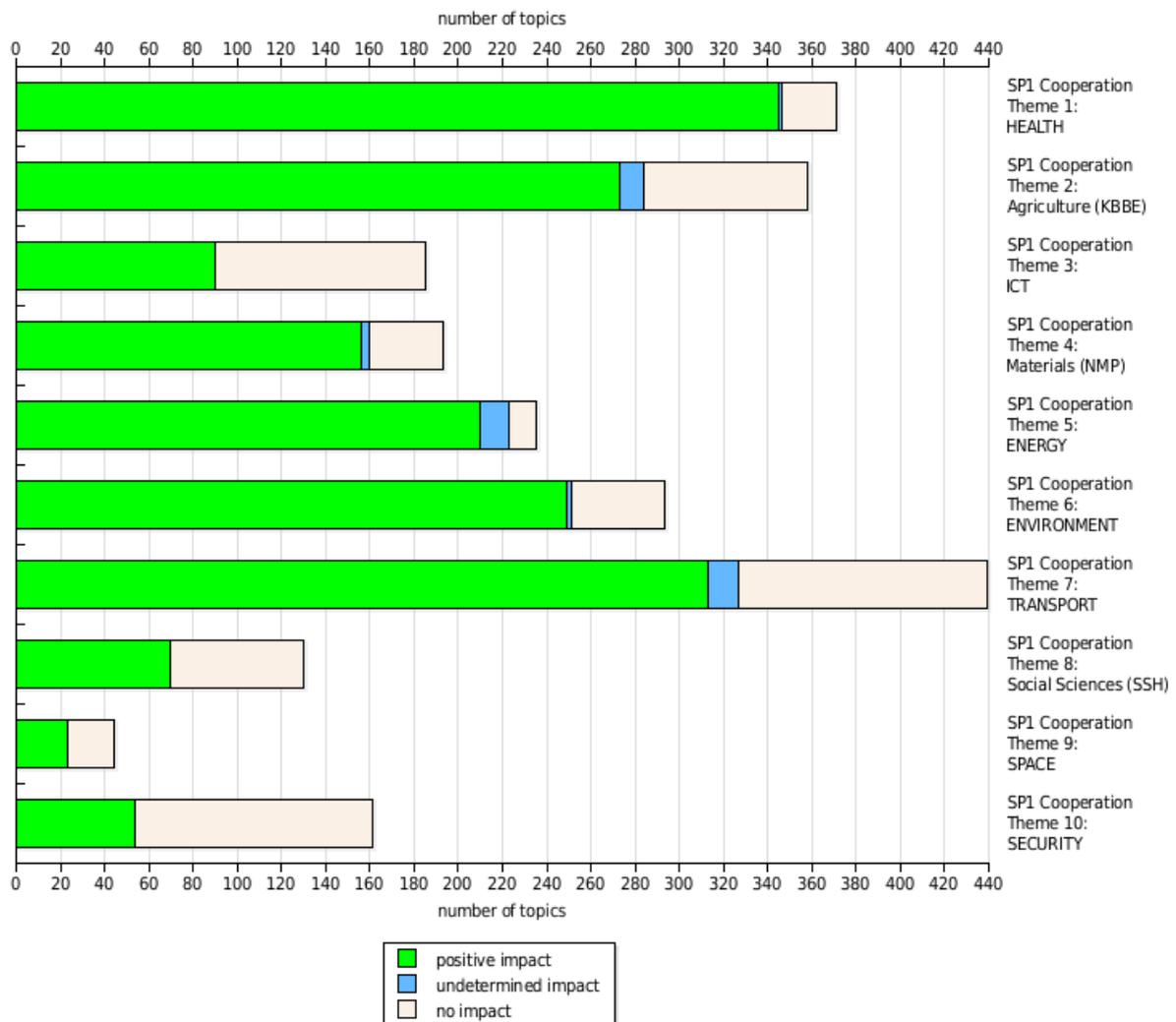


Figure 2: Number of topics with expected impacts in the ten 'Cooperation' themes⁵

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 in Figure 2 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

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 (about 49 %; see above) it is again the theme HEALTH that shows the highest EC contribution to projects contributing to EU SDS objectives (€ 1.7 billion). Besides ICT (ranking second with € 1.6 billion), a significant contribution comes from the themes Materials (NMP) and TRANSPORT, with € 1.1 billion and € 827 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 (90 %) and ENVIRONMENT (90 %).

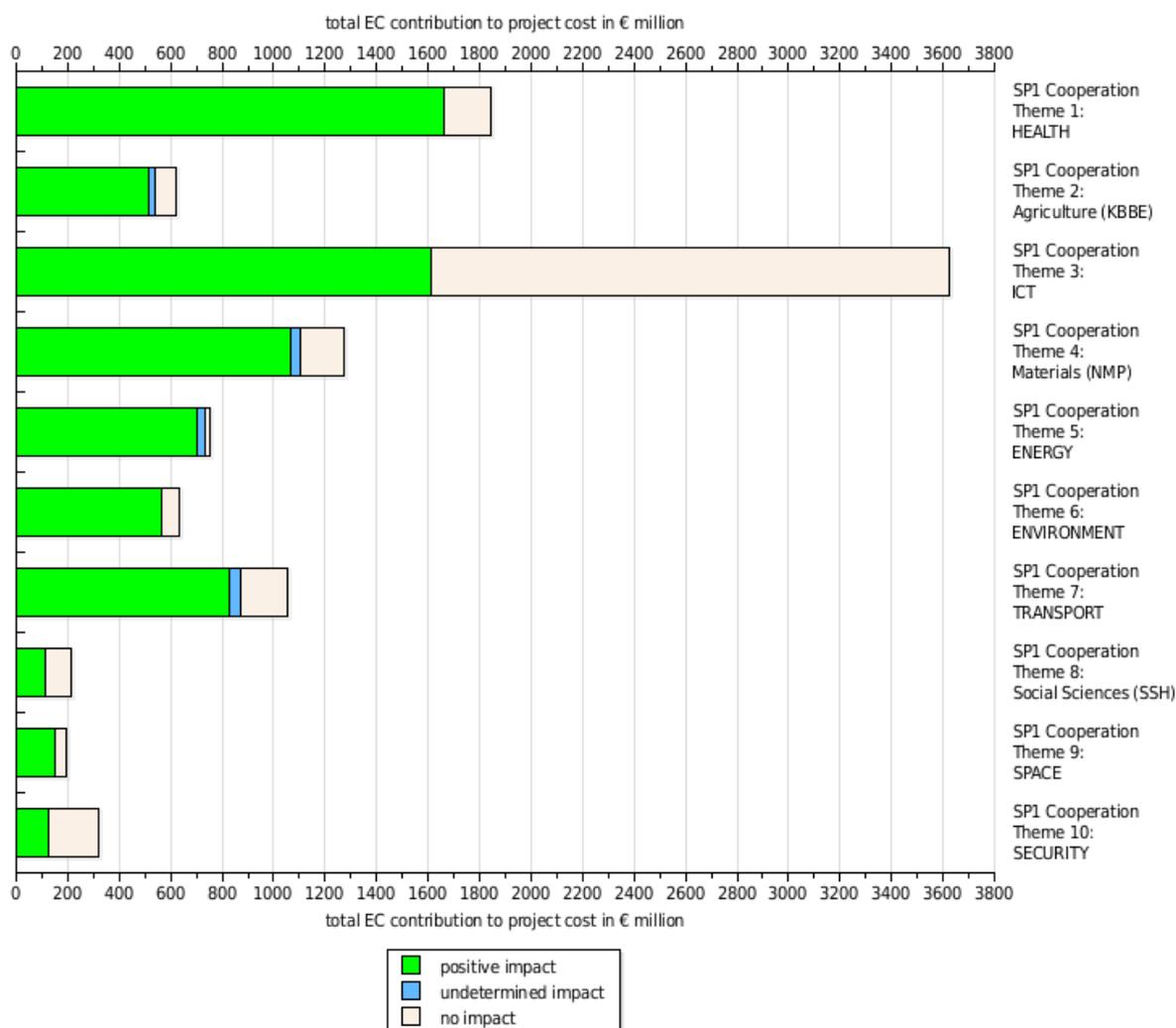


Figure 3: Total EC contribution to projects with expected impacts in the ten "Cooperation" themes⁶

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 2007-2009, projects are being funded under some 1126 topics only (76 % of all topics called for). However, more than one project may be funded under one topic.

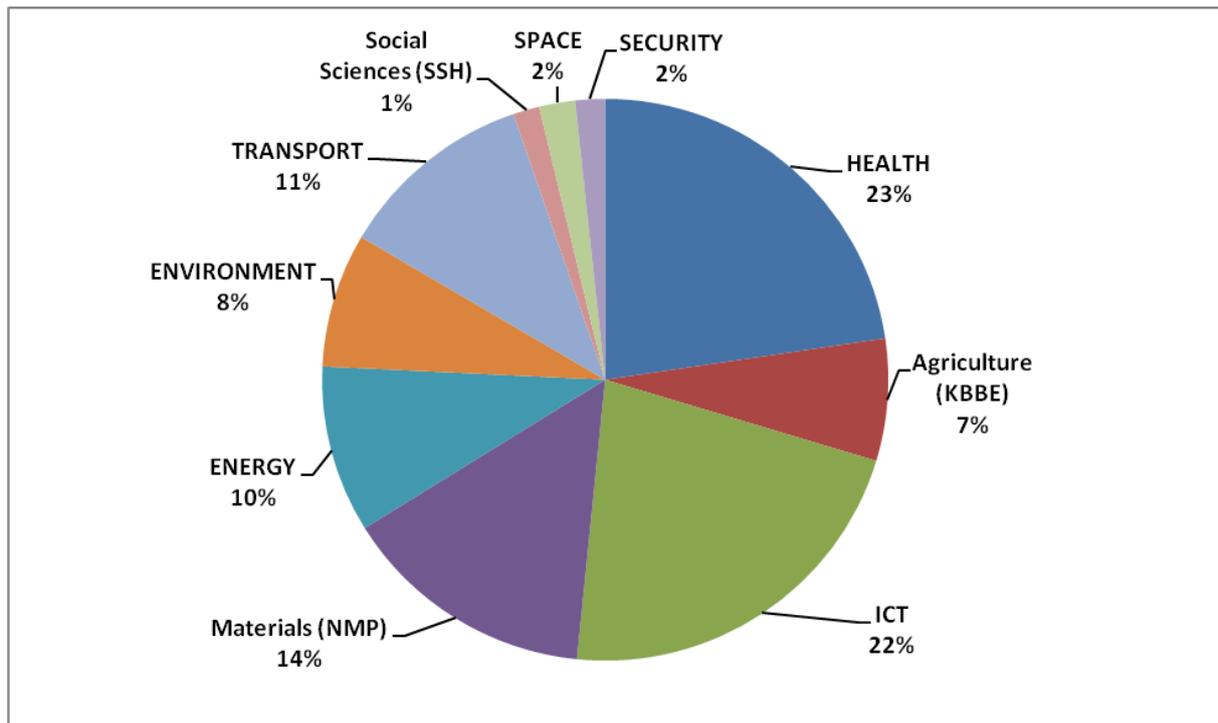


Figure 4: Share of total EC contribution (€) to projects with positive impacts on EU SDS objectives across the ten 'Cooperation' themes

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 budget (total EC contribution) spent on projects with positive impacts on the 78 EU SDS objectives (see Figure 4) reveals that seven 'Cooperation' themes, in particular the themes HEALTH, ENERGY and ENVIRONMENT, contribute disproportionately high share to EU SDS objectives, that is, 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 three themes ICT, Social sciences (SSH) and SECURITY contribute disproportionately low shares 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.

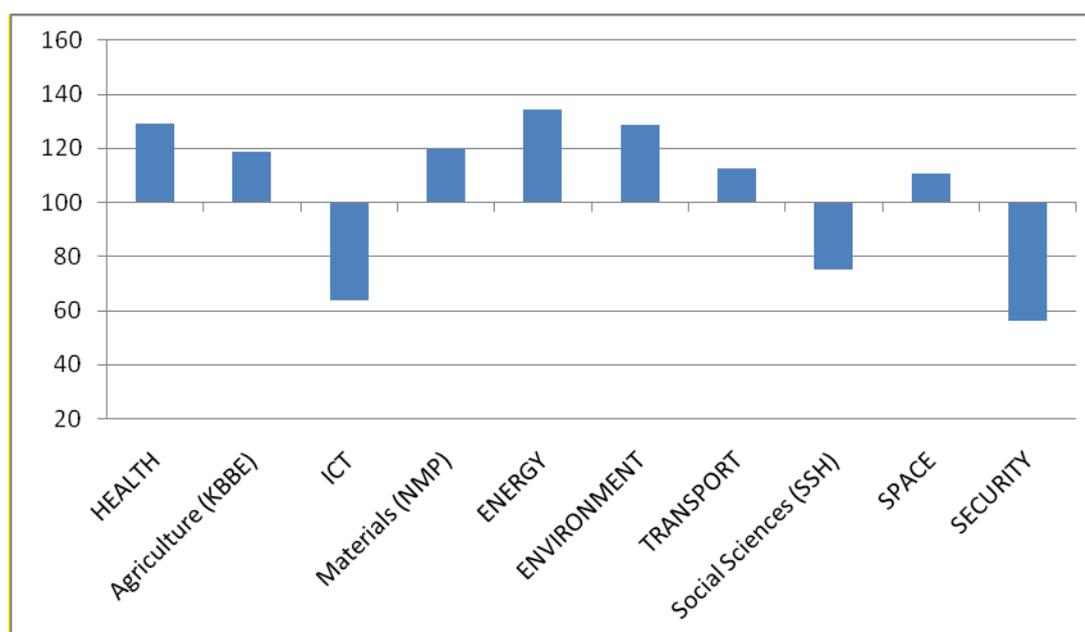


Figure 5: Analysis of total EC contribution to projects with positive impacts on EU SDS objectives in relation to total EC contribution per theme (Index basis = 100)⁷

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 also interesting to “switch the view” in order to investigate which of the seven EU SDS key challenges are actually affected by FP7 topics. As Figure 6 below shows, 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 671 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 572 and 539 topics respectively.

Research on social issues 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 118 and 194 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 will be dealt with in an upcoming policy brief, has a broader understanding of climate change, and is thus addressed even more by research under the FP7’s ‘Cooperation’ programme.

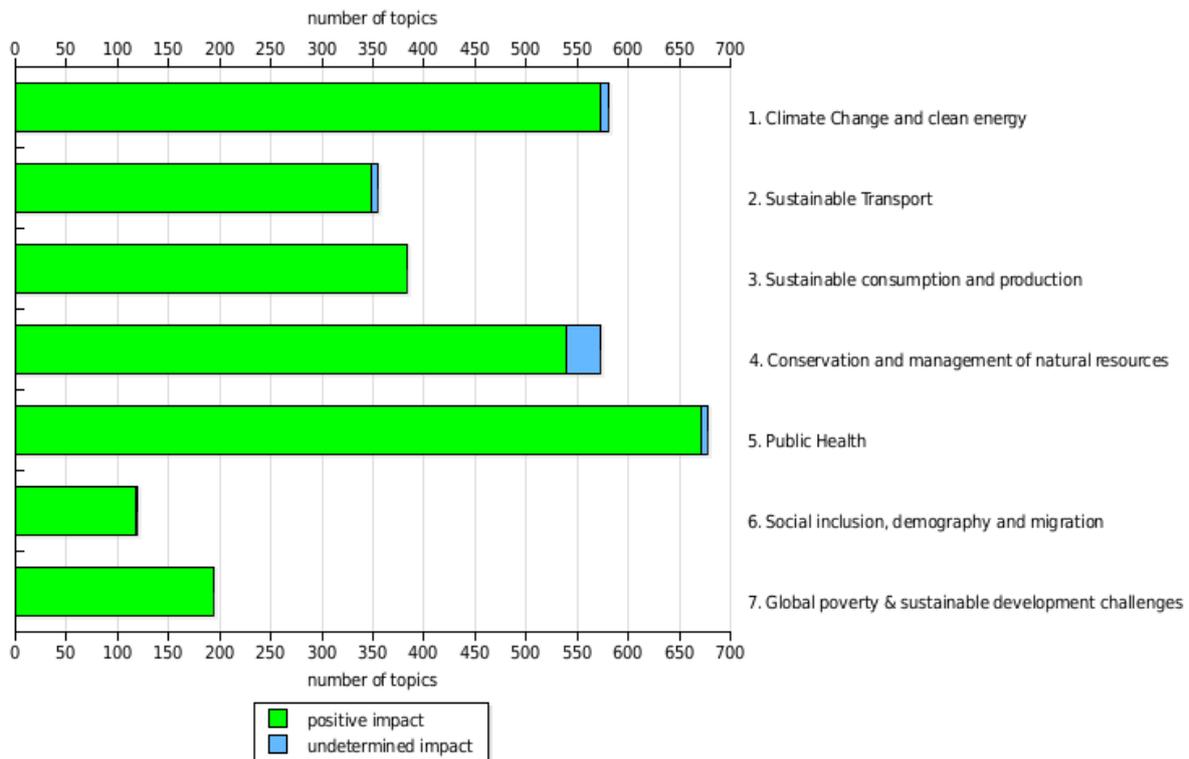


Figure 6: Number of topics contributing to the EU SDS key challenges⁹

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

The highest amount of FP7 funding is dedicated to the 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 € 3.3 billion, followed the key challenge "climate change and energy" with a total EC contribution of € 2.8 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 € 502 million and € 642 million 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!

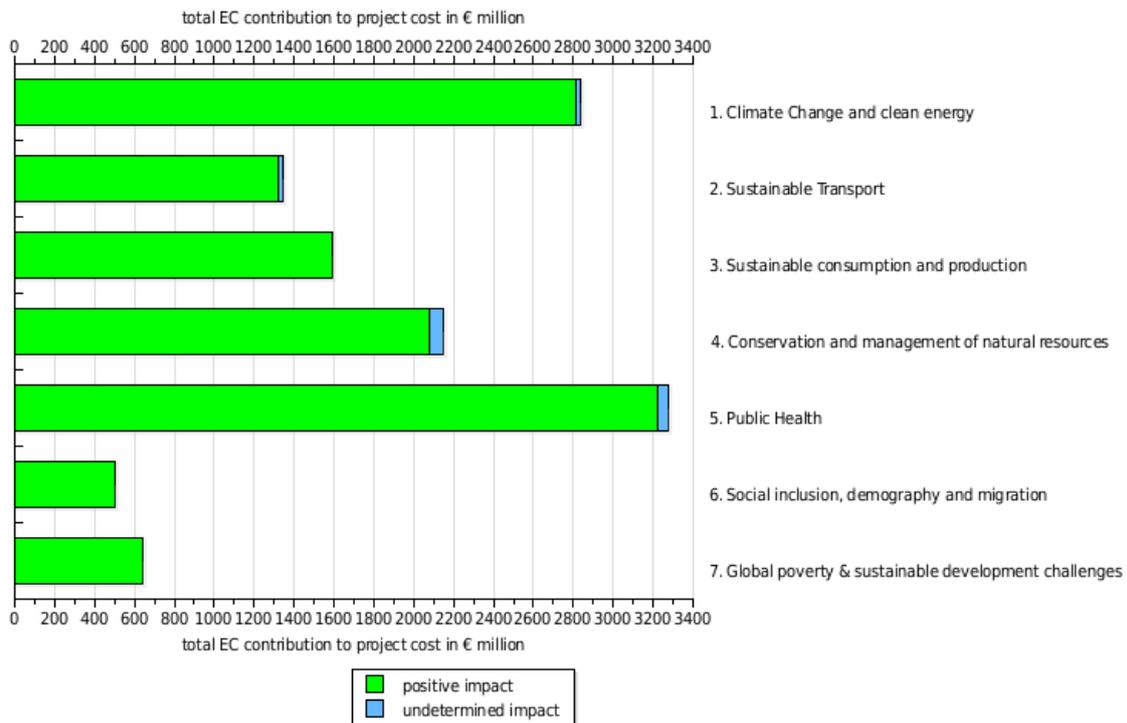


Figure 7: Total EC contribution to projects contributing to the EU SDS key challenges (€ million)¹⁰

How did the FP7 contribution to SD change over time?

The share of SD relevant topics in FP7 peaked in 2009 but fell again in 2010 and 2011

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 to about 70 % in 2011. The drop in 2011 was the result of a reduction of SD-relevant research in the themes Materials (NMP) and Agriculture (KBBE), falling from over 80 % in 2007 and 2008 to less than 70 % in 2011. The theme ENVIRONMENT showed a similar trend, although less pronounced (from about 88 % in 2009 and 2010 to 76 % in 2011). In contrast, the share of topics contributing to EU SDS objectives increased between 2009 and 2011 in the themes HEALTH and ENERGY to about 95 %.

The share of topics with undetermined impacts experienced a decline from 2.1 % in 2007 to 1.4 % in 2009, but then again increased to 1.9 % in 2011.

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 2007-2009, projects are being funded under some 1126 topics only (76 % 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!

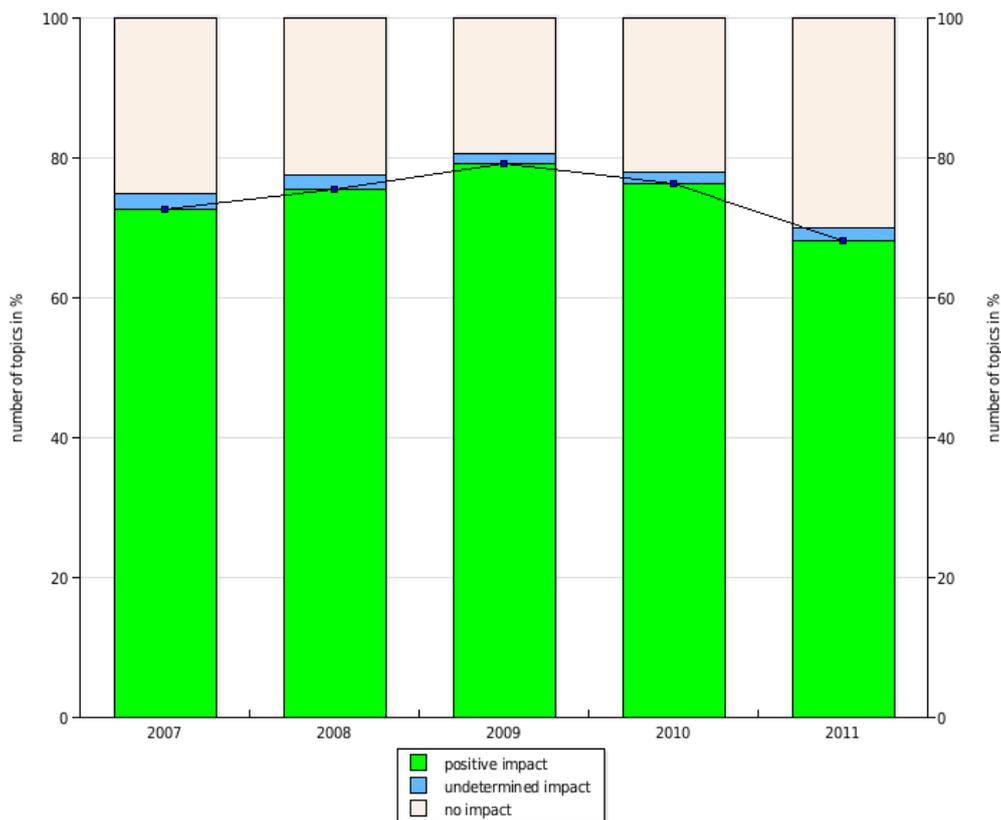


Figure 8: Share of topics contributing to EU SDS objectives in the Work Programmes 2007 to 2011

The share of EU co-financing to projects with positive impacts increased substantially between 2007 and 2009

Figure 9 displays the development of EC contribution over the Work Programmes 2007 and 2009¹¹ allocated to projects with expected impacts on EU SDS objectives. Although the total EC contribution decreased from € 4.4 in 2007 to € 2.7 billion in 2009, the share of funding for projects with positive impacts increased substantially from about 60 % to more than 80 %. At the same time, the share of EC contribution allocated to projects with undetermined impacts decreased steadily from 1.7 to 0.7 %.

¹¹ Data on the number of projects stemming the Work Programme 2010 are still not complete, and projects from the Work Programme 2011 are not included as they are still under negotiation.

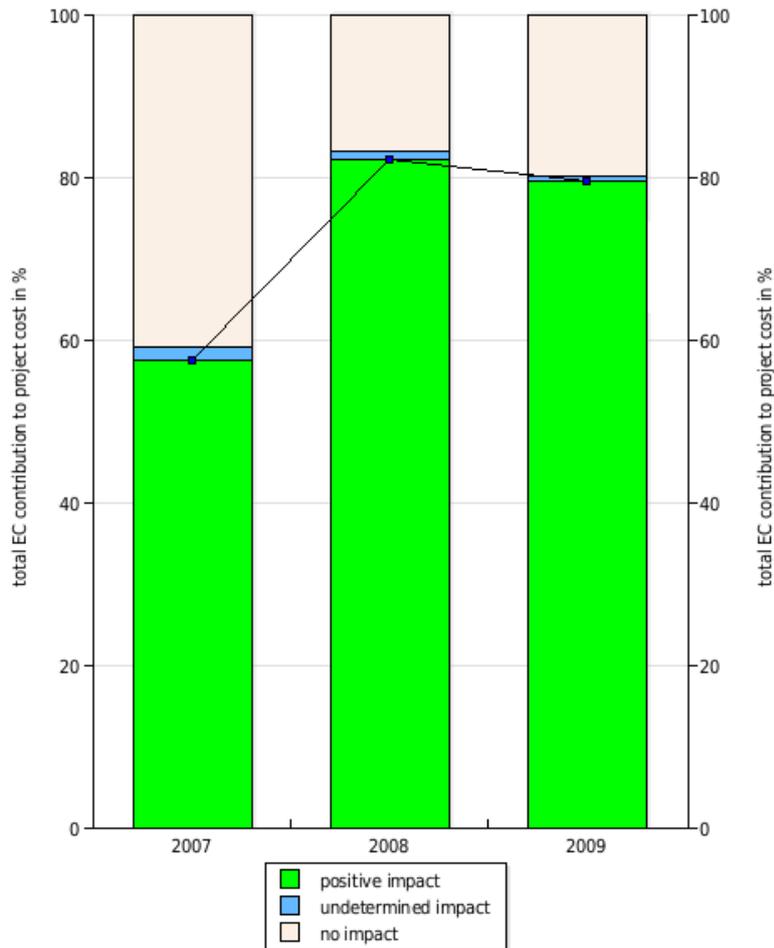


Figure 9: Share of EC contribution to projects contributing to EU SDS objectives in the Work Programmes 2007 to 2009¹²

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

Germany, the United Kingdom and Italy 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 research¹³ in FP7 (due to their large number of coordinated projects) are Germany (349 projects) followed by the United Kingdom (252 projects), France (221 projects) and Italy (215 projects). Notably, the share of projects coordinated by organisations from Eastern European countries is rather low.

¹² 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 2007-2009, projects are being funded under some 1126 topics only (76 % 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 only available from 2007 to 2009 because projects from the Work Programmes 2010 and 2011 are still under negotiation.

¹³ 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.

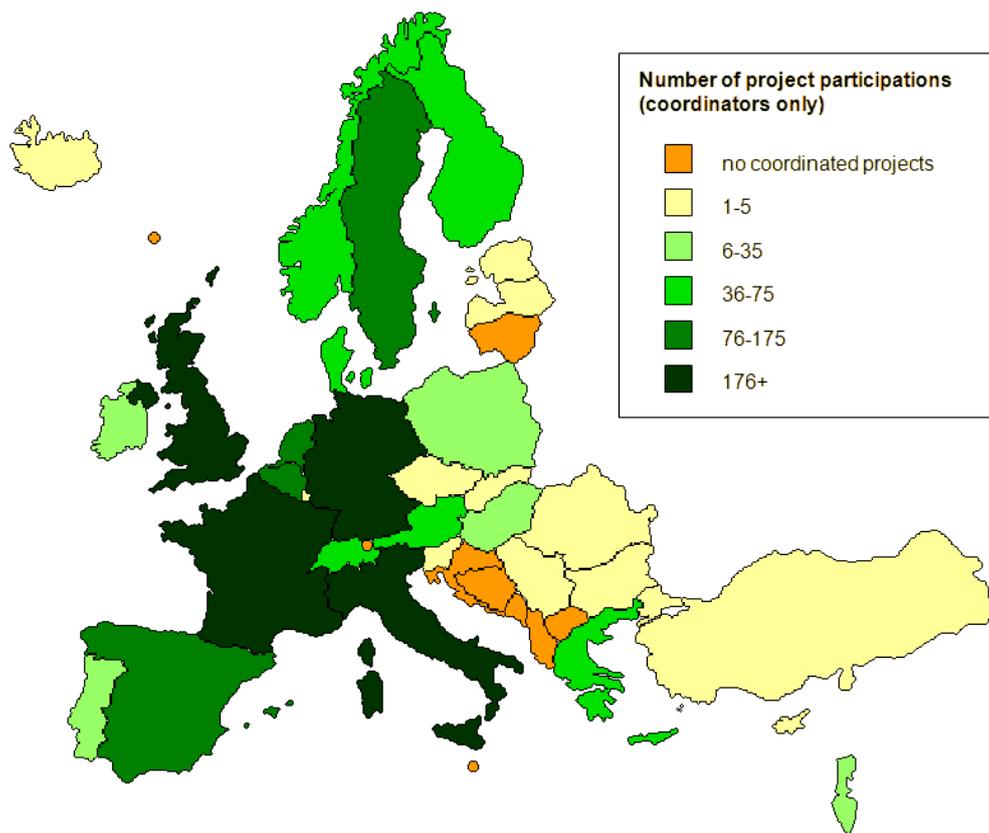


Figure 10: Geographical representation of coordinated of projects impacting on the EU SDS objectives in EU Member States and associated countries

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 following table 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” (11.6 % of all topics), between the theme TRANSPORT and the key challenge “sustainable transport” (9.8 % of all topics), and between the theme ENERGY and the key challenge “climate change and clean energy” (7.3 % of all topics).

“Public health” addressed by one quarter of all topics

The key challenge “public health” is addressed by almost one quarter (23.8 %) 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 20.2 % and 19.1 % of all ‘Cooperation’ topics, respectively, both having an important part of expected impacts from the themes ENERGY and ENVIRONMENT.

“Conservation and

While the key challenge “sustainable transport” is almost exclusively

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

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 (1828 topics) with expected impacts on EU SDS objectives (%)¹⁴

	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%	0.1%	0.1%	11.6%	1.2%	2.5%
Agriculture (KBBE)	1.6%	0.1%	1.5%	4.3%	4.8%	0.1%	1.1%
ICT	2.0%	0.4%	0.6%	0.3%	0.9%	0.4%	0.0%
Materials (NMP)	1.8%	0.4%	3.5%	3.2%	2.0%	0.1%	0.5%
ENERGY	7.3%	0.7%	3.5%	4.0%	0.2%	0.1%	0.5%
ENVIRONMENT	4.1%	0.4%	1.7%	5.0%	2.1%	0.2%	1.2%
TRANSPORT	2.0%	9.8%	1.9%	1.3%	0.7%	0.3%	0.2%
Social Sciences (SSH)	0.4%	0.2%	0.5%	0.3%	0.1%	1.3%	0.5%
SPACE	0.5%	0.1%	0.1%	0.5%	0.4%	0.0%	0.4%
SECURITY	0.5%	0.2%	0%	0.0%	0.9%	0.4%	0.1%
Total	20.2%	12.3%	13.6%	19.1%	23.8%	4.2%	6.9%

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

Data in Table 3 below re-emphasises the major role of the key challenge "public health", accounting for one third (33.2 %) 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 challenges¹⁵ – is allocating more project funding than the theme ENERGY in order to address the key

¹⁴ 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.

¹⁵ Despite the fact that ICT comprises about one third of total EC contribution (34 %, € 2.8 billion) within SP 'Cooperation', it only accounts for about 19 % (€ 1.1 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 7.2 % 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 (€ 10.5 billion) to projects with expected impacts on EU SDS operational objectives¹⁶

	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	0.1%	0%	0.0%	0.0%	17.0%	1.0%	2.5%
Agriculture (KBBE)	0.5%	0%	0.5%	2.0%	3.3%	0.1%	0.2%
ICT	11.9%	2.0%	1.7%	0.9%	7.3%	2.6%	0.1%
Materials (NMP)	1.7%	0.1%	3.7%	4.5%	2.8%	0.1%	0.4%
ENERGY	4.5%	0.5%	1.9%	1.7%	0.1%	0.0%	0.1%
ENVIRONMENT	2.3%	0.0%	0.8%	2.7%	1.0%	0.0%	0.2%
TRANSPORT	1.6%	7.2%	0.6%	0.9%	0.1%	0.1%	0.0%
Social Sciences (SSH)	0.1%	0.0%	0.3%	0.1%	0%	0.8%	0.1%
SPACE	0.9%	0.5%	0.1%	0.5%	0.8%	0%	0.4%
SECURITY	0.4%	0.2%	0%	0.2%	0.9%	0.1%	0%
Total	24.0%	10.6%	9.6%	13.6%	33.2%	4.9%	4.1%

¹⁶ 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 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.

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 2007-2011) 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](#)¹⁷.

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 database which allows analysing the data of the monitoring system from various points of view. To this end, it

¹⁷ 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.

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 of April 2011) comprises information on about 2,400 topics (from the 'Cooperation' Work Programmes 2007 to 2011) and 3,000 projects (from the years 2007 to 2010) with more than 33,000 project partners and a total EC contribution of more than € 10,500 million.

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.

