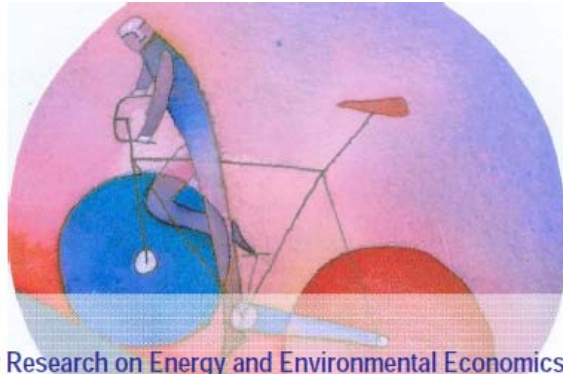


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**Cross-cutting Analysis of Results from COOPENERGY's  
European Survey on Multi-Level-Governance Models  
for Sustainable Energy Planning**

*Edoardo Croci, Tania Molteni*

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Co-funded by the Intelligent Energy Europe  
Programme of the European Union

CROSS-CUTTING ANALYSIS OF RESULTS FROM  
COOPENERGY'S EUROPEAN SURVEY  
ON MULTI-LEVEL-GOVERNANCE MODELS FOR SUSTAINABLE  
ENERGY PLANNING

*Authors: Edoardo Croci, Tania Molteni - IEFE Bocconi University*

*The authors would like to thank COOPENERGY's partners for their determinant contribution in the design, diffusion and implementation of the survey.*

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## INTRODUCTION

Regional and local authorities in Europe are more and more engaged in planning a sustainable use and production of energy, also in the view to help Member States in their fight against climate change. More coordination is needed among policies at all levels of government, from the local to the national one, in order to improve the effectiveness and efficiency of sustainable energy policies.

COOPENERGY is a three-year project running from March 2013 to March 2016, co-financed by the European Commission through the Intelligent Energy Europe programme, led by the Regional Council of Rhône-Alpes and involving twelve partners from nine countries across the European Union. Its main goal is to foster the development of collaboration models in sustainable energy planning between the regional and local public authorities to lead the transition towards low carbon communities and regions.

At this purpose, the project sees among its first activities the implementation of a survey at European level, to identify and collect a wide sample of collaboration initiatives between regional and local authorities on sustainable energy (named “Multi-Level-Governance models” within the project). These examples will inform the development of tools to support local authorities in improving their collaboration efforts.

The survey’s target was to reach in total at least one hundred and fifty (150) NUTS 2 and NUTS 3 regions in all EU27 Countries. For the survey’s purposes, a questionnaire has been disseminated through an online platform in 4 versions (English, French, Italian, Spanish) and 1 paper version (Czech). The invitation to join the European survey and take part in the questionnaire was sent to 389 recipients, of which 254 Regional/Provincial/County Authorities, 115 Energy Agencies, and 20 other organisations. The survey started in July 2013 and was closed in October 2013. A total of 128 responses were received. This report provides a detailed insight into the survey’s results through a set of descriptive statistics and elaborates some general concepts on Multi Level Governance for sustainable energy in Europe, based on a wide sample of MLG examples.

The report is structured in 2 parts:

- in the first one, answers to each question of the questionnaire are presented and commented;
- in the second one, a cross-cutting analysis of Multi Level collaborations is carried out; different features of Multi-Level collaborations are matched and jointly analysed, in order to highlight possible interactions among them.

## PART 1 - QUESTIONNAIRE'S RESULTS

### STRUCTURE OF THE QUESTIONNAIRE

The questionnaire was structured in **8 sections**, which addressed the main features of a MLG model:

- characteristics of the collaboration initiative
- partners involved
- link with regional planning
- funding
- results and impacts
- public information and participation
- transferability
- role of Regional Energy Agency.

The questionnaire foresaw mainly closed questions, with some open questions on the responsibilities of the Regional Authority and of other partners involved in the collaboration initiative and on the main success/weakness factors of the collaboration. Furthermore, it included a question through which the respondent could rate the importance of “enabling conditions” for that specific collaboration model.

### RESPONSES BY COUNTRY

A total of 128 responses were received through the online questionnaire platform and paper version. The cross-cutting analysis has been carried out on 109 responses, because some answers were incomplete or not comparable with the others and had to be taken aside from the sample.

The following graph reports the distribution of **respondents by country**. Over the 109 respondents, more than a half (64 – 58.17%) was represented by four countries: Sweden (24 – 22.0%), France (16 – 14.7%), Spain and Italy (12 – 11.0%). Italy and Spain are by far the most involved in the Covenant of Mayors with respectively 2,652 and 1,459 signatories each. This is partially reflected in the high number of respondents to the questionnaire. Sweden and France, on the other hand, have been characterised by a high response rate: their contribution could therefore be overrepresented.

All in all, 20 countries out of 28 in the European Union are represented. While not being in the EU, a questionnaire from Norway has been kept in the dataset, given the involvement of the country in the Covenant of Mayors and in MLG initiatives in general. Four respondents didn't specify any country nor region.

# Initiatives by country

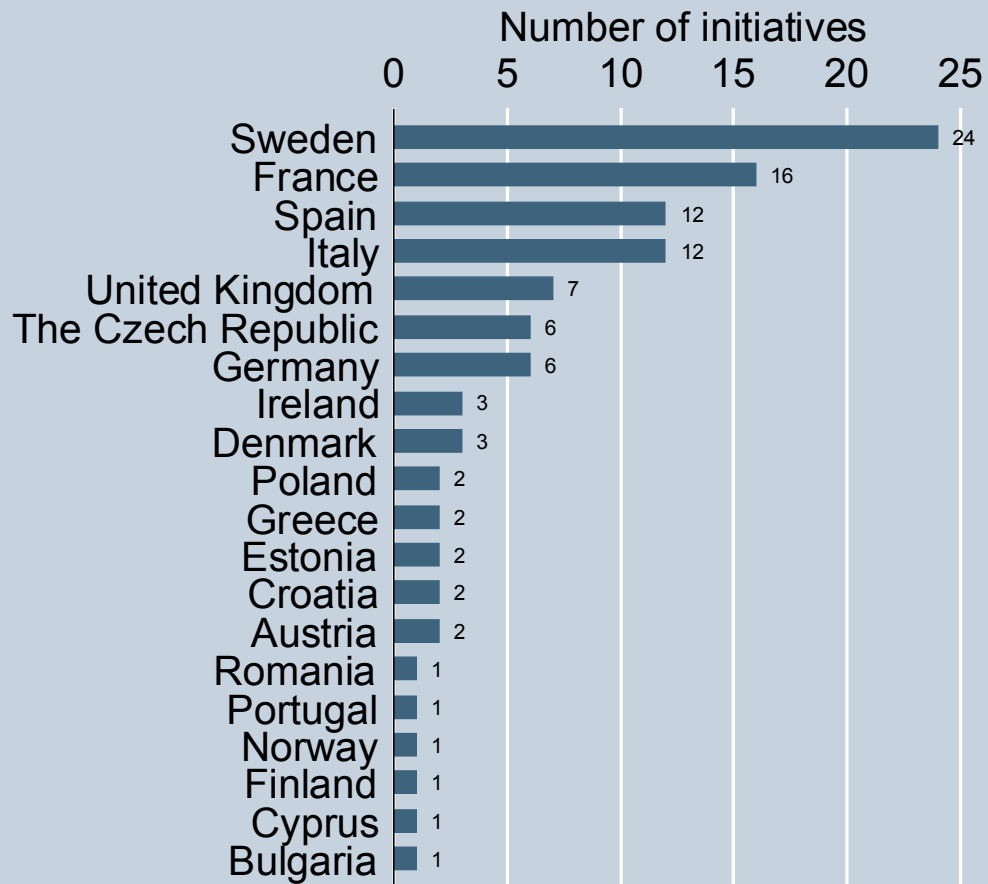


FIGURE 1 - INITIATIVES BY COUNTRY

## RESPONSES BY ANSWERING DEPARTMENT

Respondents have provided information on which department, or other organization, has answered the questionnaire. This was an open question, so it was necessary to aggregate answers into common categories, displayed in Figure 2. Departments' duties vary from country to country and from region to region: therefore their mandates are sometimes more nuanced than the following classification.

The most present department is the Environment one, either when environment is an individual mandate (15 – 13.8%), or when it comes with broader responsibilities, such as Transport (4 – 3.7%) or Energy (4 – 3.7%). Energy is indeed the second most represented department, with 10 questionnaires (9.1%) delivered (plus 4 more in the category: "Energy & Environment"). "Regional (county) management", who submitted 3 completed questionnaires, identify those respondents that, while being part of the regional (or county) authority, are part of the general administrative staff instead of a sectorial department. United Kingdom is the only country whose respondents included two departments explicitly in charge of sustainability. The 38.5% (42) of respondents have not indicated their department. In many cases this is because they are not directly employed in the regional administration. In fact, they are mostly project managers or directors, consultants, partners or managers of the special purpose company created by the initiative.

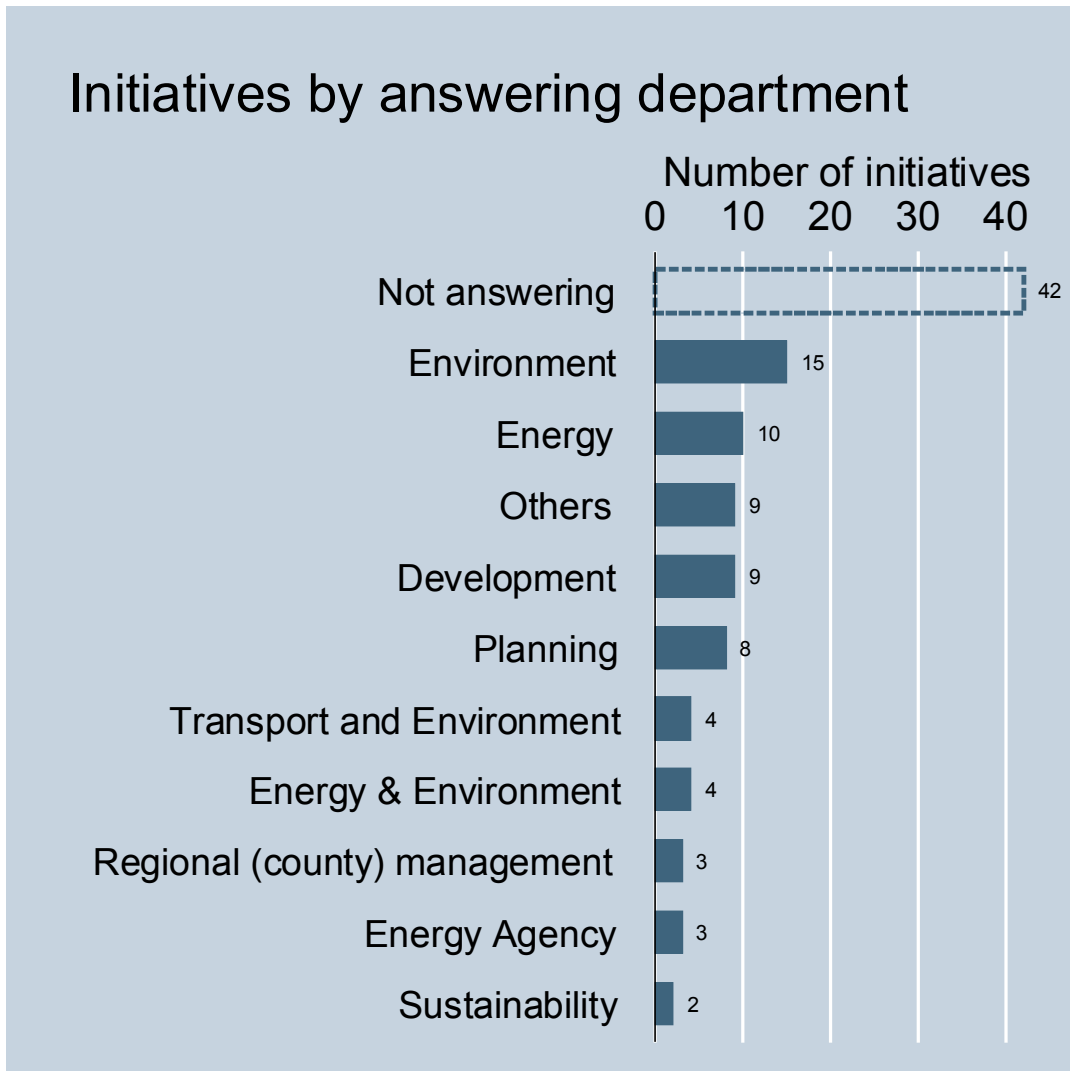


FIGURE 2 - INITIATIVES BY ANSWERING DEPARTMENT

## SECTION 1. CHARACTERISTICS OF THE COLLABORATION INITIATIVE

Questions of section 1 were aimed at analysing the characteristics of the collaboration: number of initiatives and their time length, as well as aims, areas and sectors involved.

### 1.1. NUMBER OF INITIATIVES PER RESPONDENT

Most of the collaboration between regions and counties with local authorities has been limited to a single initiative: only 22 (20.2%) respondents experienced several initiatives on sustainable energy, while 87 (79.8%) collaborated only once. The respondents have been invited to report every single initiative separately. Answers that were evidently not related to a single initiative, have been removed from the final dataset.

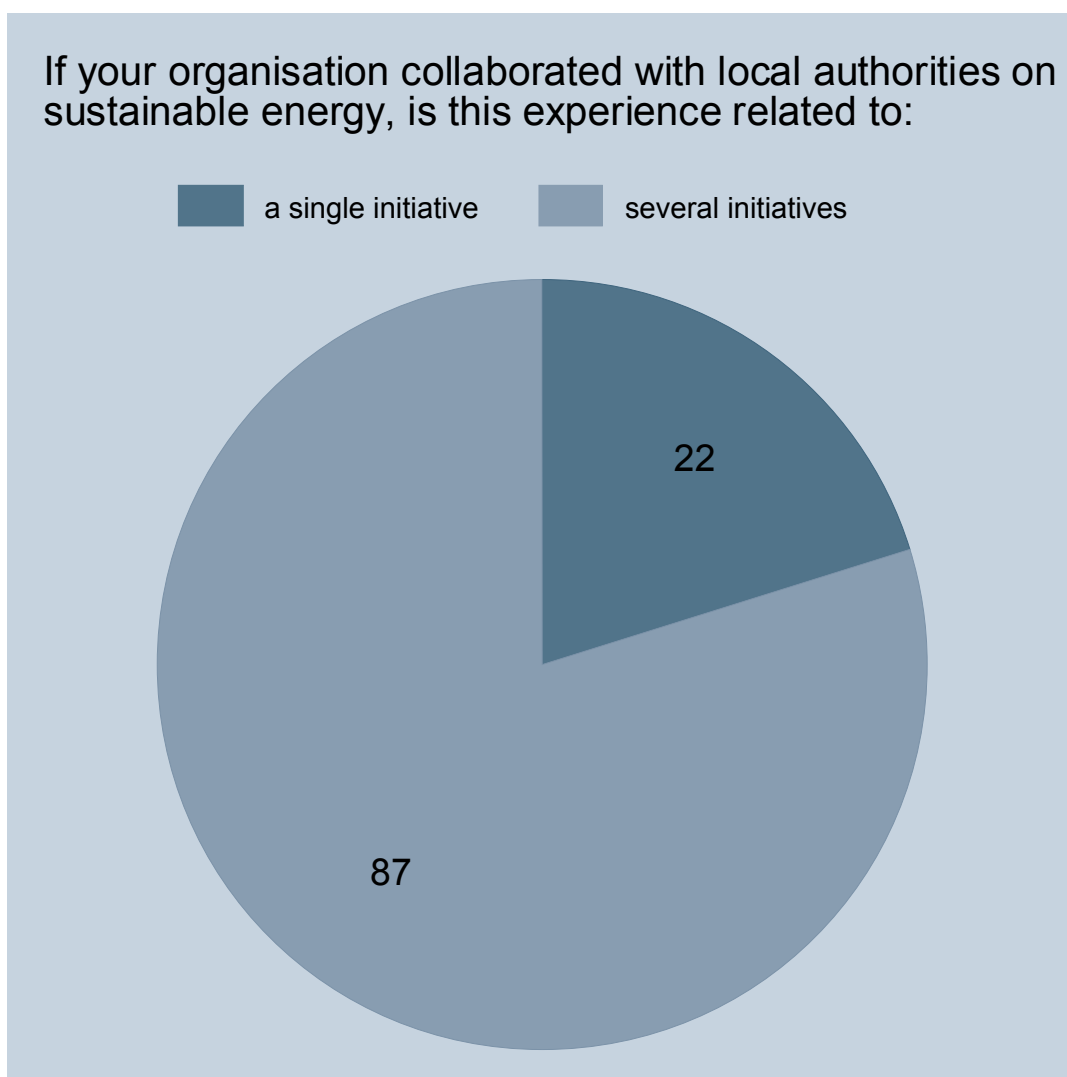


FIGURE 3 - RELATION OF THE EXPERIENCE TO SINGLE OR SEVERAL INITIATIVES

## 1.2. TIMEFRAME AND LENGTH OF THE INITIATIVE

Most respondents to the questionnaire report their initiative to be started after 2008, the adoption year of the Covenant of Mayors. In particular 25 initiatives started before 2008 and 83 initiatives started in 2008 or later. The median year is 2010, also characterised by the highest number of initiatives starting (20). Apparently 2013 has seen a reduction in initiatives; however, this is partially due to the fact that most respondents filled the questionnaire before the end of the year.

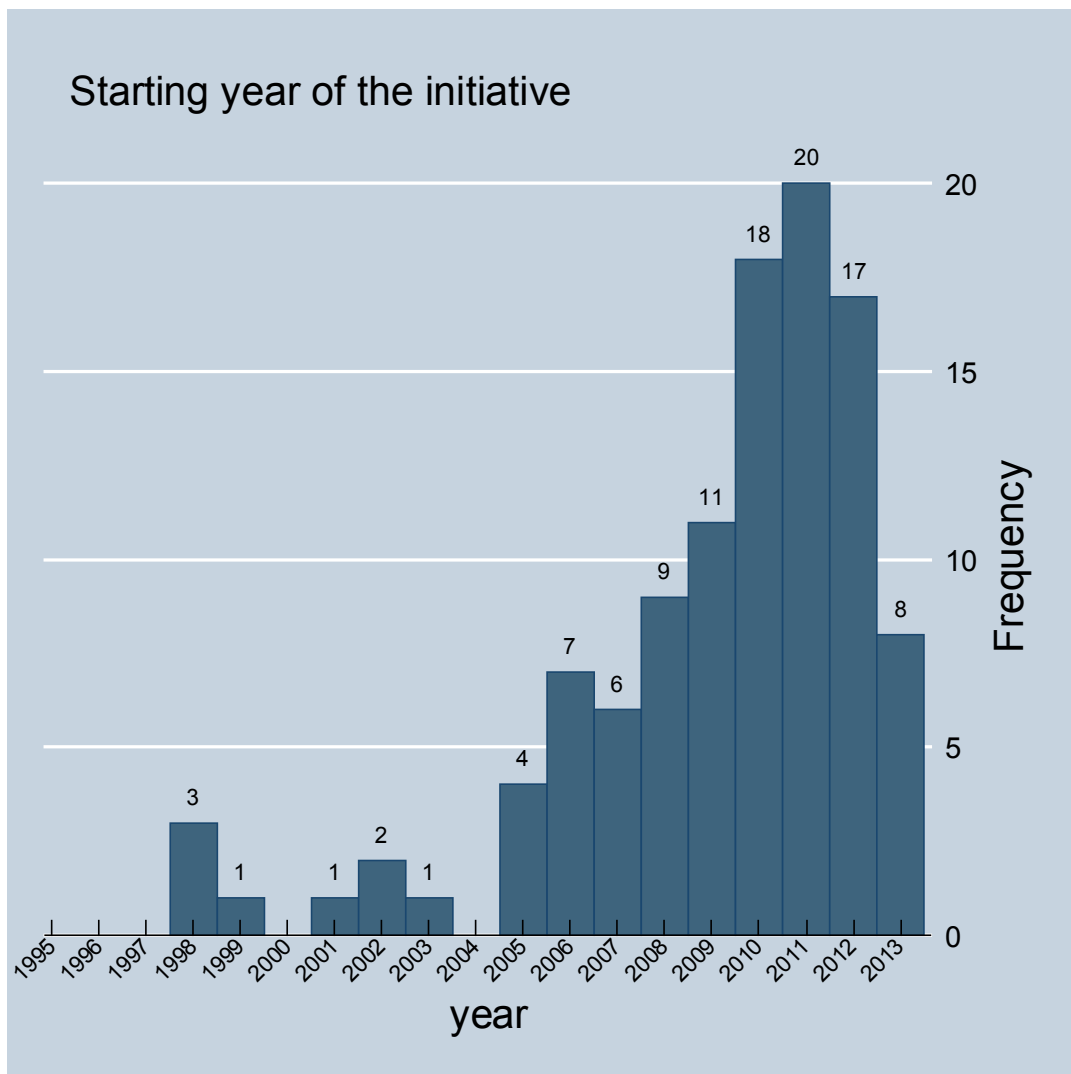


FIGURE 4 - STARTING YEAR OF THE INITIATIVE

Most of the initiatives are still ongoing (61): only 40 (39.6%) out of the 101 respondents to this question report an ending year.

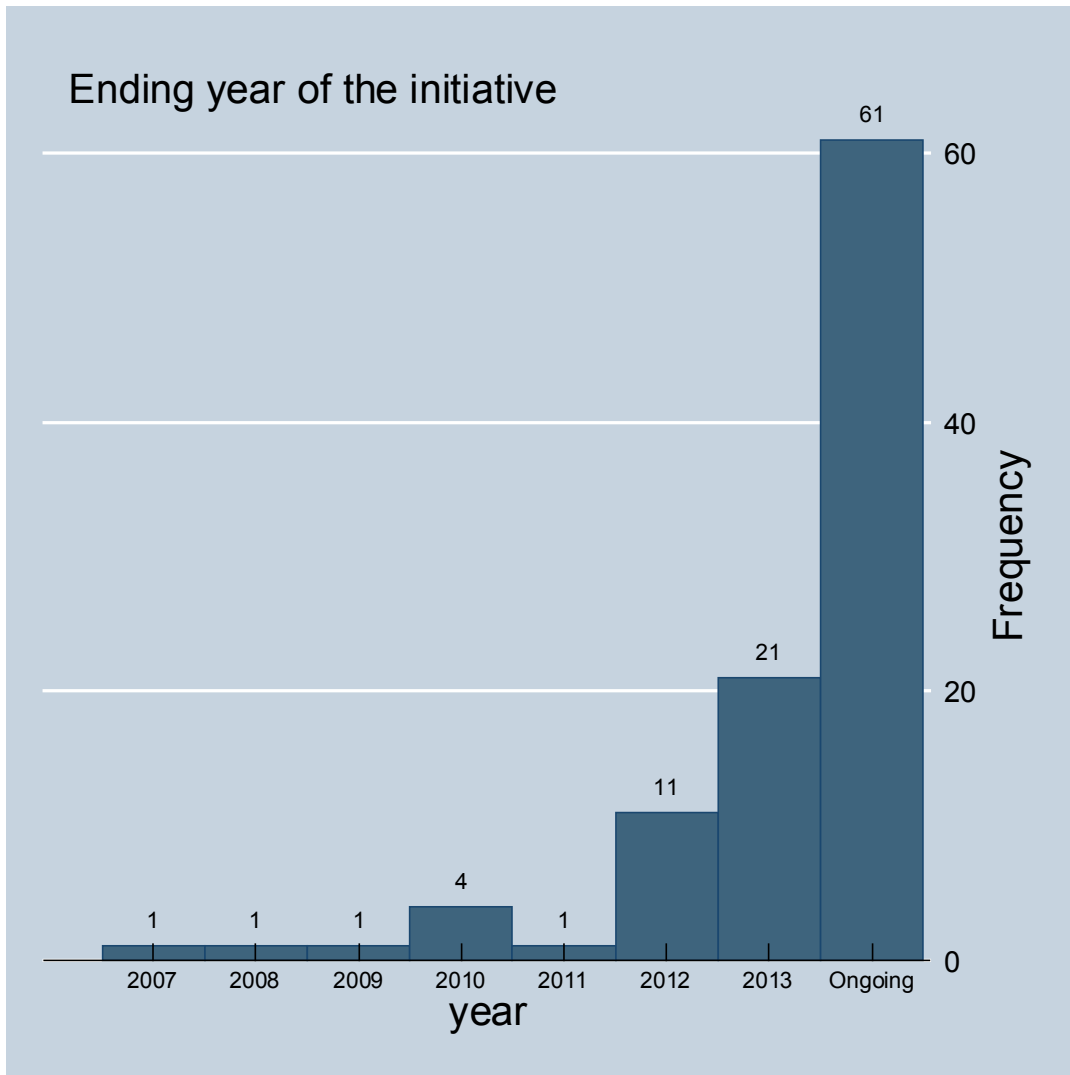


FIGURE 5 - ENDING YEAR OF THE INITIATIVE

Among the 39 initiatives for which a starting and an ending year are defined, more than a half (24 – 61.5%) has been completed in two years or less. The average time length of the completed initiatives is 2.9 years.

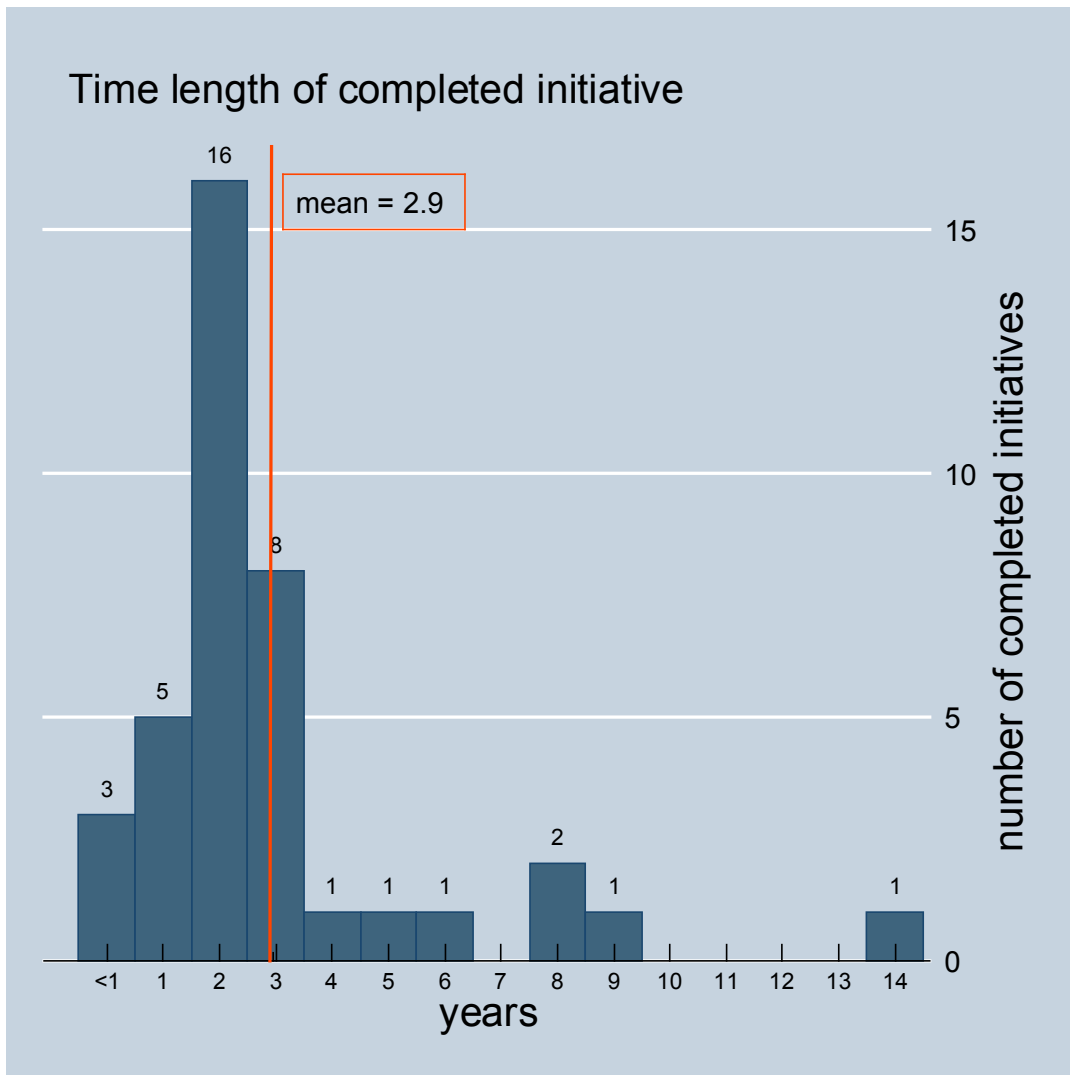


FIGURE 6 - TIME LENGTH OF COMPLETED INITIATIVE



### 1.3. AIMS OF THE COLLABORATION

A big majority of the initiatives has the aim to spread information on sustainable energy: 74 out of 109 (67.9%) state that information is one of the main aims. Similarly, 70 (64.2%) respondents stress as important aim the improvement of the decision-making process in sustainable energy and low carbon policies. As shown in the latter graph, the majority opted to stress out more than one main aim: on average, almost 4 aims have been specified, while 15 respondents (13.8%) answered affirmatively to every option.

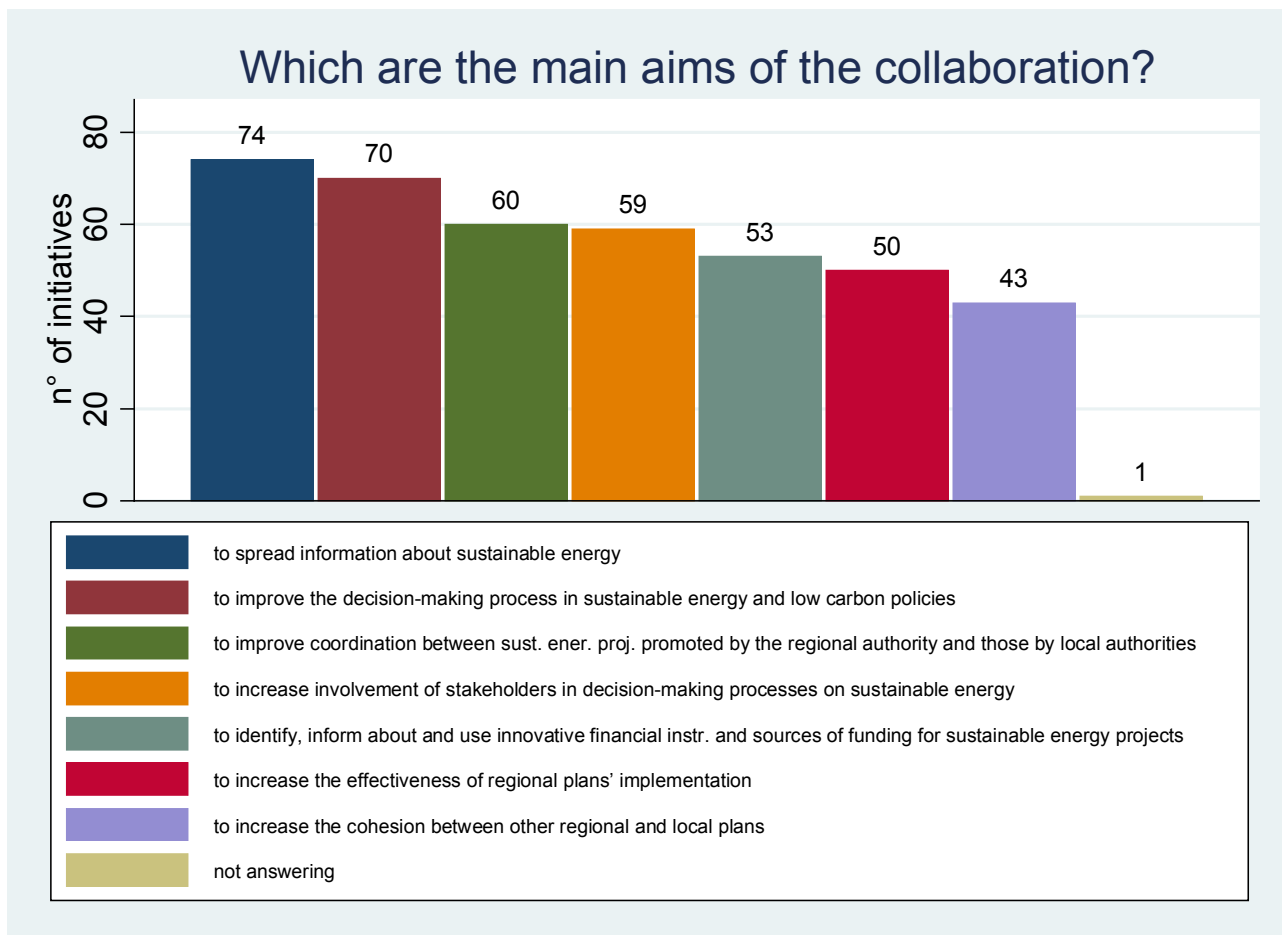


FIGURE 7 - AIMS OF THE COLLABORATION

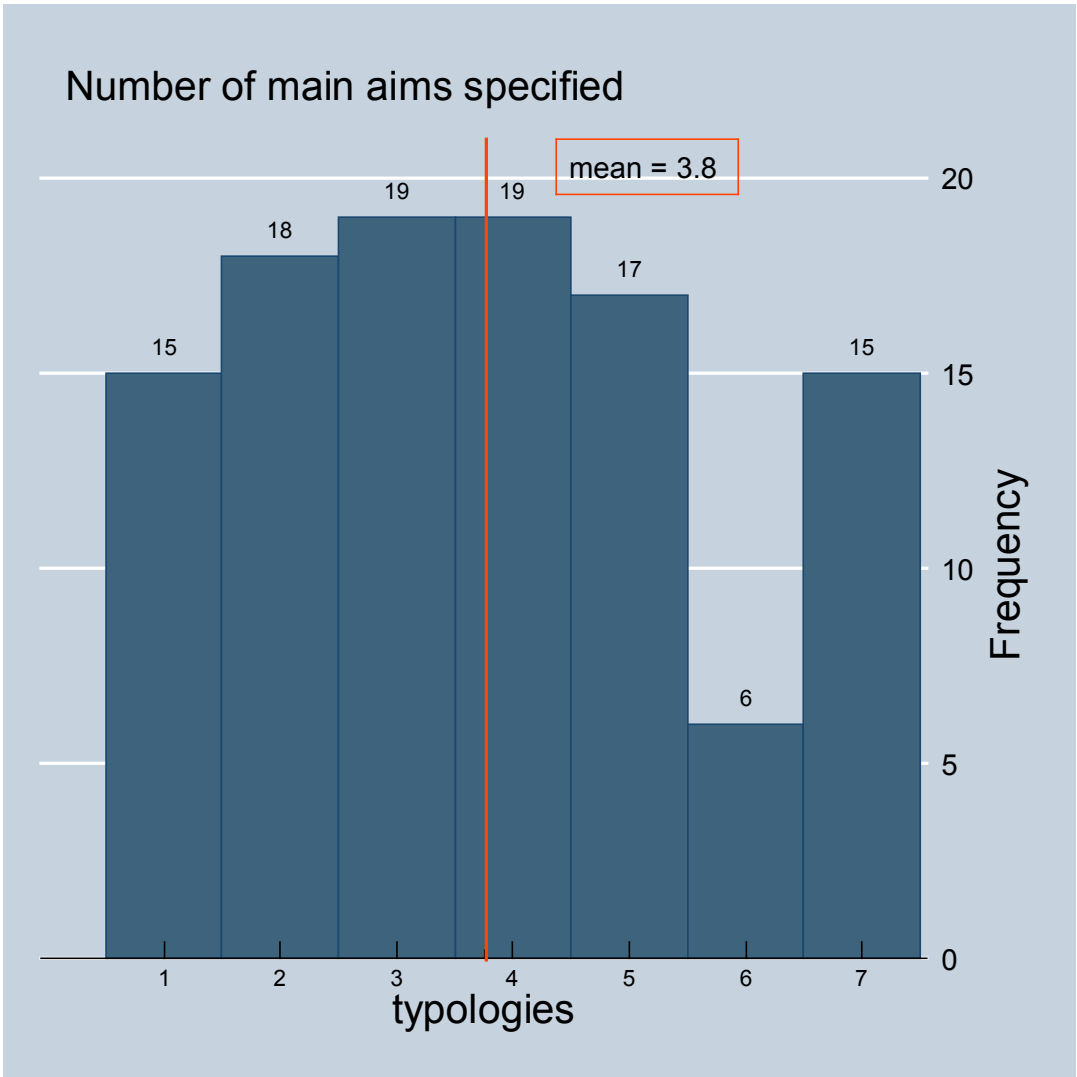


FIGURE 8 - NUMBER OF MAIN AIMS SPECIFIED

## 1.4. SCOPE OF COLLABORATION

Within the COOPENERGY project, MLG models are divided into two main scope areas of collaboration:

- the first one is related **strategic energy planning**, conducted jointly between regional and local authorities;
- the second one is related to **operational energy planning**, and refers to concrete actions conducted jointly by regional and local authorities; in particular, this second area is further articulated in three thematic “Pillars”:
  - o 1. Financial mechanisms
  - o 2. Modelling, planning and monitoring tools for decision making
  - o 3. Awareness raising and stakeholders involvement

Looking at areas of collaboration which characterize MLG cases mapped in the questionnaires, the pillar related to financial mechanisms appears as the least represented<sup>1</sup>. The awareness raising aspect is a bit more present than the other ones.

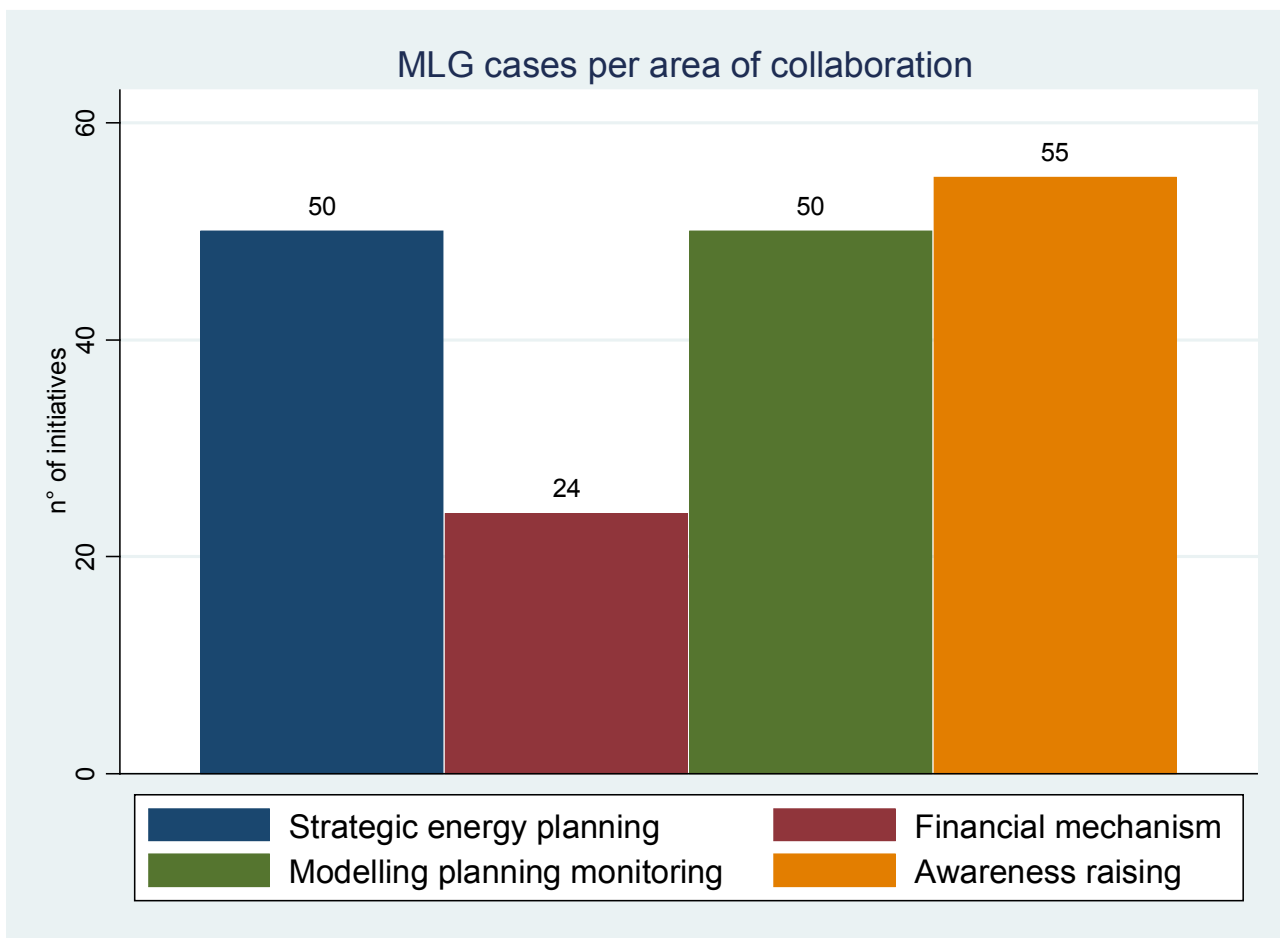


FIGURE 9 - MLG CASES PER AREA OF COLLABORATION

<sup>1</sup> Please note that each MLG model can be characterized by 1 or more area of collaboration, depending on the typology of initiative. For this reason, the total of Figure 9 is bigger than the total number of questionnaire responses.

MLG cases have been classified also according to sub-categories within each area of collaboration, named as “topics” of collaboration.

Themes of collaboration	Topics of collaboration
Concerted strategic energy planning	Cooperation in Regional SEAP design Joint local SEAP Joint planning of sectoral actions Support and promotion of local initiatives Networking
Operational energy planning	
1. Financial mechanisms	Financial counselling Joint procurement processes Financial support programme Setting up of regional funding entities PPP – Public-Private Partnership Market mechanisms
2. Modelling, planning and monitoring tools for decision making	Planning/Modelling tool Monitoring tool Setting up of support organizations Knowledge sharing tool Plans/Policies evaluation CoM-related technical support Technical Support
3. Awareness raising and stakeholders involvement	Joint communication campaign Awareness raising initiative Stakeholder engagement

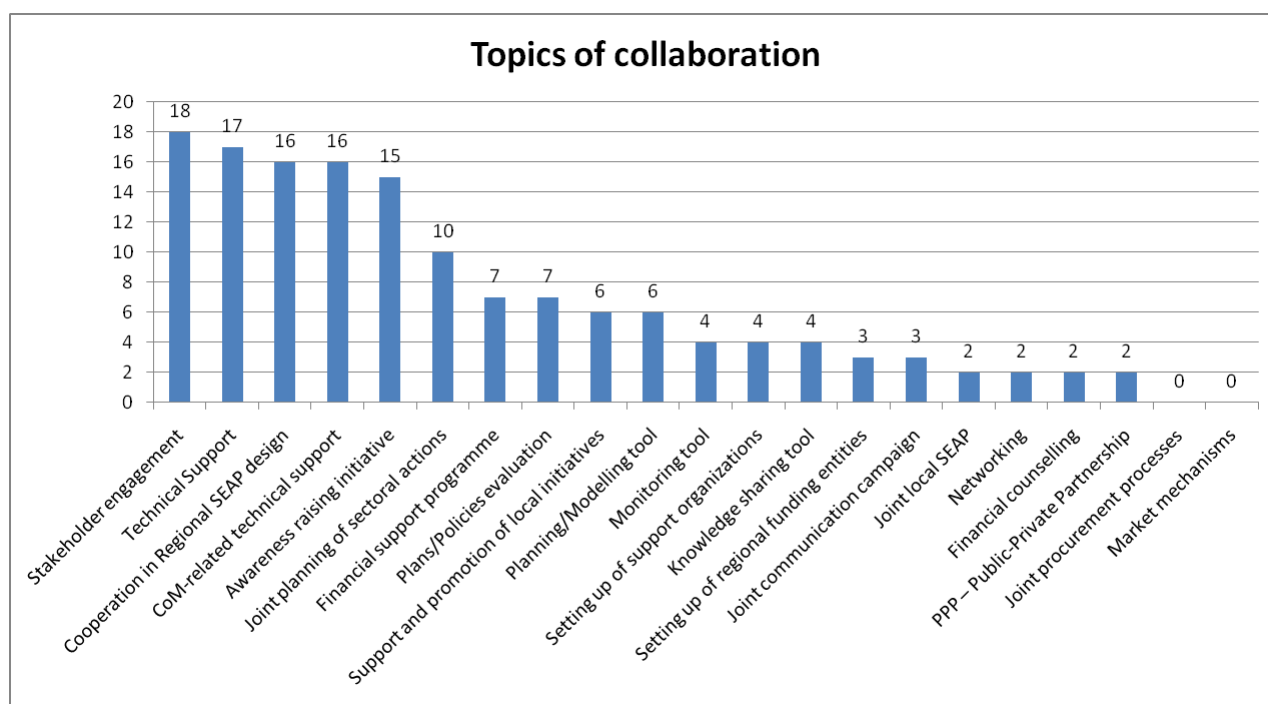


FIGURE 10 - TOPICS OF COLLABORATION IN QUESTIONNAIRE’S RESPONSES

Looking at topics of collaboration in the responses to the questionnaire, stakeholder engagement, technical support (related to the Covenant of Mayors and not) as well as cooperation in regional planning emerge as the most present ones. No cases mapped by the questionnaire are related to joint procurement processes or market mechanisms.

A list of types of collaboration for each topic can be found in Annex I to this report.

### 1.5. AREAS INVOLVED IN THE COLLABORATION

Maybe unsurprisingly, as many as 95 respondents (87.1%) have indicated energy efficiency as one of the involved areas, followed by renewable energy (82 – 75.2%) and GHG reduction (68 – 62.4%). Noticeably, only one initiative has not involved any of these three main areas, focusing instead on energy security and other matters related to energy supply. In the “other” category, respondents have stressed both building refurbishment (2) and actions for air quality (2), as well as other scattered actions.

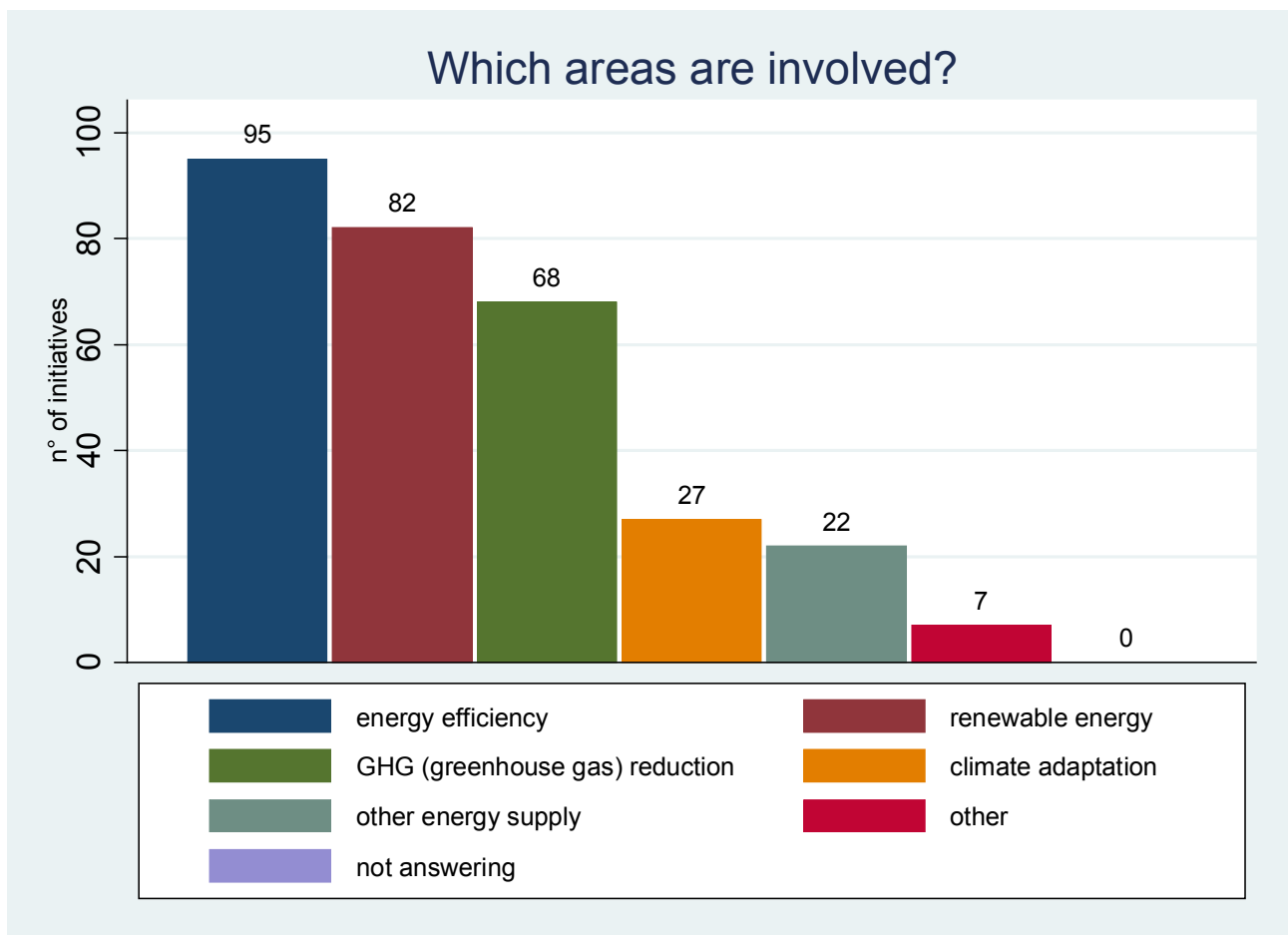


FIGURE 11 - AREAS INVOLVED

## 1.6. SECTORS INVOLVED IN THE COLLABORATION

The buildings sector has been the most frequently involved in respondents' initiatives (88 – 80.1%), followed by local energy production (70 – 64.2%) and transport and mobility (63 – 57.8%). Only 5 initiatives (4.6%) do not specifically and directly involve said sectors. Among the 13 “other” answers, it is worth noticing that 3 respondents specify that the initiative is related to public lighting, 3 identify other public services as the sector involved and 3 relate the initiative to households.

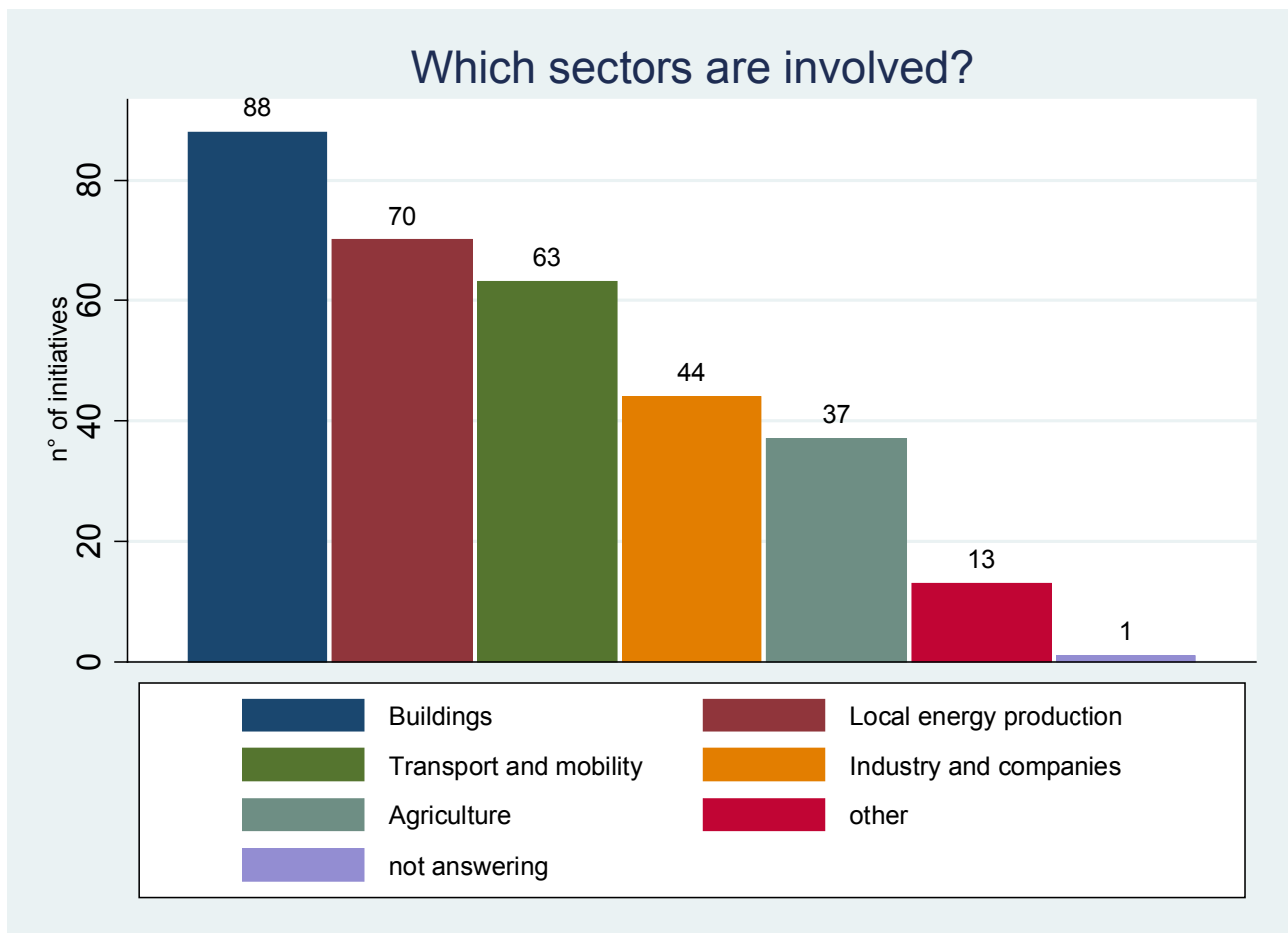


FIGURE 12 - SECTORS INVOLVED

## SECTION 2. PARTNERS INVOLVED

Questions of section 2 were aimed at understanding the number and typology of partners involved, as well as the management instruments used to involve and coordinate them.

### 2.1. OTHER PARTNERS INVOLVED

Almost every MLG initiative has been conducted by regions/counties, involving at least the local authorities (94 - 86.2%) or county/regional authorities (83 - 76.1%). This is unsurprising and intrinsic in the definition of MLG. Such distribution, in fact, descends directly from the dual nature of MLG: a vertical dimension, constituted upon linkages and cooperation with different institutional levels, is coupled with a horizontal dimension, where linkages are forged within the same level. On the contrary, national authorities are the least partner involved (22 initiatives - 20.2%). In the non-explicitly stated options, respondents have suggested, among others: citizens and community groups (4), banks (3), public-owned utility companies (3).



FIGURE 13 - OTHER PARTNERS INVOLVED

## 2.2. NUMBER OF PARTNER TYPOLOGIES

Most of the initiatives involved more than one partner: the average number is 3.7 and as many as 55 initiatives (50.4%) involve three or four partners; 31 (28.4%) initiatives involve 5 partners or more. Only one initiative included the participation of more than 7 partner typologies<sup>2</sup>.

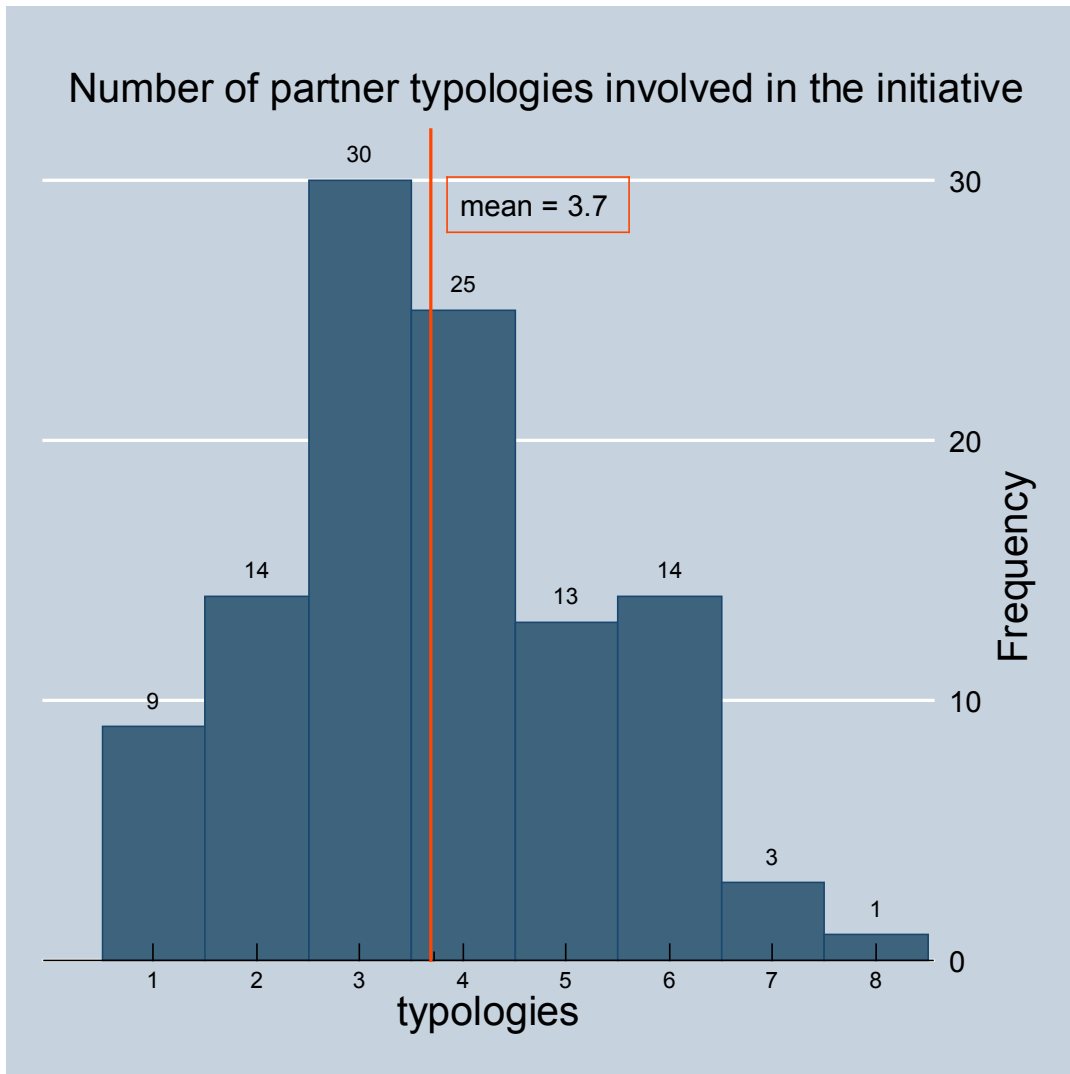


FIGURE 14 - NUMBER OF PARTNER TYPOLOGIES INVOLVED

<sup>2</sup> Note here that “other” counts as a single typology, despite the number of other partners actually stated in the open answer.



### 2.3. DEFINITION OF RESPONSIBILITIES

Concerning responsibilities definition and assignment to partners, 16 respondents (14.7%) state that they haven't been clearly defined. Nevertheless, a large majority (91 – 83.5%) recognises a clear definition of responsibilities among the partners in the initiative.

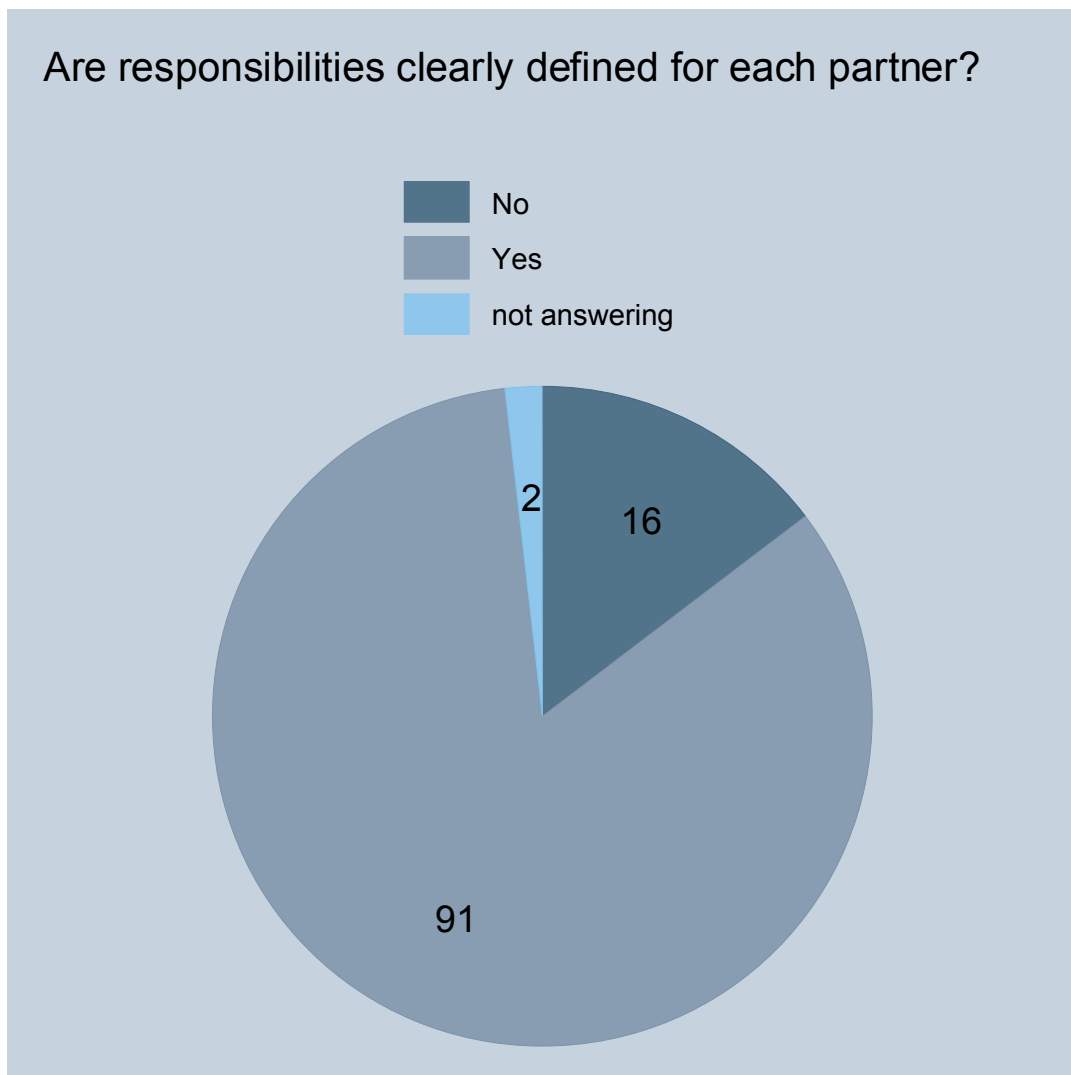


FIGURE 15 - DEFINITION OF RESPONSIBILITIES

## 2.4. OTHER REGIONAL DEPARTMENTS INVOLVED

Out of 108 responding subjects, more than a half (63 - 57.8%) reports the involvement of other regional departments. Those questionnaires with a negative answer for this question (45 – 41.3%) have, in the majority of the cases (25), been filled by subjects other than a regional department (see comment to the second question). Therefore, they may have perceived the question as inconsistent.

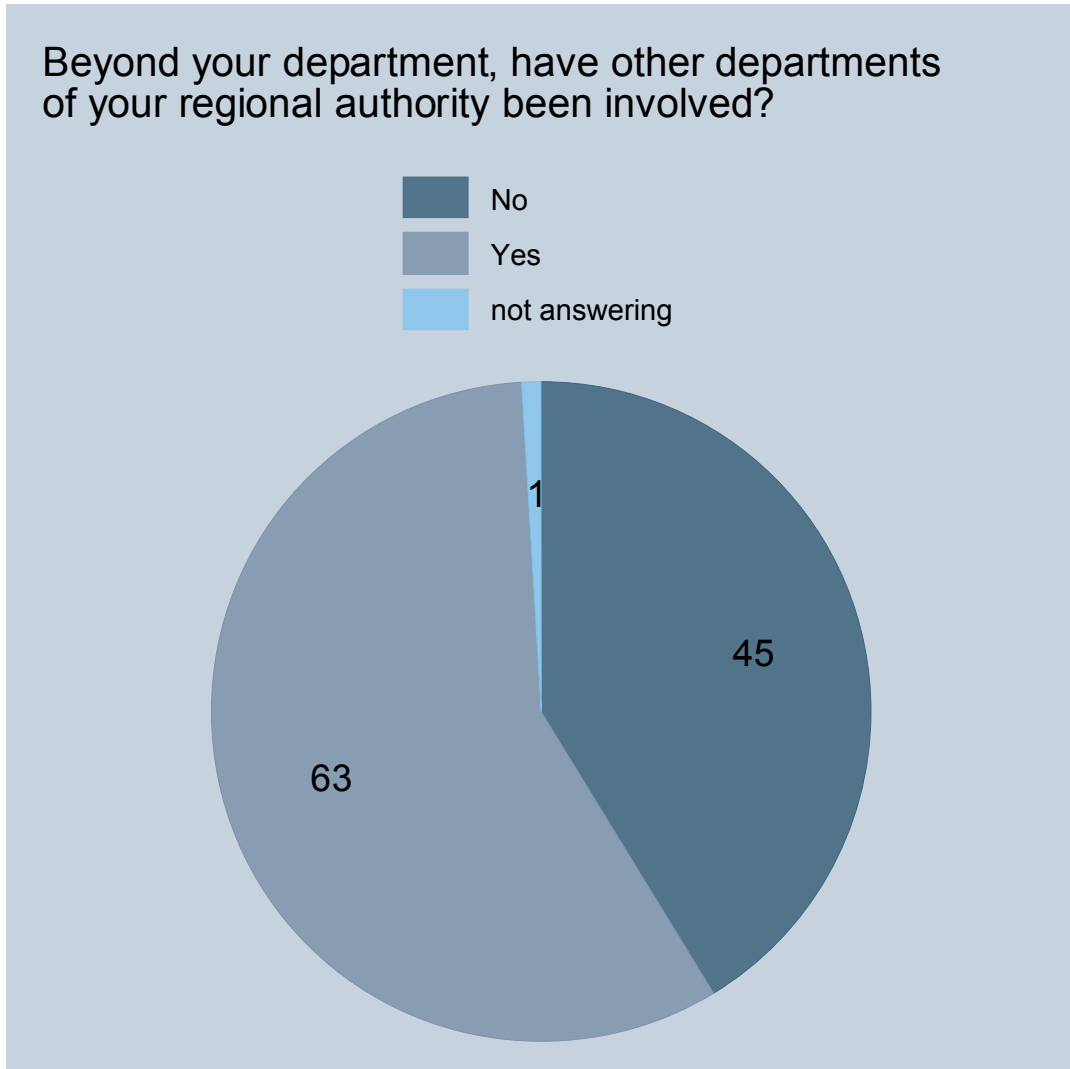


FIGURE 16 - OTHER DEPARTMENTS INVOLVED (Y/N)

The two departments mostly involved are energy and environment, as expected. It is worth noticing these two departments (or more general departments with these mandates) have been involved in almost every initiative (95 – 87.2%). Their involvement is deduced from them being the respondents or from the following graph (that depicts the other department involved). When they are not, the department of planning (5 initiatives) or development (5 initiatives) play a prominent role.

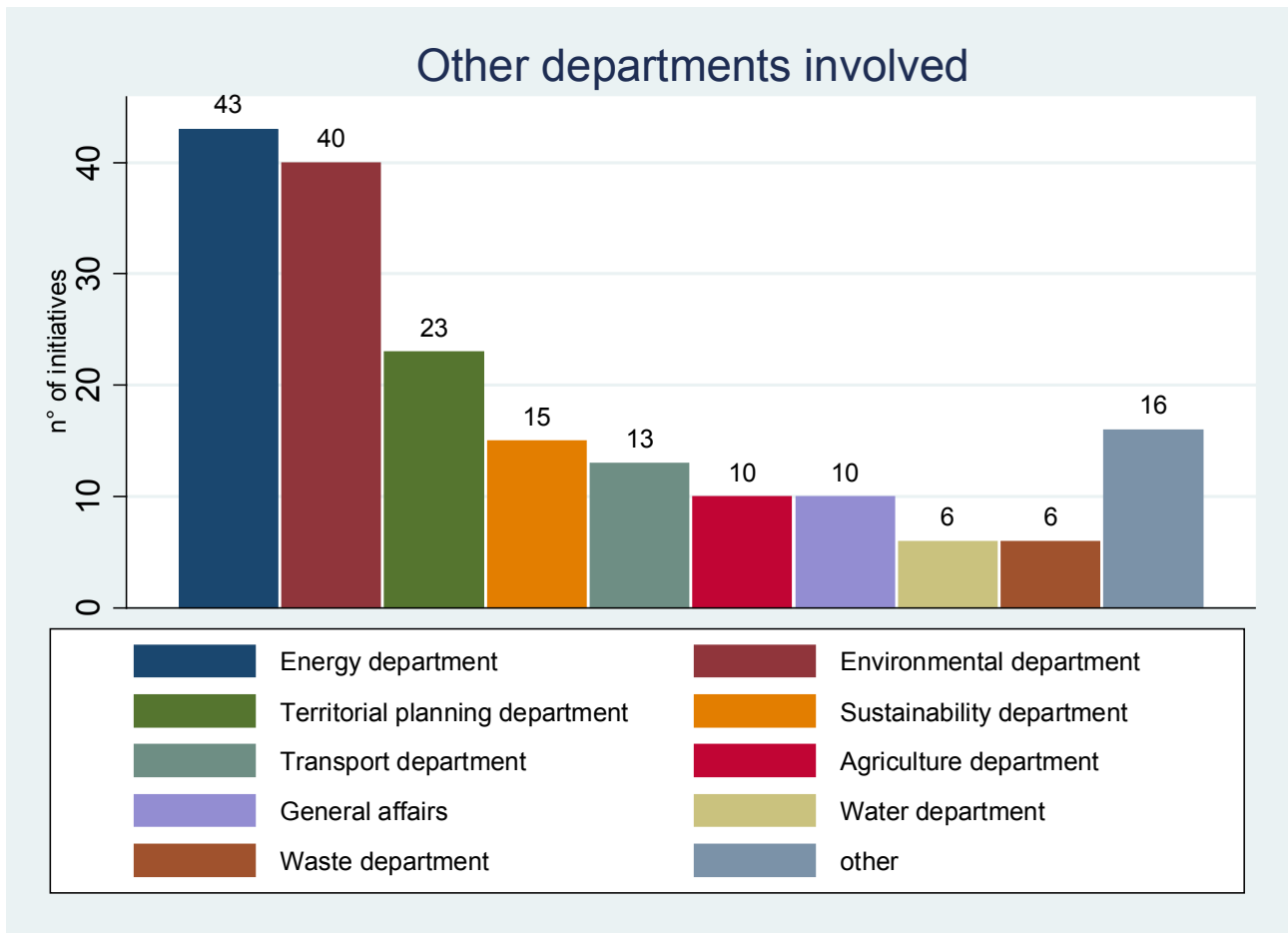


FIGURE 17 - OTHER DEPARTMENTS INVOLVED

The following graph shows the number of departments involved on average. Most of the respondents have worked in cooperation with or have involved other regional departments. On average, between one and two other departments have been involved.

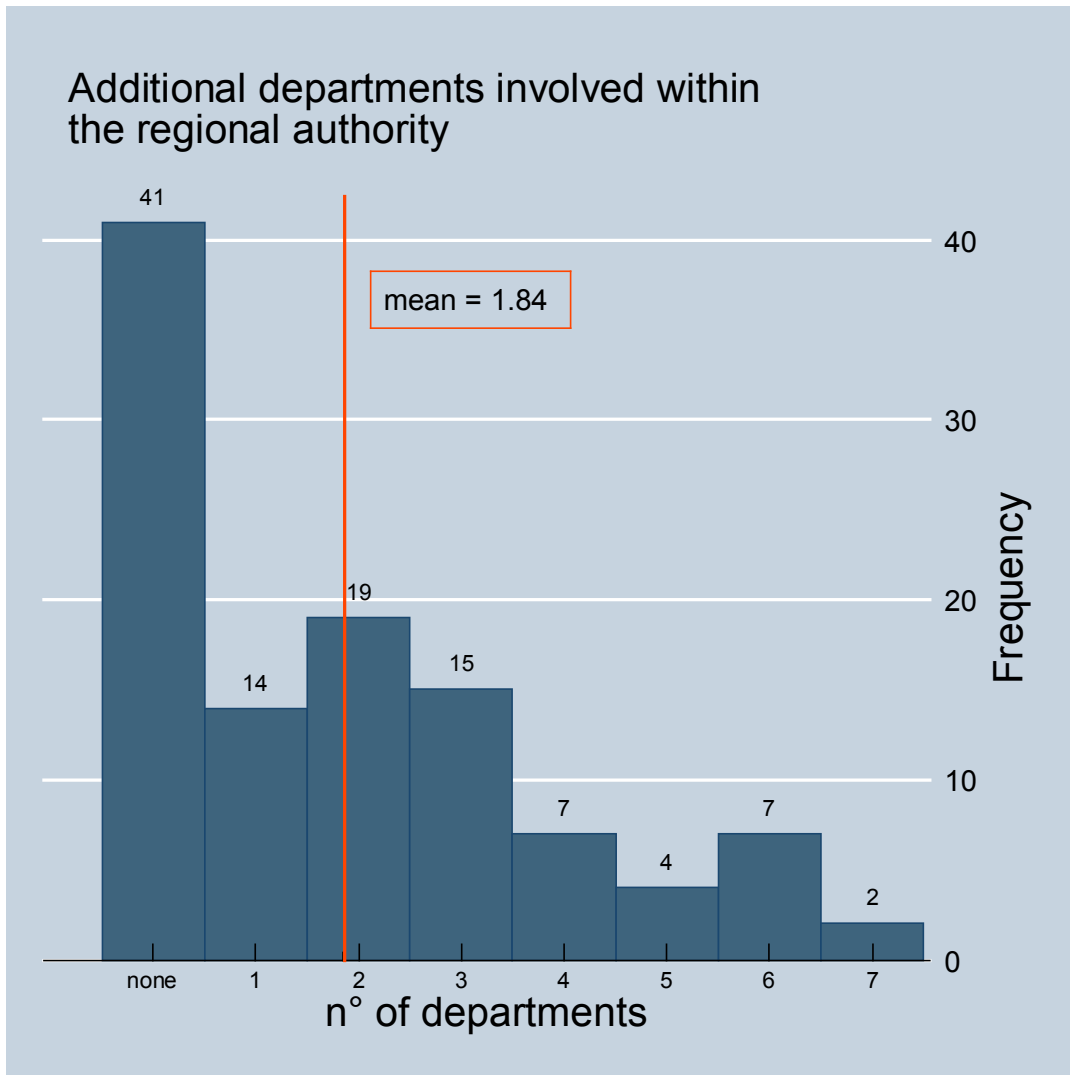


FIGURE 18 - NUMBER OF ADDITIONAL DEPARTMENTS INVOLVED

## 2.5. FORMALIZATION AND MANAGEMENT OF THE INITIATIVE

The following graph shows the number and typology of management instruments employed. On the horizontal axis, the number of instruments is reported. On the vertical axis, the number of corresponding initiatives is reported. In total, 58 initiatives have been managed with the help of only one of the mentioned management instruments: either through a dedicated agency (23), through meetings (22) or by a coordinating committee (13). Moreover, 28 initiatives have been managed through two different instruments and 11 have been managed involving all the previous instruments. A dedicated agency has been opted, either as the only management instrument or in combination with the other two, by 51 respondents; meetings have been used 56 times in total; coordinating committees have been chosen in total 40 times.

Among the “others” category, it is of some interest to notice that 2 respondents specified the direction has been assumed by an office of the presidency/council (elected body).

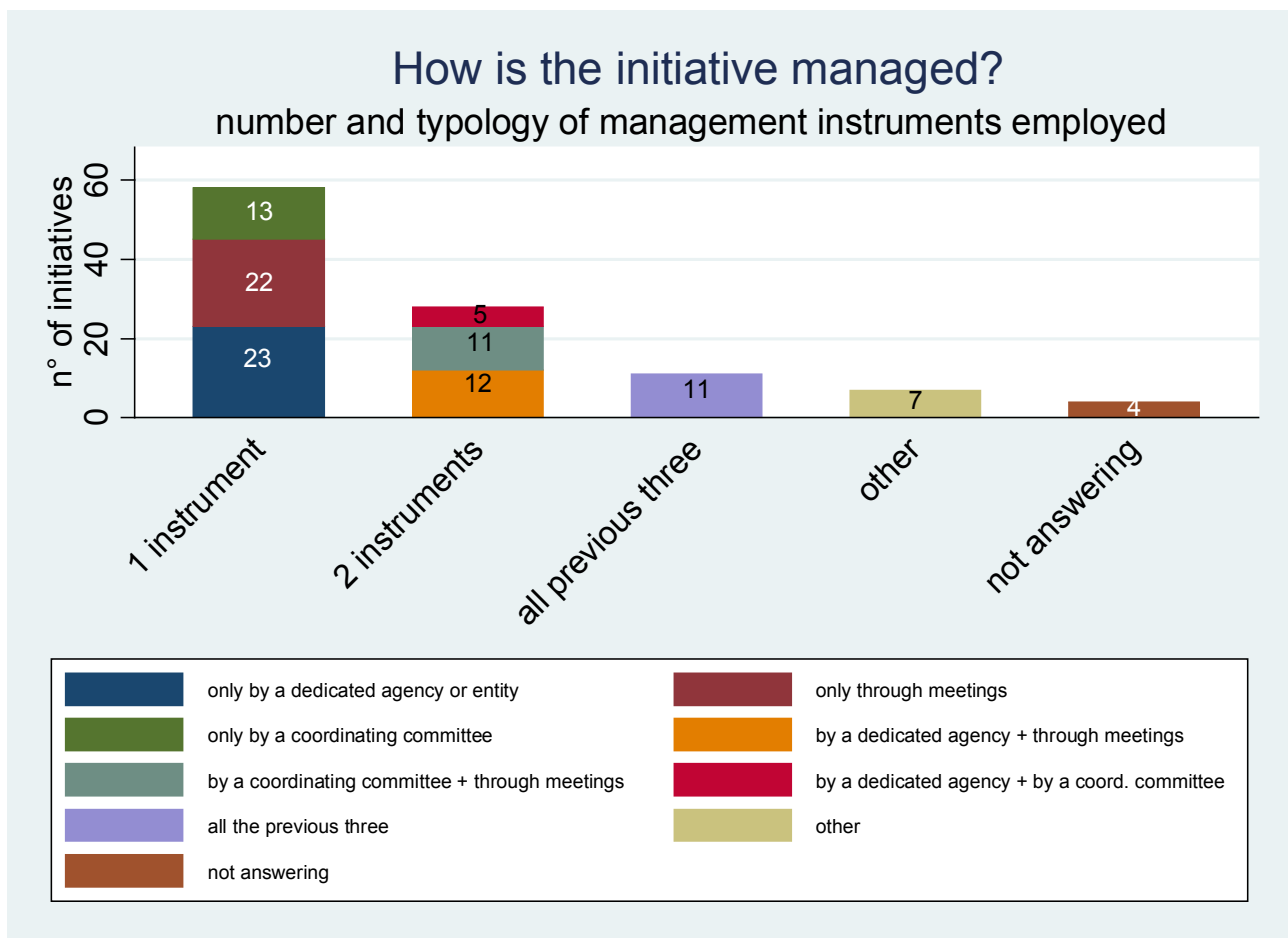


FIGURE 19 - NUMBER AND TYPOLOGY OF MANAGEMENT INSTRUMENTS EMPLOYED

A formal act or an agreement have been used to formalise the collaboration in 73 (67%) out of 109 experiences.

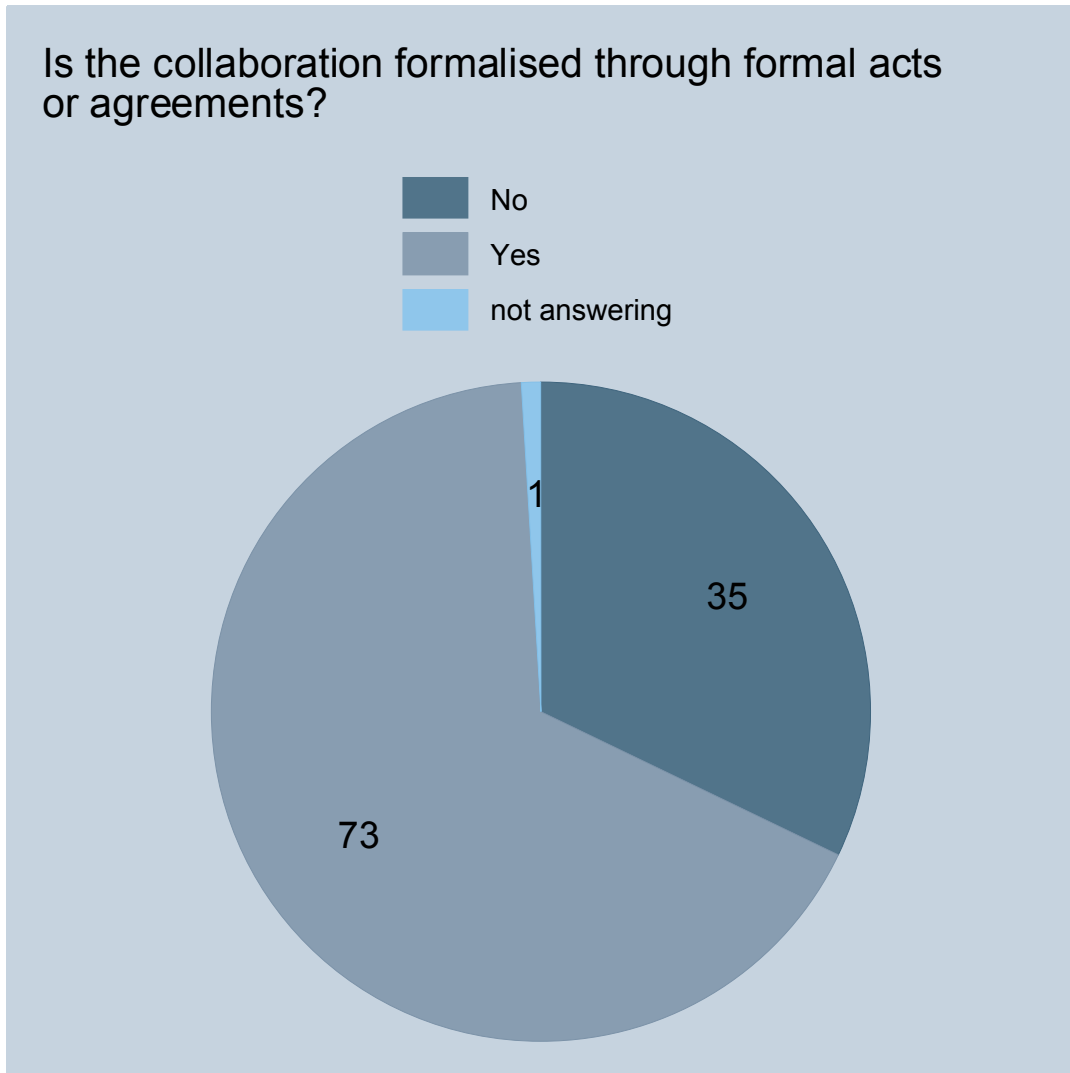


FIGURE 20 - FORMALIZATION OF THE COLLABORATION (Y/N)

In particular, the following graph shows the typology of formal/informal act or agreement signed. In total, 82 respondents filled in the question (despite only 73 answered affirmatively the previous question). A single document has been preferred to multiple agreements in 42 (38.5%) cases; 15 (13.8%) times respondents have reported a formalisation through two document typologies, while one initiative has been formalised through all the three. Formal agreements are the most common act, with 42 uses (57.5% of the formalised initiatives), either alone (28) or in combination with other instruments; followed by Memorandum of Understanding (18 – 24.7% of the formalised initiatives) and Deliberative acts (15 – 24.7%).

Among those who have answered “other”, some have specified: a partnership agreement (2); a normative act approved at the regional or local level (2); contracts or agreement enforced by private-law (2) and a membership in a formal network (2).

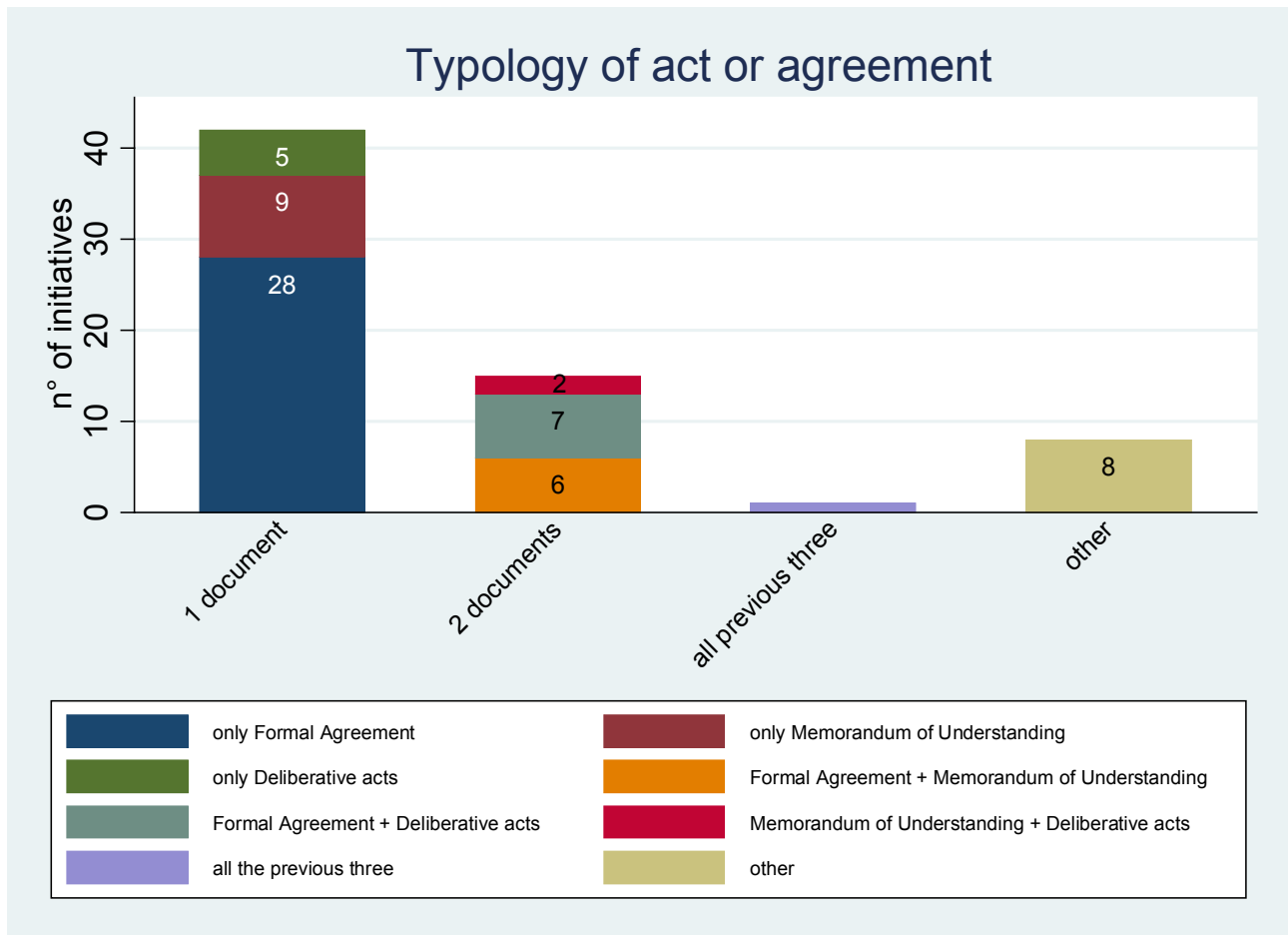


FIGURE 21 - TYPOLOGY OF ACT OR AGREEMENT

The political level has had an influential role in deciding to activate the collaboration in the absolute majority of the initiatives (65 – 59.6%), followed by the administrative level (30 – 27.5%). The technical level was decisive only in 11 initiatives.

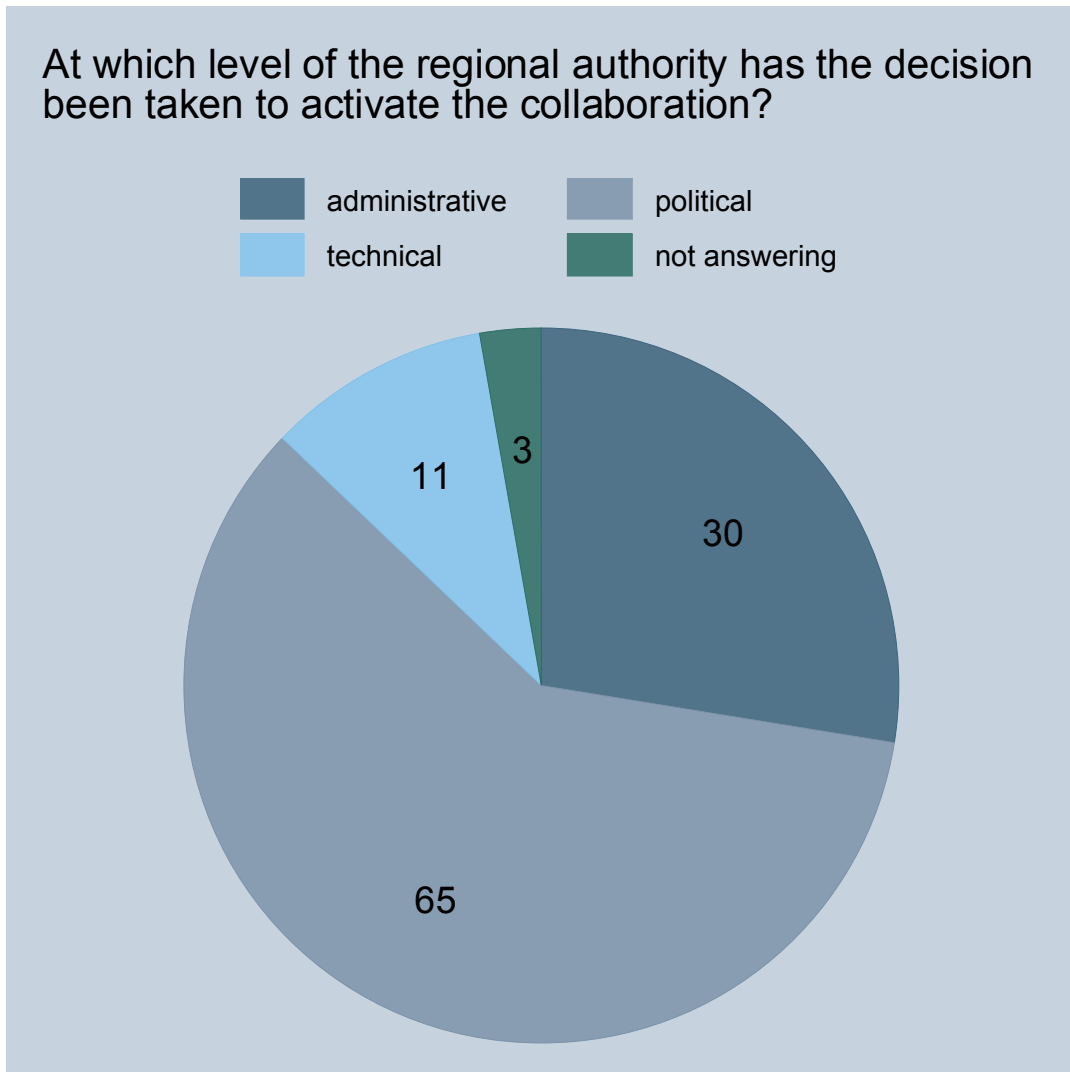


FIGURE 22 - DECISIONAL LEVEL ACTIVATING THE COLLABORATION



## SECTION 3. LINK WITH REGIONAL PLANNING

### 3.1. RESPONSIBILITIES OF THE REGIONAL AUTHORITY IN ENERGY PLANNING

The following graph shows the responsibilities of the regional (county) authority in energy planning. Promotion of energy efficiency (88 – 80.7%), promotion of renewable energy (84 – 77.1%) and development of energy plan (66.1%) are by far the most common duties of authorities.

In only one case, whose related questionnaire has been filled by the environmental department of a German region, the authority is said to be responsible of regulating energy tariffs.

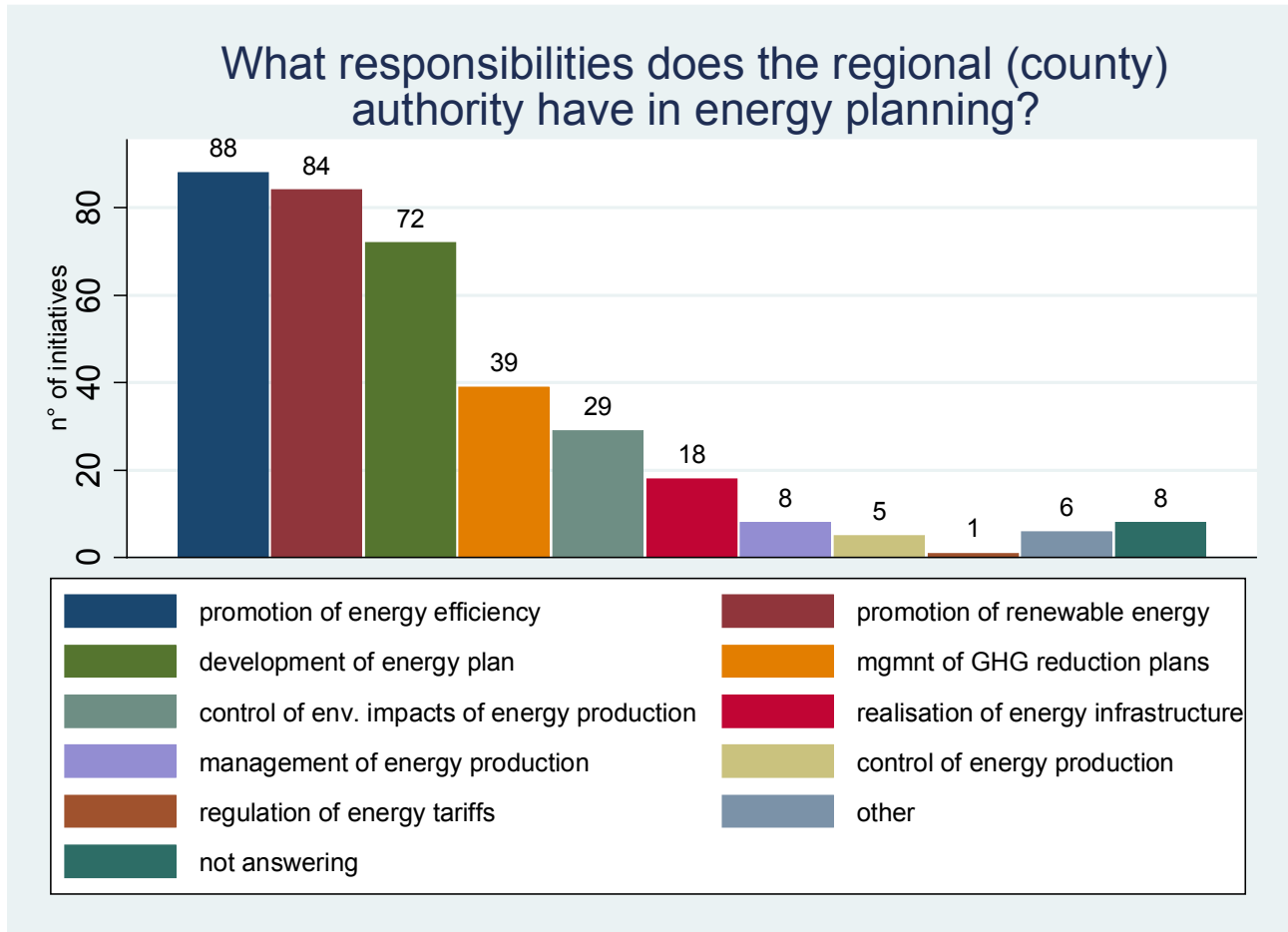


FIGURE 23 - RESPONSIBILITIES OF THE REGIONAL AUTHORITY IN ENERGY PLANNING

### 3.2. LINK WITH REGIONAL SEAP AND OTHER REGIONAL PLANS

Most of the respondents have reported that the region has approved a sustainable energy plan (84 – 77.1%); 81 (74.3%) report the initiative to be related to the regional sustainable energy plan, while 59 (54.1%) report it to be related to a different regional plan. In total, many of those initiatives that are related to different plans are also related to the sustainable energy plan: in fact 46 initiatives (78.0% out of 59) are linked with both.

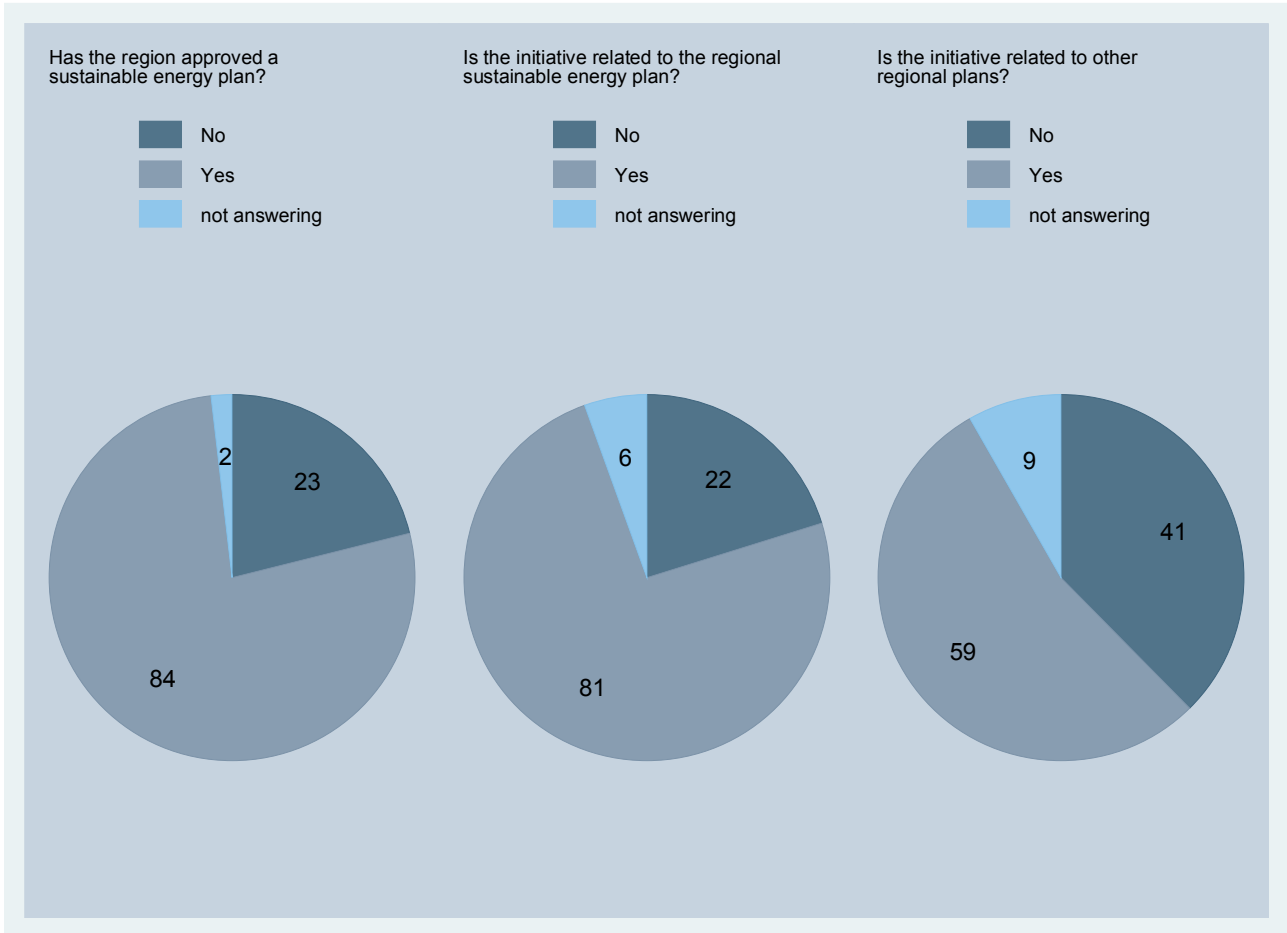


FIGURE 24 - LINK WITH REGIONAL SEAP AND OTHER REGIONAL PLANS

The relation among the three charts is best explained with the following Venn diagram. In particular, most initiatives whose region has approved a sustainable energy plan, relate the initiative with it (71). Out of these 71, 40 initiatives relate to other regional plans as well, while 31 are related to sustainable energy plan only. Despite not having approved the plan, 10 respondents relate the initiative to a sustainable energy plan, probably referring to some other authority's plan. Five initiatives are related to regional plans other than the sustainable energy one, despite it was indeed approved by the region. Finally, 8 initiatives have not been related to any regional plan, despite a sustainable energy plan had been previously approved by the region.

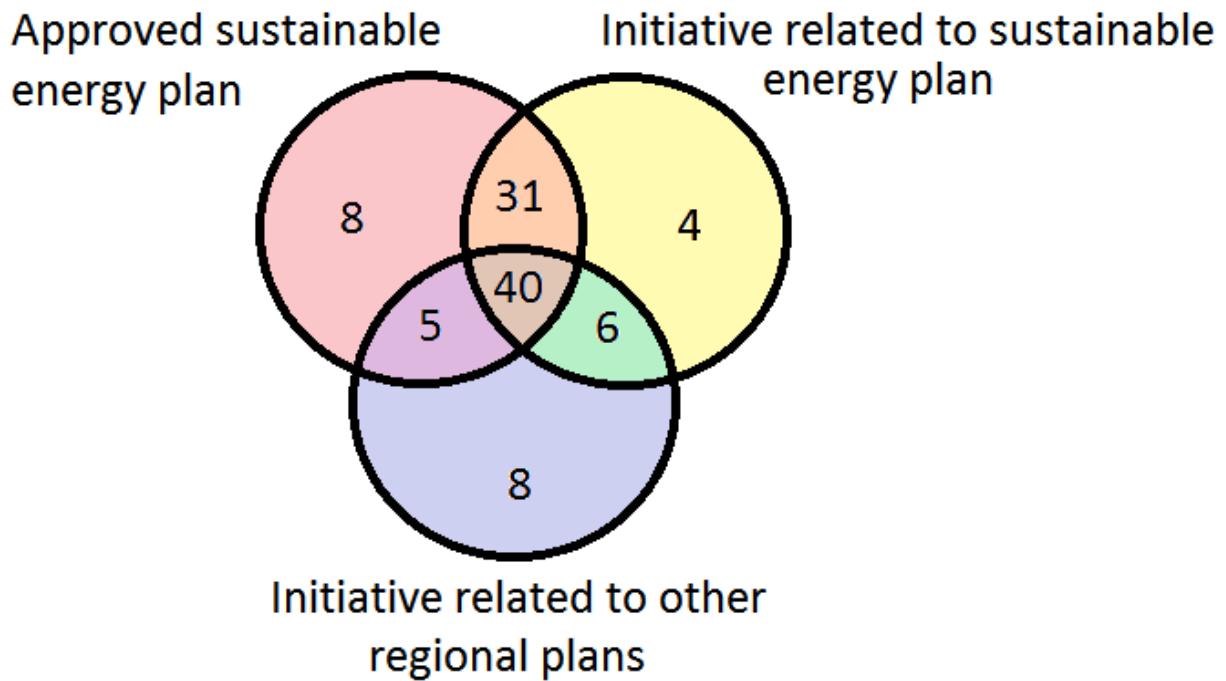


FIGURE 25 - LINK WITH REGIONAL SEAP AND OTHER REGIONAL PLANS (VENN DIAGRAM)

The following graph shows which other regional plans have been preferentially involved. Sustainability and Territorial development plans have been involved the most, specifically 26 and 23 times. On the total of 59 initiatives related to plans other than sustainable energy, they have been involved respectively 44.1% and 39% of the times.

Those who specified a different alternative to those proposed (11), indicated plans narrower in scope, mostly related to energy or environment objectives.

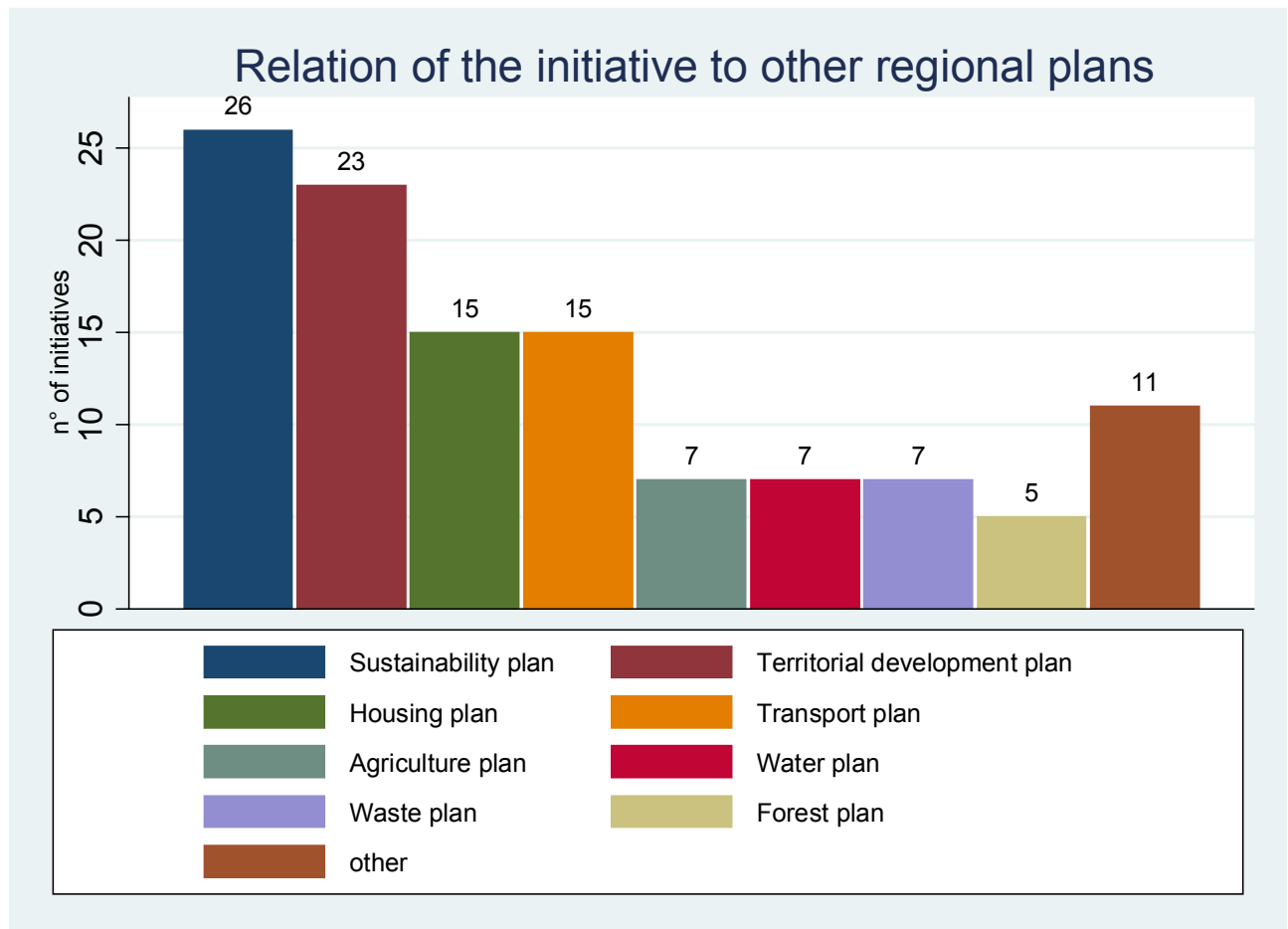


FIGURE 26 - RELATION OF THE INITIATIVE TO OTHER REGIONAL PLANS

## SECTION 4. FUNDING

### 4.1. BUDGET

Respondents have been asked what budget has been allocated to the initiative and whether the amount indicated was either on annual or total basis. Excluding those that answered they didn't know (3) and a total of 18 respondents that didn't indicated an answer at all, 20 out of 88 total respondents indicated an annual budget, while 68 indicated a budget on total basis. In total, 8 respondents (9.1% out of 88) indicated that no budget was allocated, beyond staff working hours. Most of the initiatives financed on annual basis have budget comprised between 100.000 € and 500.000 €, that also includes the median value. Few initiatives, on the other hand, have higher annual budgets: only two are funded by more than 50.000.000 €. Most of the initiatives financed on total basis rely on less than 500.000 € in total (17 less than 100.000 € and 18 between 100.000 and 500.000).

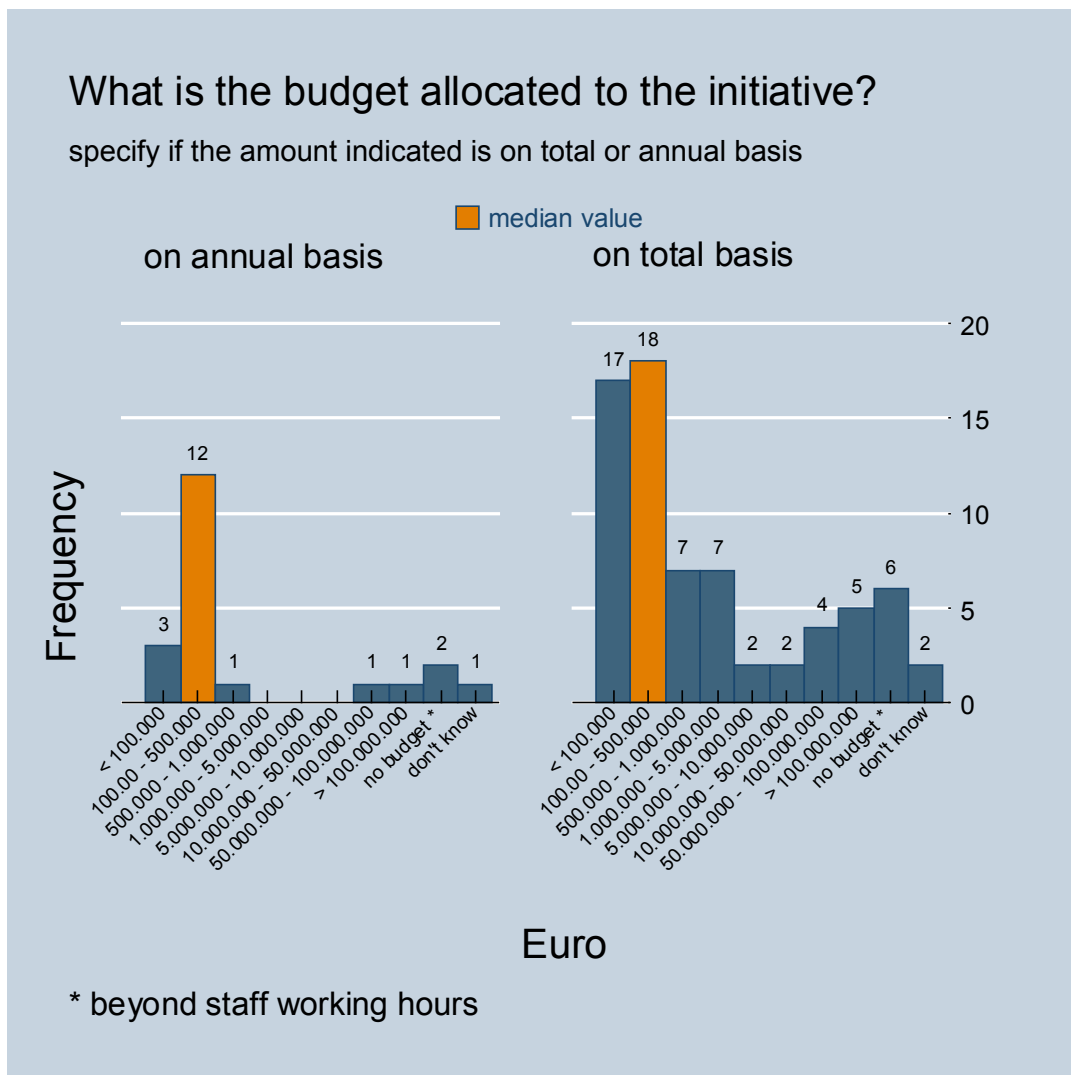


FIGURE 27 - BUDGET ALLOCATED TO THE INITIATIVE (ANNUAL BASIS/TOTAL BASIS)

## 4.2. FUNDING SOURCES

The public sector is by far the most common source of funding: either by regions/counties (68 – 62.4%) or by local authorities (42 – 38.5%) directly involved in the initiative, or by the national government (30 – 27.5%).

Other stated sources, not expressly specified in the following question, include, among others: EU ad-hoc funds, programmes for cross-borders cooperation and private citizens contribution.

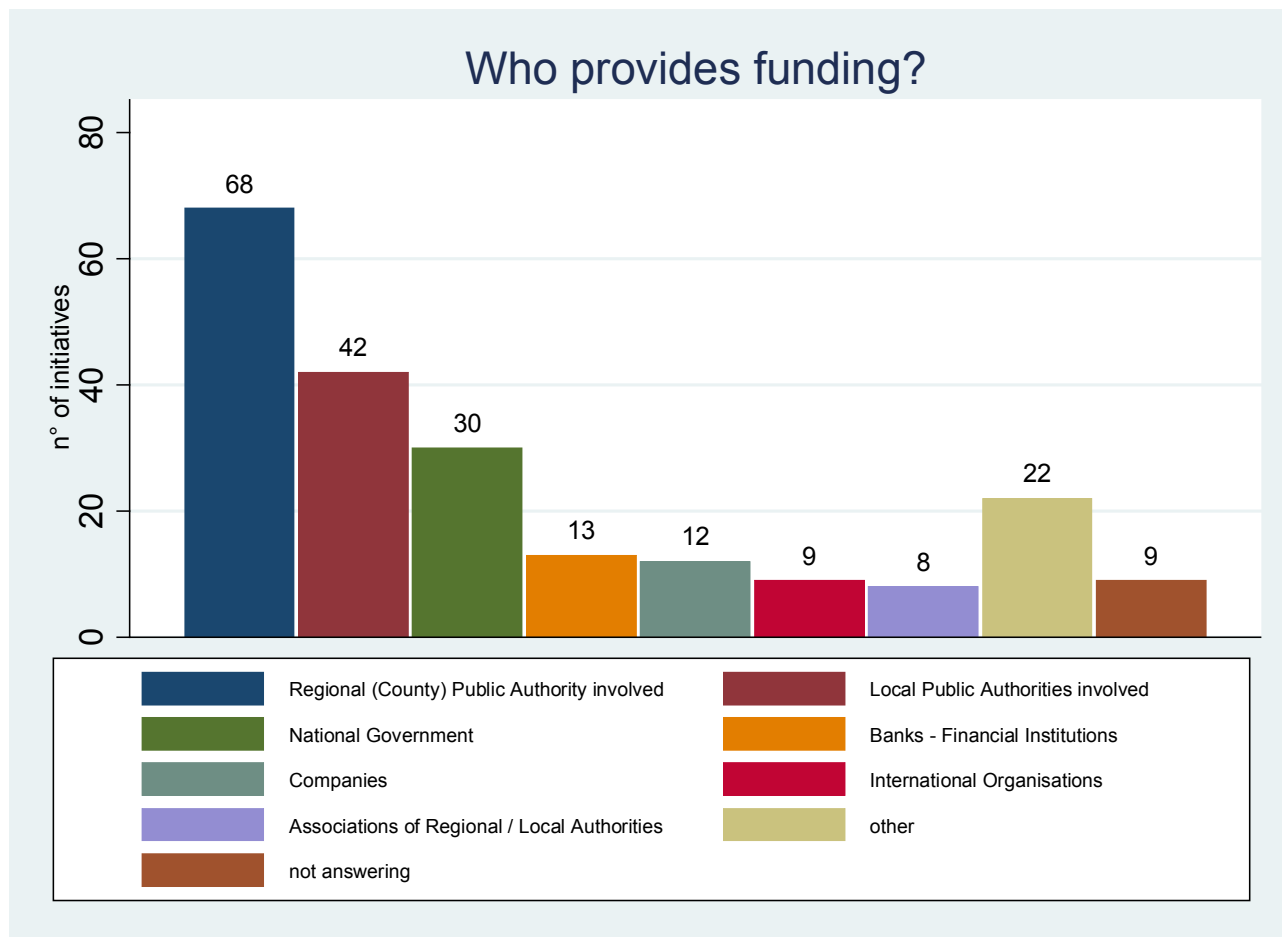


FIGURE 28 - FUNDING SOURCES

## SECTION 5. RESULTS AND IMPACTS

### 5.1. MONITORING AND REPORTING

In most of the initiatives, results are monitored (95 – 87.2%) and reported (87 – 79.8%). However, fewer initiatives can count on an external independent party for monitoring or reporting (36 – 33.0%).

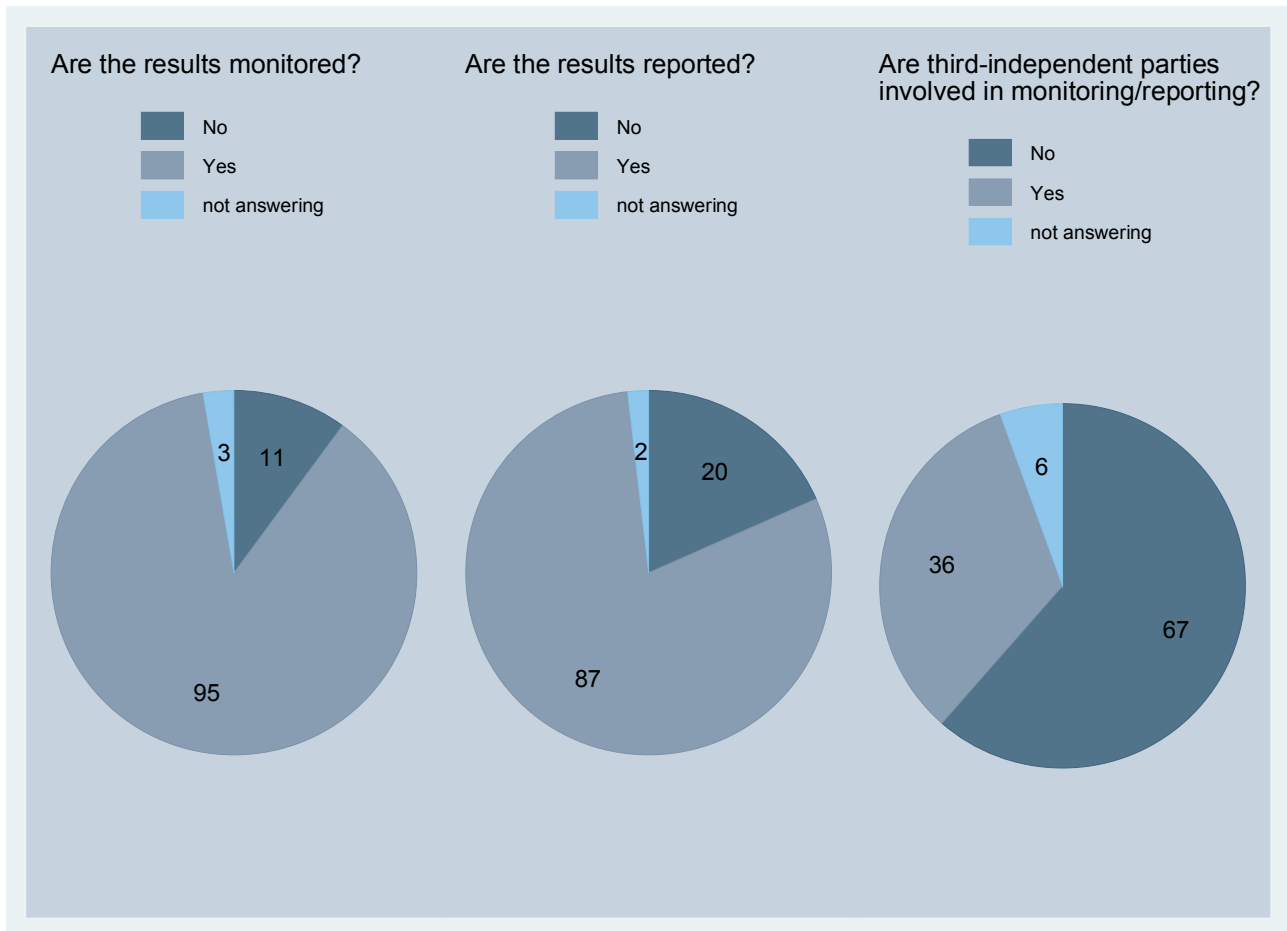


FIGURE 29 - MONITORING AND REPORTING

## 5.2. RESULTS AND IMPACTS OBTAINED

The following graph orders the results/impacts of each initiative, showing in which field it succeeded. The available possibilities were given and no “other/specify” option was available, henceforth the relatively high number of missing answers (14). Energy efficiency and energy savings are the result that most respondents report as obtained: it concerns 85 cases out of 109 total respondents (95 excluding those that did not answer the question). Carbon dioxide reduction was similarly important: 76 initiatives report curbing in CO2 as one of the results obtained. As it could be expected, almost every initiative (74 out of 76) concerning the reduction of CO2 reached simultaneously a result in terms of saving energy.

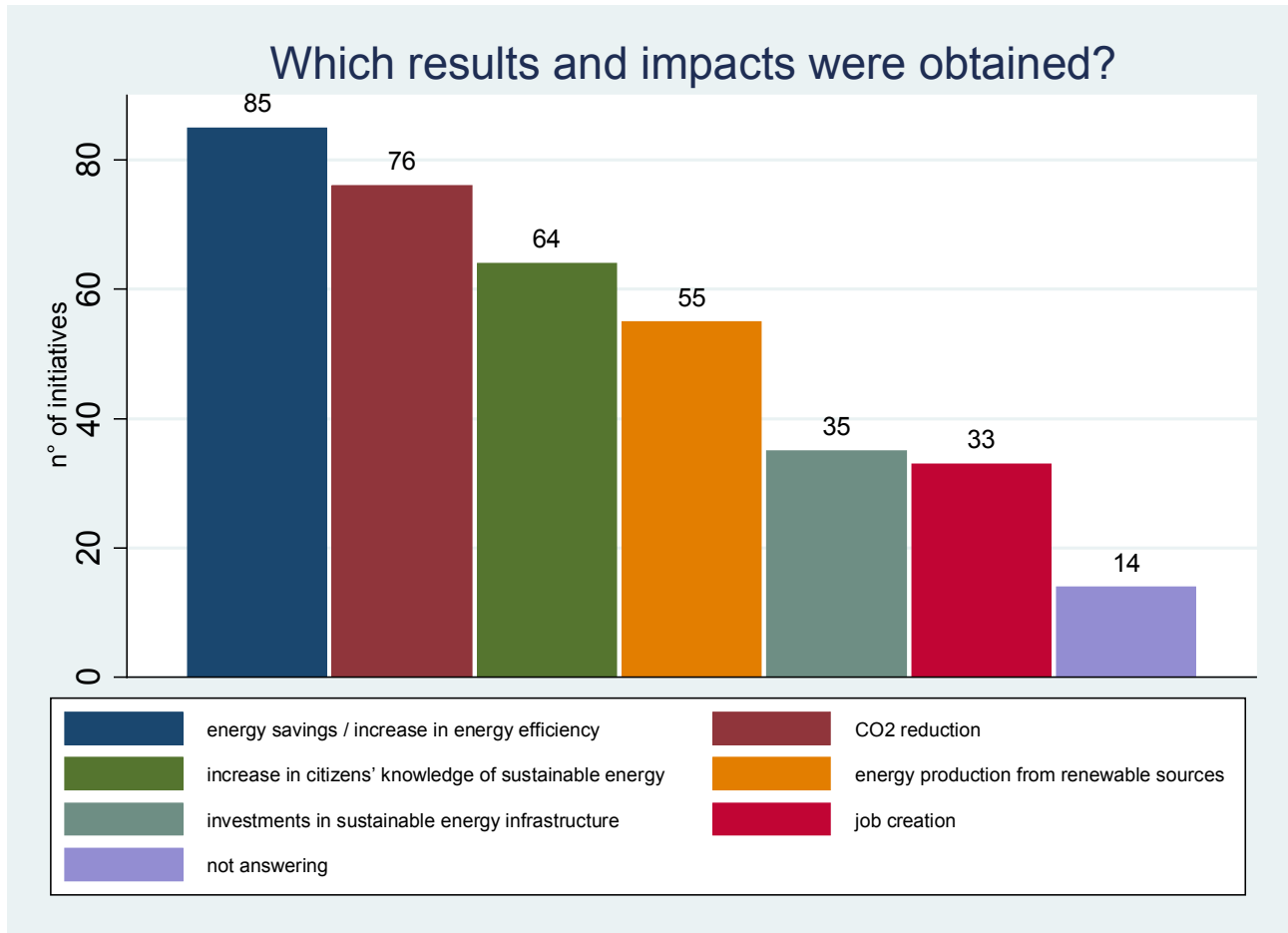


FIGURE 30 - RESULTS AND IMPACTS OBTAINED



### 5.3. ENABLING CONDITIONS

Respondents have been asked to rank a set of six possible enabling conditions from “not important at all” to “determinant”. Both speaking in average values and looking at the distribution of answers, Political Commitment can be considered the most important of the six: more than 42% of the respondents classified it as “determinant”. Similarly, access to funds, is considered at least “very important” by more than a half of the respondents (61.8% of the total). An interesting result emerges concerning the pooling of resources: despite few consider it to be “determinant”, it is still considered “important” or “very important” for the broad majority of the initiatives, and should consequently be considered a relevant enabling condition.

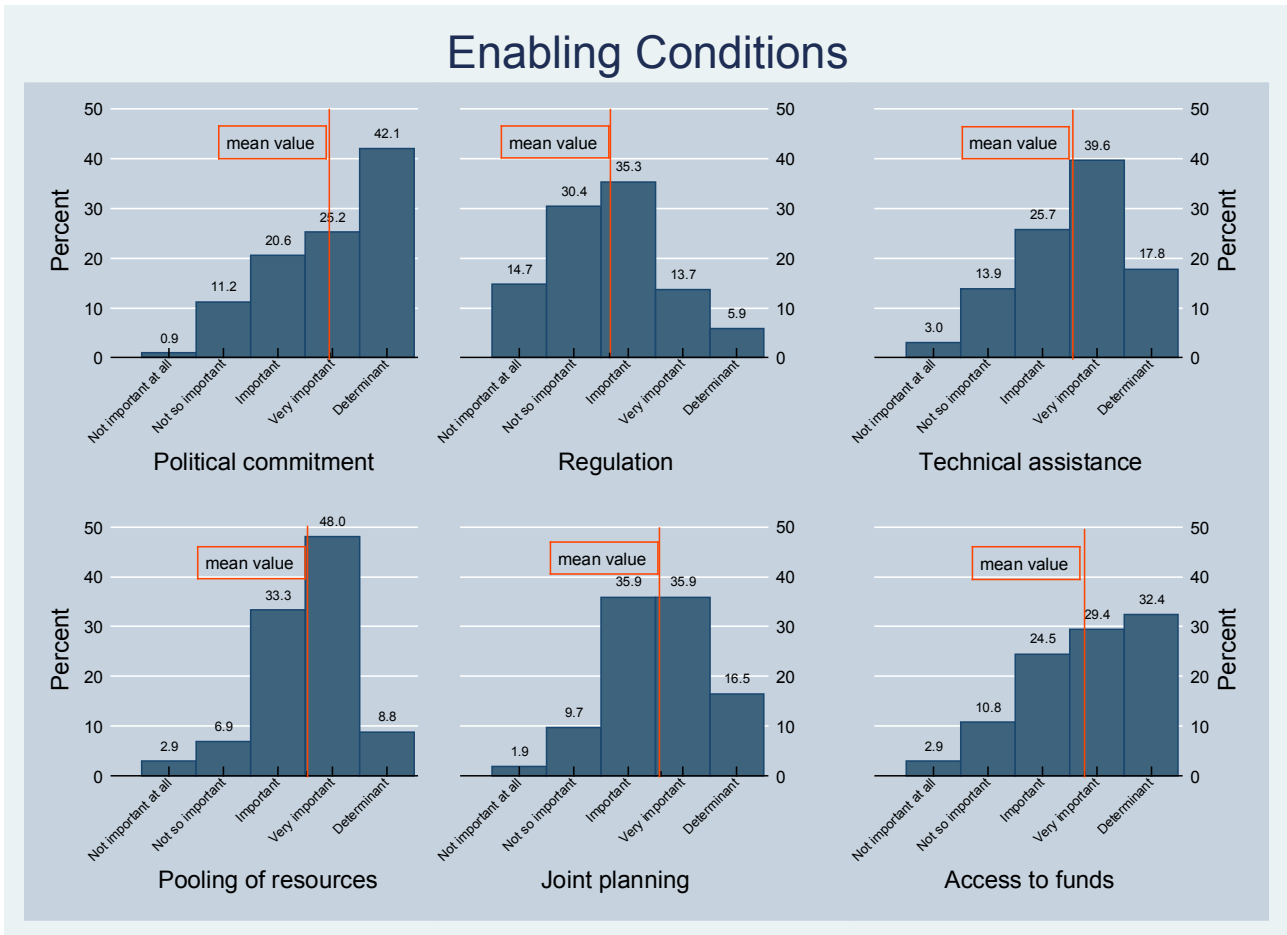


FIGURE 31 - ENABLING CONDITIONS

## SECTION 6. PUBLIC INFORMATION AND PARTICIPATION

### 6.1. INFORMATION MEANS

Respondents were asked to choose one or more means that they may have used to inform the public about the initiative. Websites of the authorities have been used the most (90 – 82.6%), followed by presentations during events (82 – 75.2%) and traditional press, such as articles in local and regional press (71 – 65.1%). All in all, 101 of 109 total initiatives report to have used some sort of web-based information tool or instrument; conversely, fewer initiatives (84) have been backed up by traditional press, including newspapers, TV and publications.

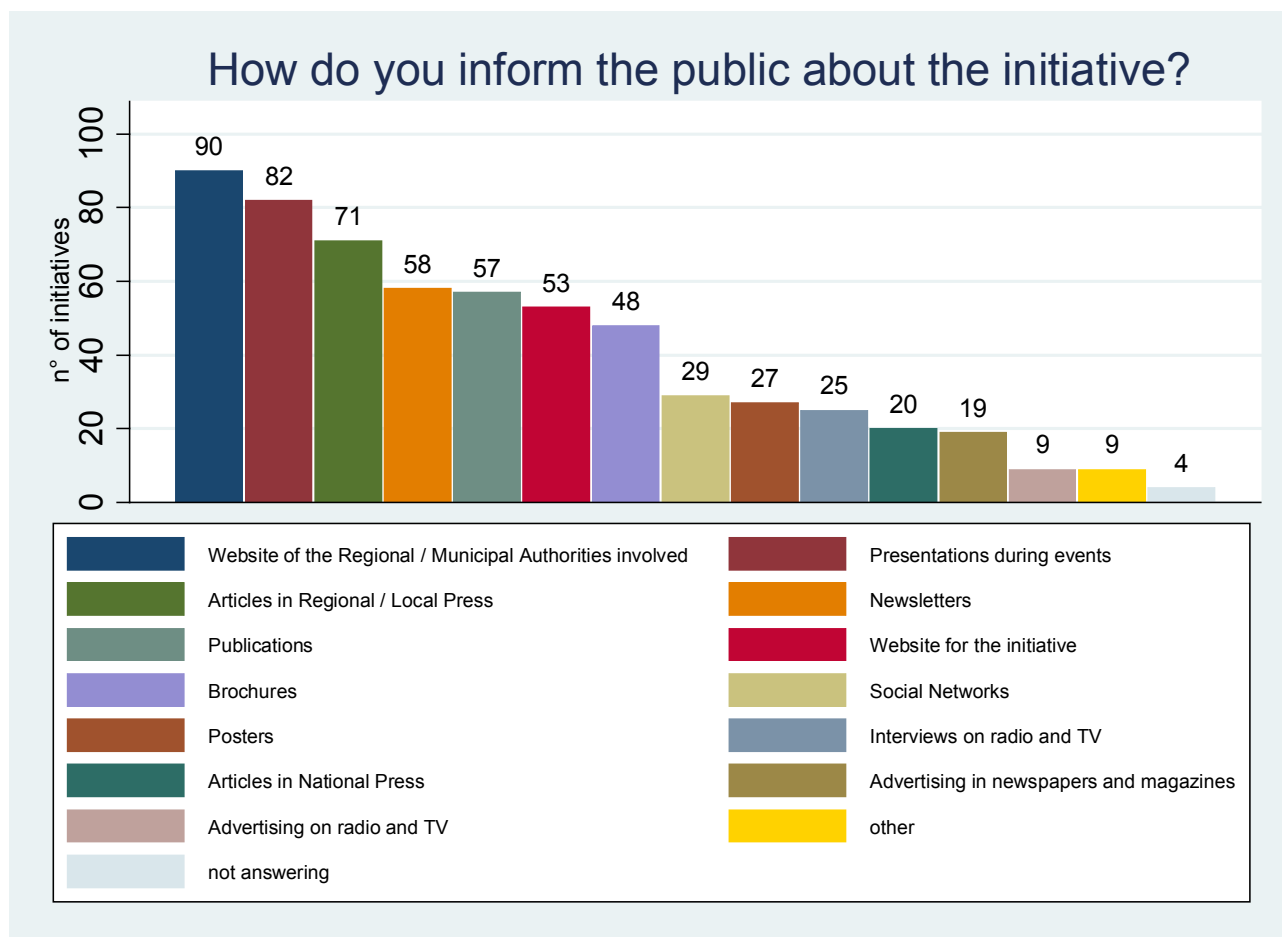


FIGURE 32 - INFORMATION MEANS

Few initiatives rely on a single typology of information means, while most initiatives report preferring a wider set of tools to inform citizens. In fact, between five and six (mean 5.6) different approaches have been used on average to inform the public.

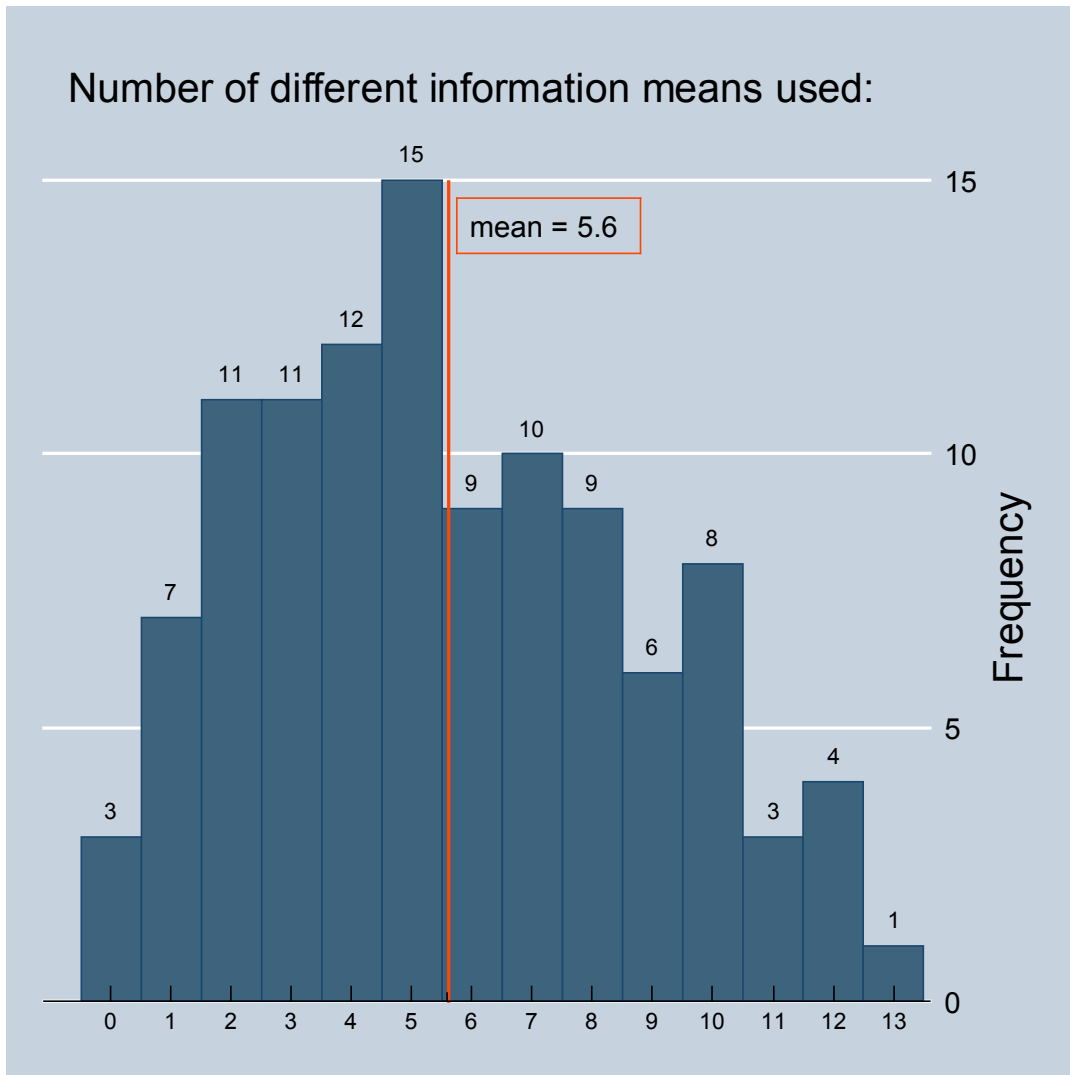


FIGURE 33 - NUMBER OF INFORMATION MEANS USED

## 6.2. CITIZENS' INVOLVEMENT

Citizens have been not only informed on the initiative, but, in most cases (59 – 54.1%), have been involved in it.

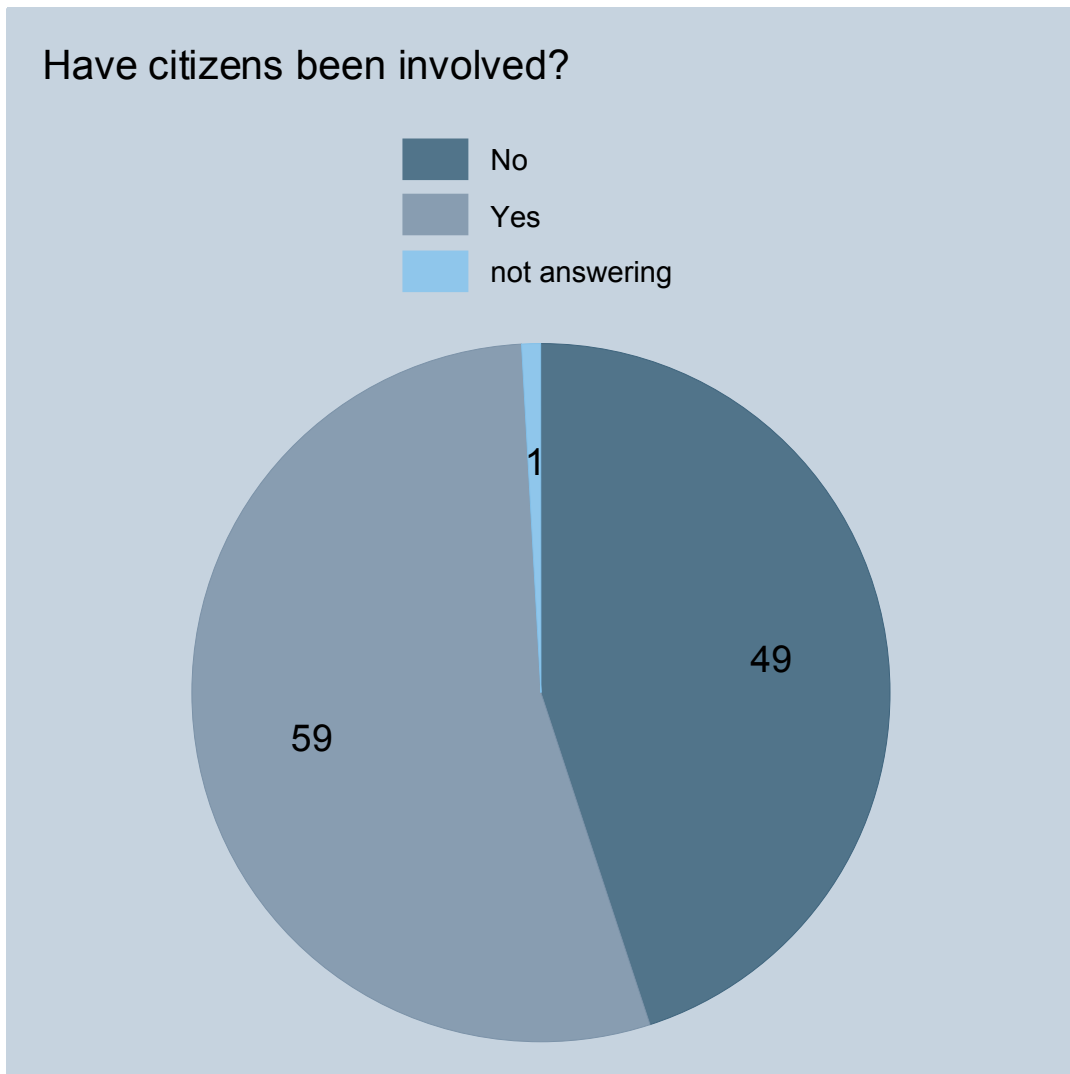


FIGURE 34 - CITIZENS' INVOLVEMENT (Y/N)

The most used instrument for citizens involvement is reported to be public meetings (39 – 66.1% of total initiatives that have involved citizens), followed by surveys (20 – 33.9%). Other respondents, besides the pre-compiled fields, have specified further instruments, such as specific campaigning and awareness-raising days.

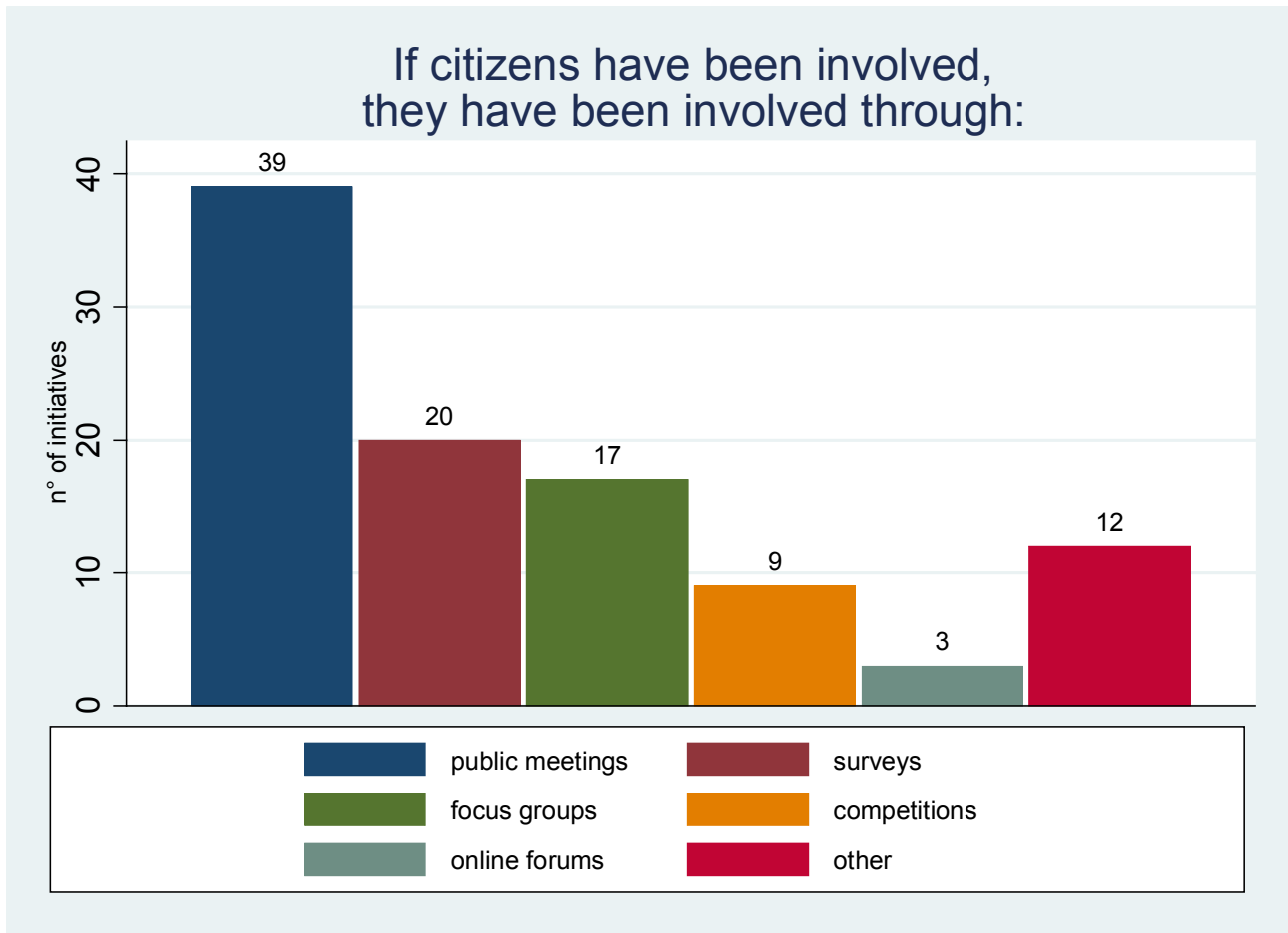


FIGURE 35 - CITIZENS' INVOLVEMENT (HOW)

## SECTION 7. TRANSFERABILITY

### 7.1. INSPIRATION SOURCES

Most of the initiatives reflect in some way a previous experience: 70 initiatives (64.2%) have in fact drawn inspiration from an external source. Where from? Mostly from other regions (46 – 42.2%), but also international and national guidelines.

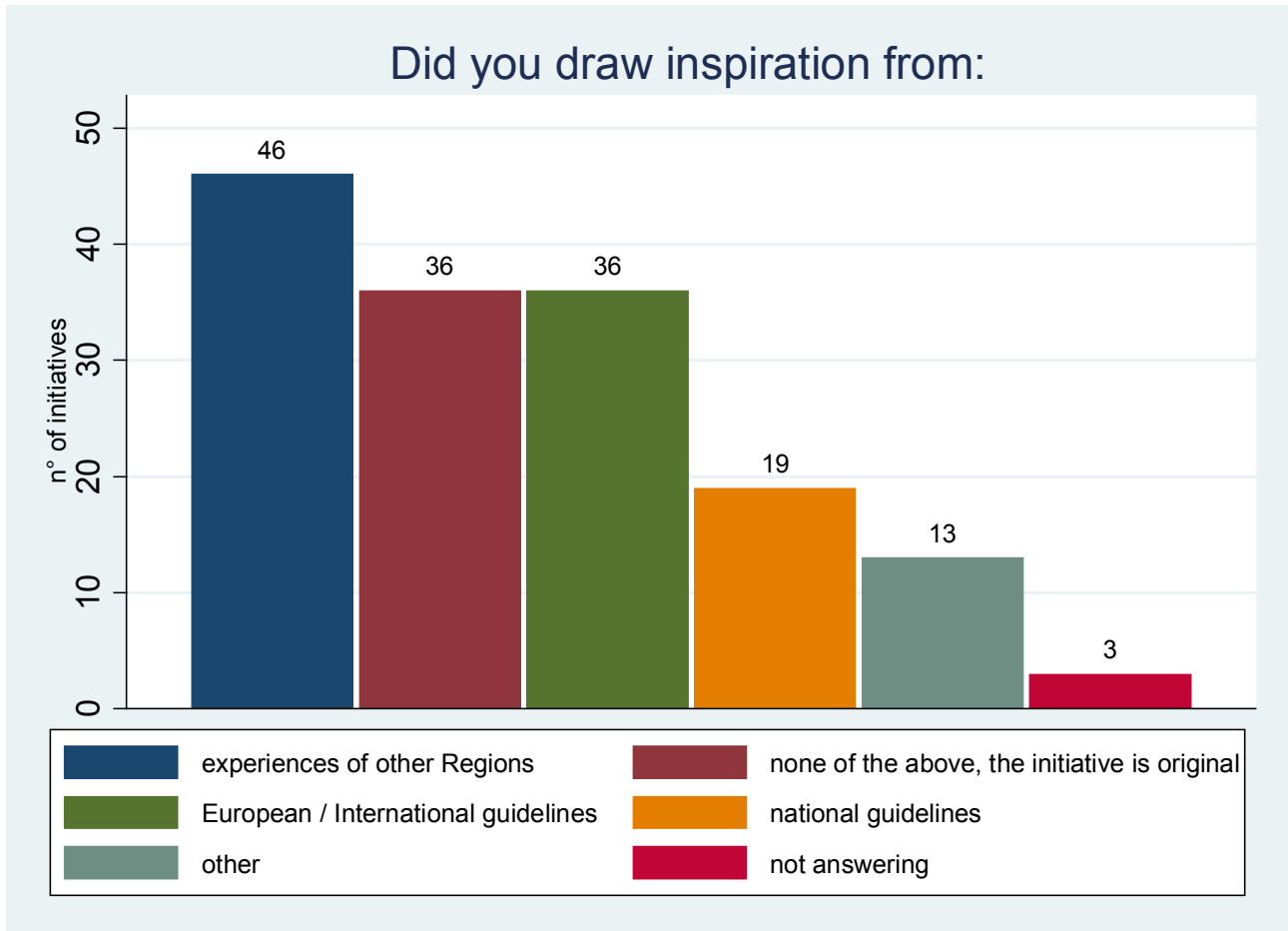


FIGURE 36 - INSPIRATION SOURCES

Some of the initiatives have been replicated by other regions. As many as 54 respondents (49.5%) have answered affirmatively to whether or not their initiative had been replicated.

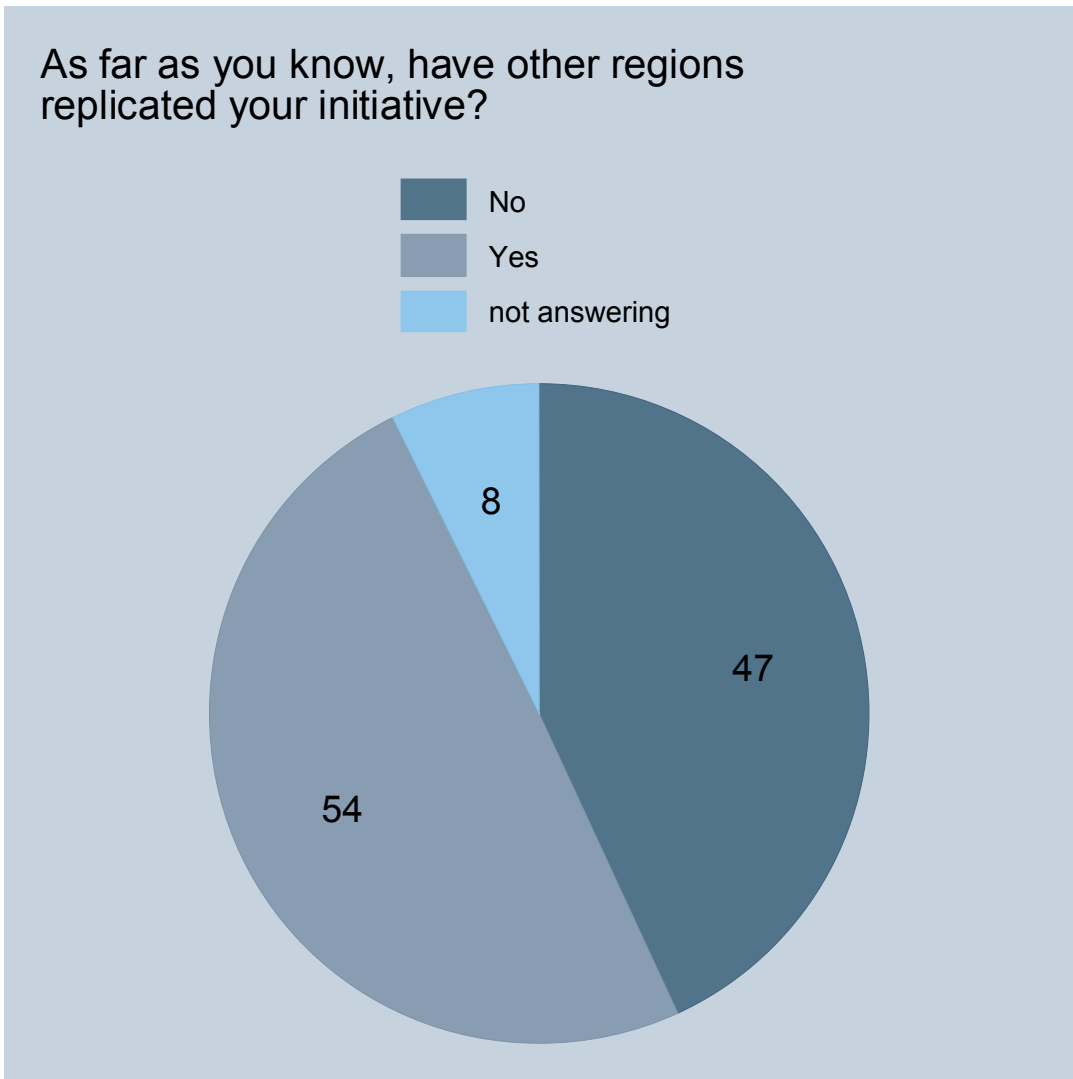


FIGURE 37 - REPLICATION OF THE INITIATIVE

## SECTION 8 ROLE OF REGIONAL ENERGY AGENCY

A Regional Energy Agency has been established in the majority (78 – 71.6%) of the responding sample and, where it has, it is most of the time involved in collaboration initiatives on sustainable energy: to be more precise, in 69 cases out of 78 (88.4%).

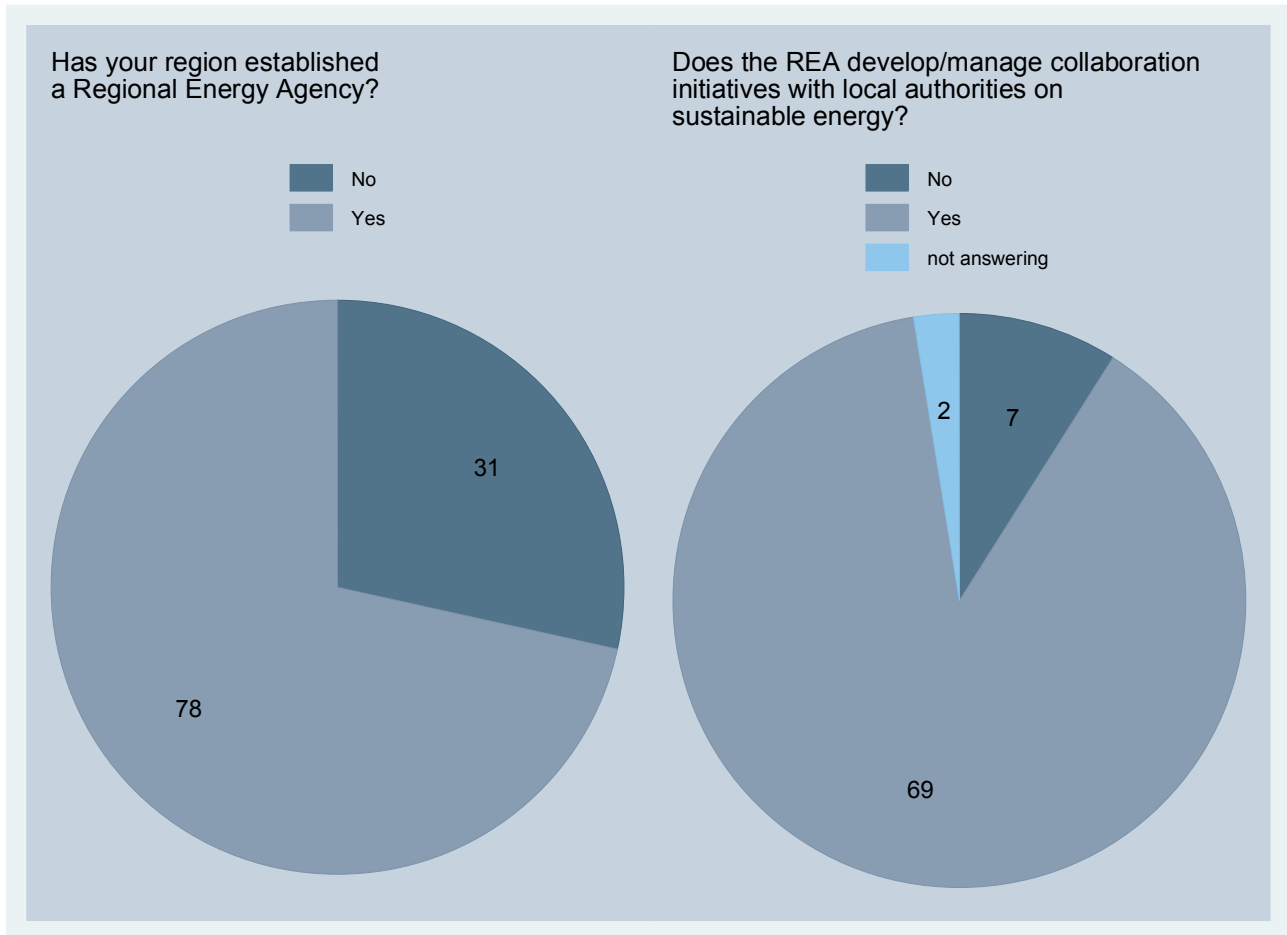


FIGURE 38 - PRESENCE AND ROLE OF A REGIONAL ENERGY AGENCY



Promotion of low carbon technologies is the most cited function for REAs, as part of their relation with local authorities: in 54 cases out of 69 (78.3%). It is followed by technical support for development of SEAPs and other plans (50 – 72.4%), along with monitoring initiatives, management of help desks and financing energy efficiency or GHG reduction.

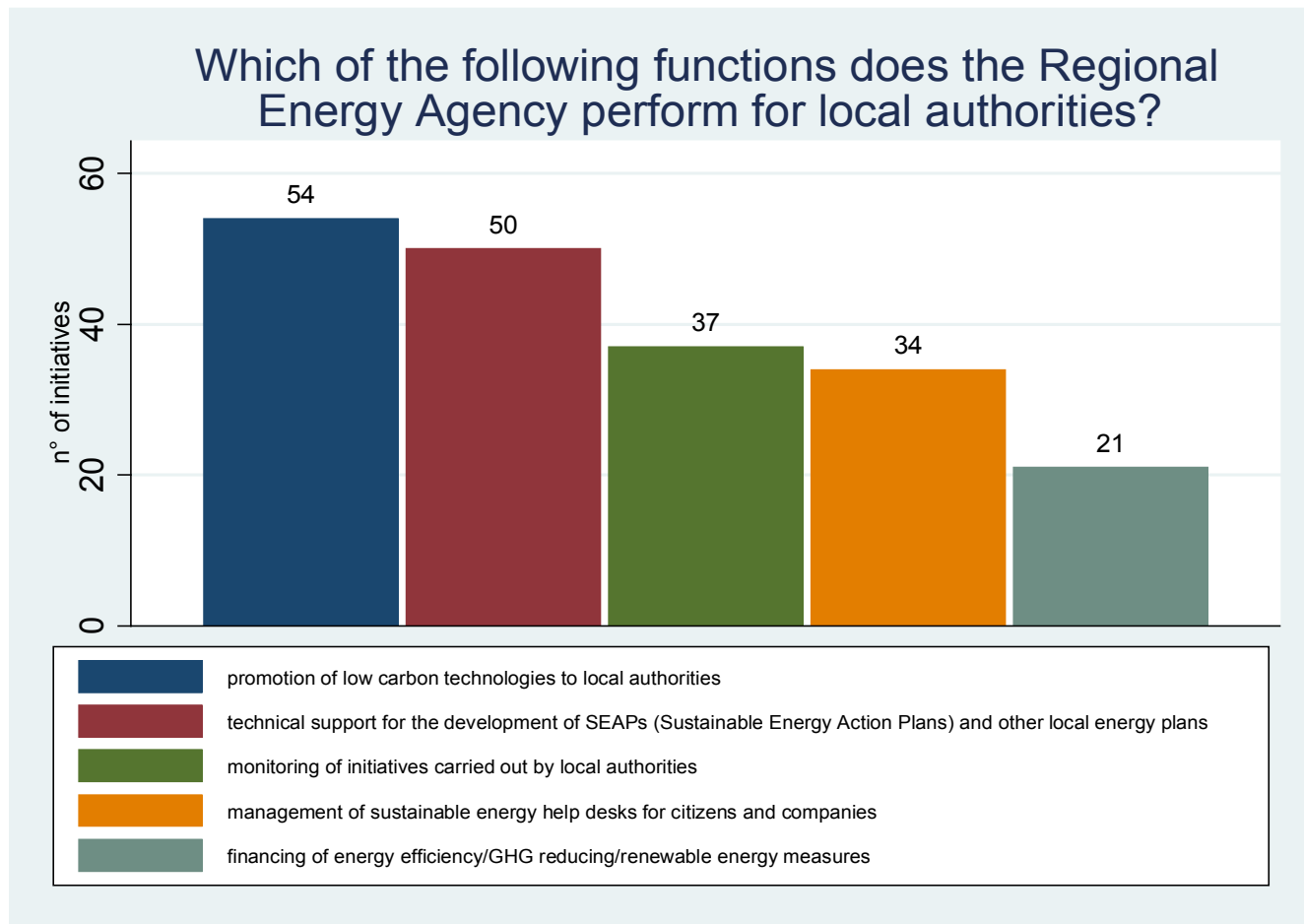


FIGURE 39 - FUNCTIONS OF THE REGIONAL ENERGY AGENCY FOR LOCAL AUTHORITIES

Finally, only 29 respondents out 78 (which reported the presence of a REA), state that REA must obtain a pre-authorization of some sort from the region to cooperate with local authorities.

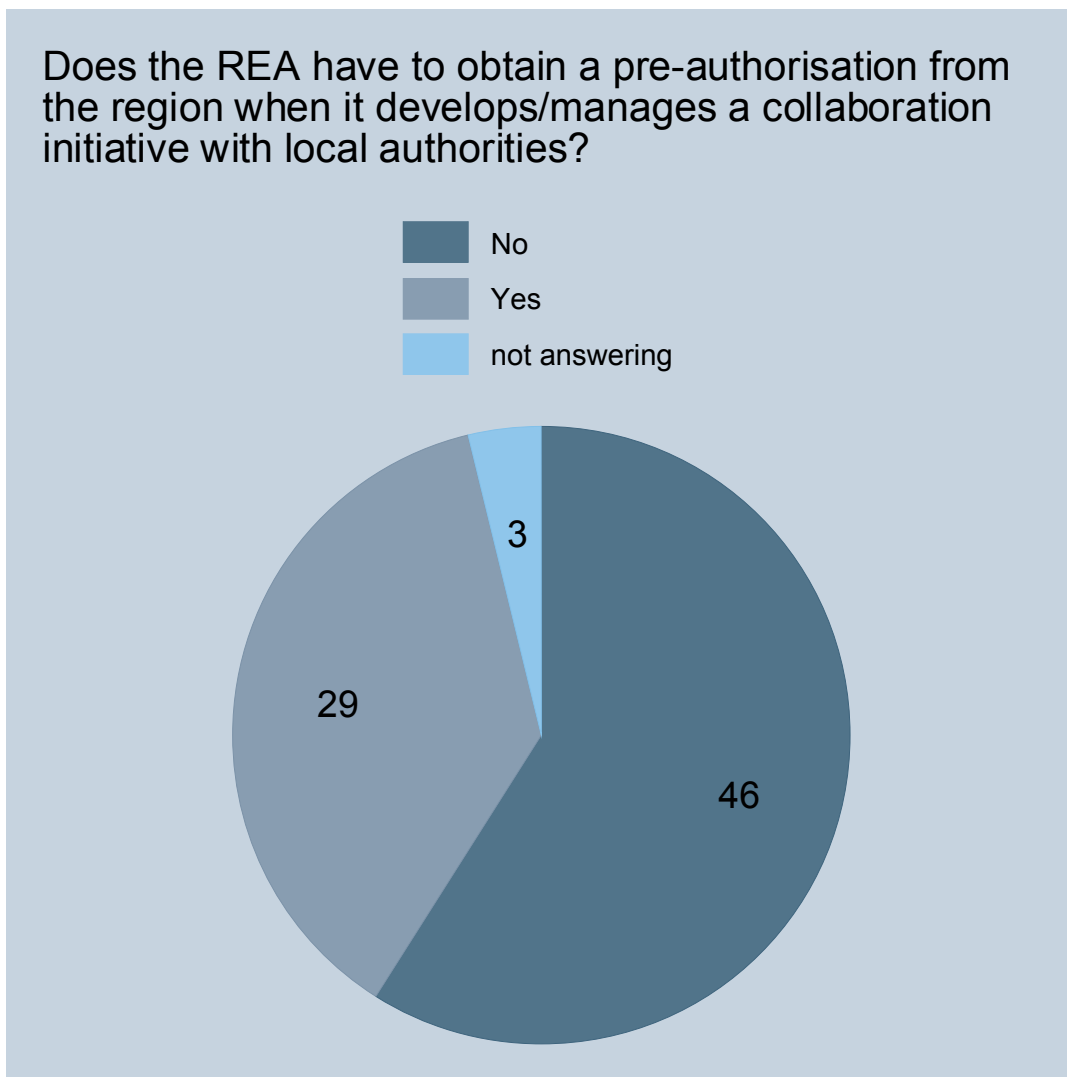


FIGURE 40 - PREAUTHORIZATION OF REGIONAL ENERGY AGENCY IN CASE OF COLLABORATION WITH LOCAL AUTHORITIES (Y/N)

## PART 2 - INSIGHT INTO MLG MODELS

The second part of this report looks across the MLG experiences mapped by COOPENERGY survey, to highlight common traits and differences among them. The results are influenced by the higher number of experiences from some countries (notably Sweden and France) in the sample, due to a higher response rate obtained from these countries. Nonetheless, the report provides a first interesting set of data to understand better some features of MLG models for sustainable energy planning currently in place in Europe.

Firstly, success and weakness factors of MLG experiences reported by respondents are presented, in order to highlight which factors are most frequently mentioned.

Secondly, an analysis of MLG initiatives crossing several dimensions is provided. It could be supposed that structured, long-term collaborations rely on better funding availability and diversity of resources, as well as on stakeholder involvement processes which enable a higher consensus base and participation to the initiative. The objective of this analysis is thus to investigate whether a relation between specific features of these MLG initiatives exists or not.

The cross-sector analysis is carried out along two main axes:

- the **funding** of the initiative is put in relationship with other features of the initiative, such as its degree of formalization, its link with the regional SEAP and its focus on a specific area of collaboration.
- **citizens involvement** in the initiative is put in relationship with the same dimensions (more specifically, with the degree of formalization and its link with regional SEAP).

### A. SUCCESS FACTORS

Among the topics explored by the questionnaire, respondents were asked to express the main success and weakness factors of their collaboration initiative in the form of open answer<sup>3</sup>.

The presence of **political support**, **political will** and **political commitment** stand out as the most frequent element reported as success factor of collaboration initiatives. Respondents link this element to the vision of politicians for sustainability and sustainable energy and commitment of decision makers. The presence of cross-party political will in support of the initiative is also often highlighted.

The same relevant result can be noted also for elements related to **partnership working** and **good working relations** among partners of the initiative, which quite often is reported as deriving from collaboration within previous projects.

**Governance** and **process management** follow as third most frequent elements. This category comprises for example the set up of dedicated agencies to carry out the initiative, or the use of effective monitoring and management processes.

Not far from this category, also **involvement of stakeholders** is often recognized as a success element, thanks to a broad involvement of actors and a shared vision among them.

The following frequently reported elements are **funding availability**, often linked to the availability of financial support from the EU or from the regional authority, and an effective **management of financial resources**.

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<sup>3</sup> The question related to success factor was answered by 97 respondents (89%), the one on weakness factor by 83 (76%) respondents.

Under the label **technical expertise**, all elements related to specialized competences which have enabled and improved the collaboration initiative have been categorized together, such as technical knowledge of energy issues, communication skills and expertise, knowledge of funding schemes, and knowledge of legal issues. Next to technical expertise, also exchange of experience, information and good practice seems an important element for an effective collaboration.

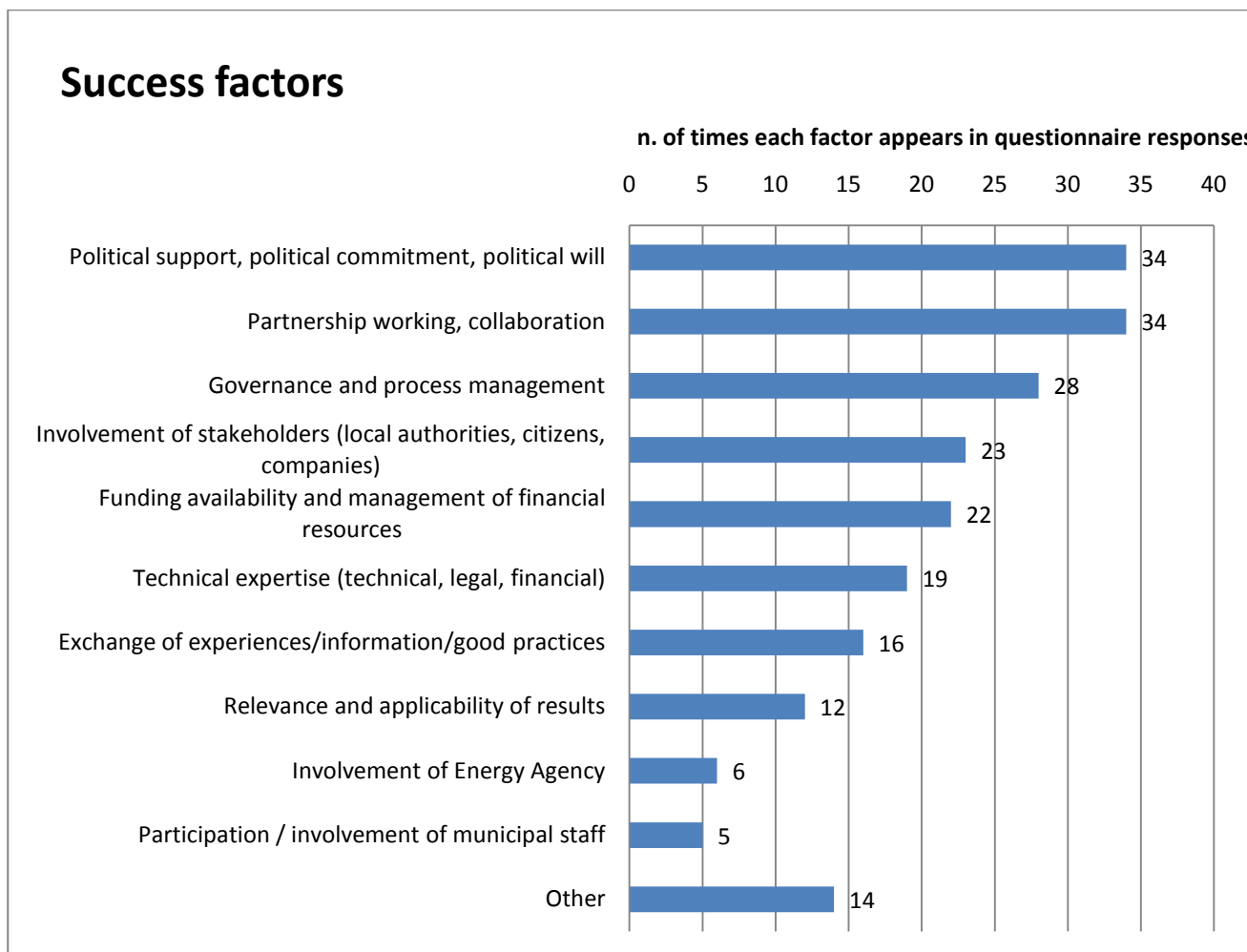


FIGURE 41 - SUCCESS FACTORS

## B. WEAKNESS FACTORS

As far as weakness factors reported by respondents are concerned, the picture is quite different from the previous graph. For success factors, there were several elements highlighted frequently by a relevant number of respondents. Here it is possible to identify a single element, the **lack of funding** or other **financial aspects**, which is reported with a very high frequency by respondents, whereas the other elements show quite lower frequencies. This is not surprising, since it is widely acknowledged that insufficient funding is one of the main barriers that regional and local authorities are facing in planning and implementing sustainable energy strategies. Some respondents highlight the role of external financing and how difficult it is to carry on a project when the external contribution (e.g. EU-funded projects) ends.

Interestingly, the second most relevant factor is the **lack of cooperation** or **collaboration** between partners or actors involved in the initiative. This can pertain for example different backgrounds and experiences of people involved in the initiative, or different motivations and commitment towards the initiative and its aims, which makes it difficult to find a compromise. Surprisingly, the **involvement of stakeholders** is reported as relevant weakness factor with two opposite interpretations. Both when stakeholders are **too few**, since this hinders participation, and when they are **too many**, since this can cause coordination problems, as well as a relevant consumption of resources to make partners cooperate.

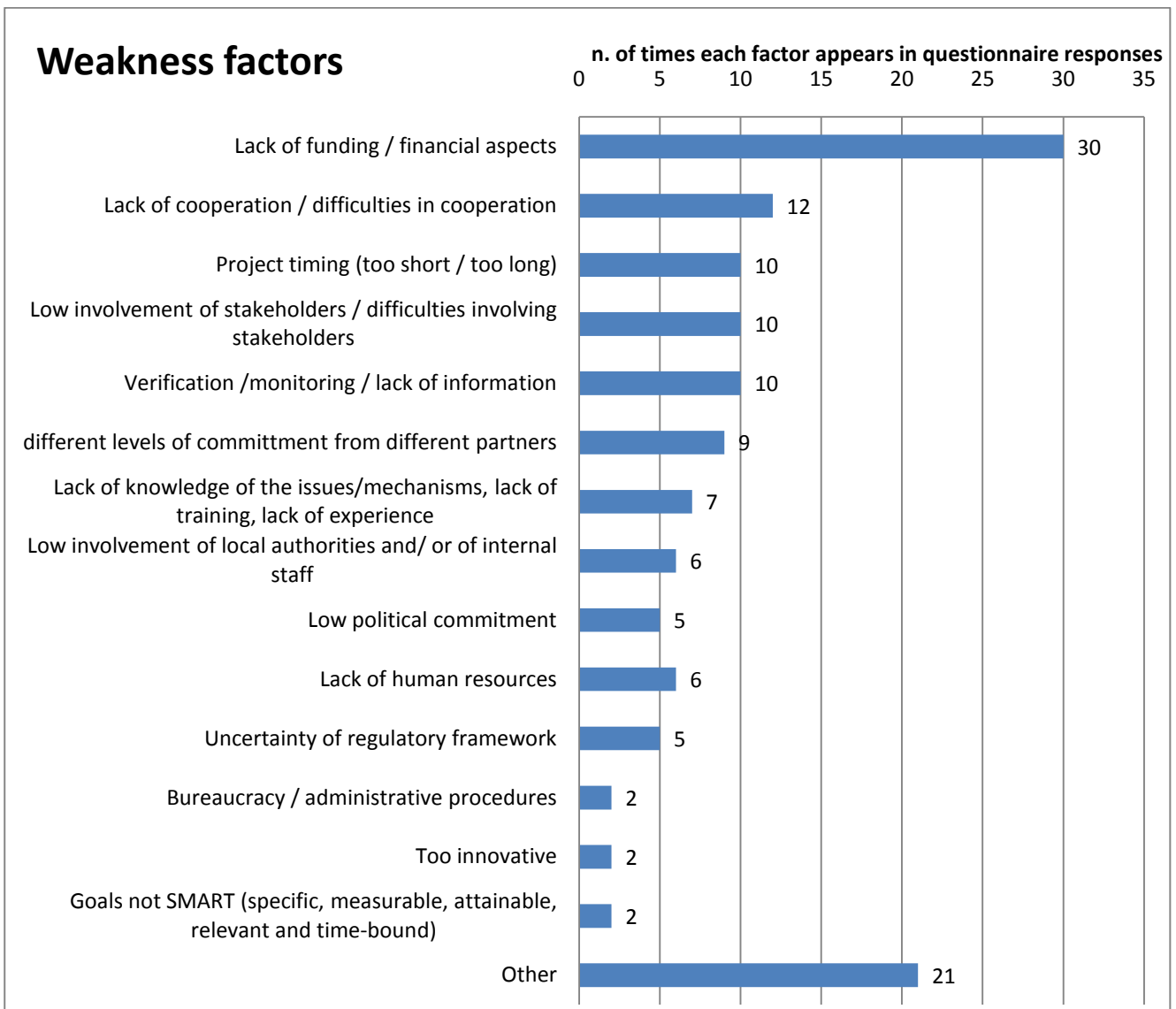


FIGURE 42 - WEAKNESS FACTORS

## C. RELATION BETWEEN FUNDING AND OTHER DIMENSIONS

This paragraph aims at investigating if funding of an MLG initiative has relations with other features, namely with its degree of formalization, its link with the regional SEAP and its focus on a specific area of collaboration.

### C1. RELATION BETWEEN DEGREE OF FORMALIZATION OF MLG INITIATIVE AND ITS FUNDING

As highlighted in Section 2.5 (Figures 19 and 20), in a relevant share of MLG models mapped by the questionnaire the collaboration is formalized through a formal agreement, a Memorandum of Understanding, deliberative acts, or a combination of them.

Figure 42 combines in the same graph the degree of formalization of initiatives and their funding. Looking in particular at the right-sided graph (funding on total basis), which comprises more data, formalized initiatives have higher funding compared with not-formalized initiatives. The implied median value for formalized initiatives is positioned in the range 500.000-1.000.000€, whereas for not-formalized initiatives it is positioned in a lower range (100.000-500.000€).

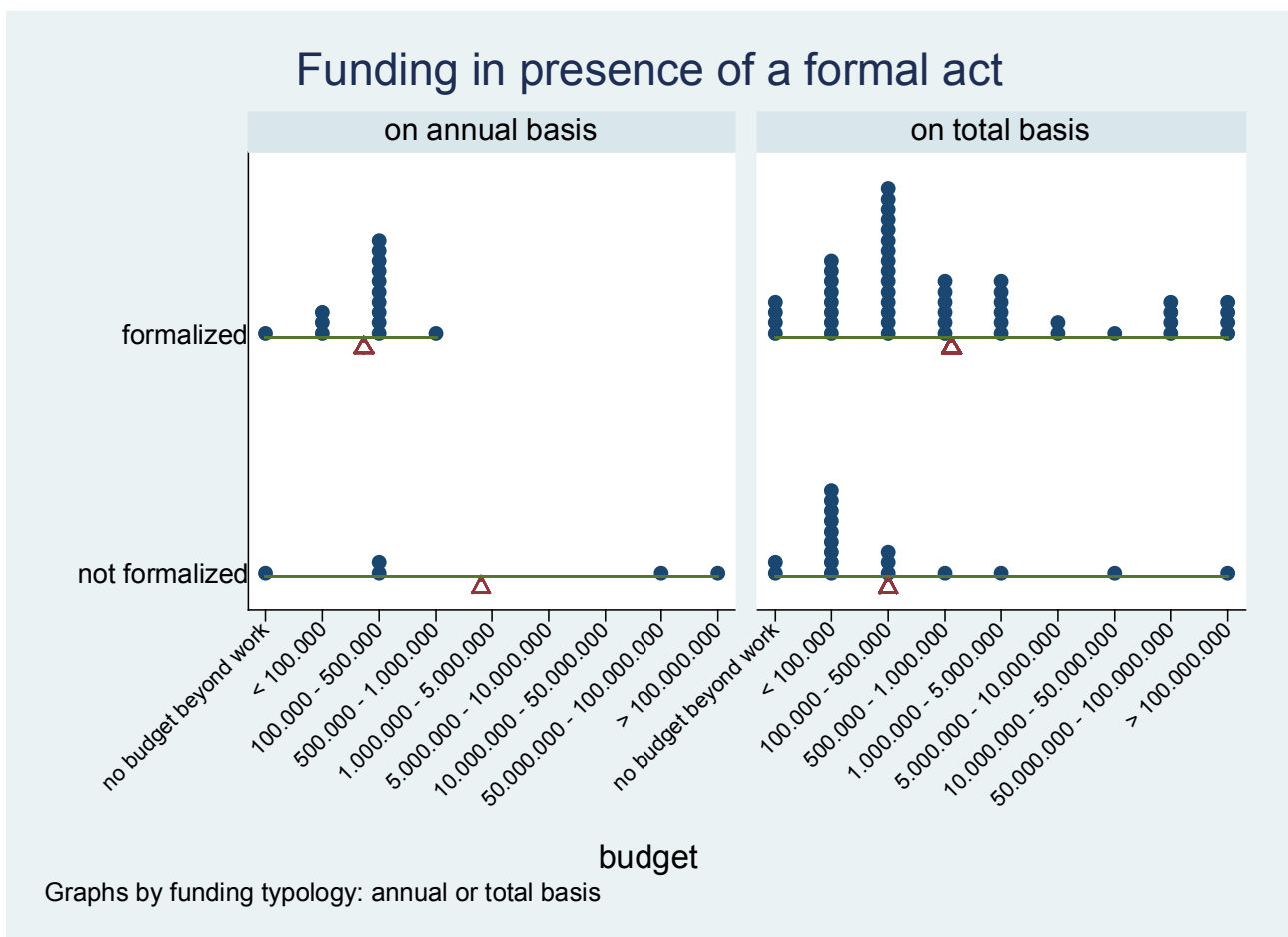


FIGURE 43 - RELATION BETWEEN FORMALIZATION AND FUNDING

Formalized initiatives can be considered to be more structured and stable processes than not-formalized ones. It seems that being a structured processes facilitates the finding of funding, from regional as well as from other sources.

## C2. RELATION BETWEEN PRESENCE OF A REGIONAL SEAP AND MLG INITIATIVE'S FUNDING

As highlighted in Section 3.2 (Figure 23), most of respondents reported that the Region has approved a sustainable energy plan and that the initiative is linked to the regional SEAP.

Figure 43 combines in the same graph the presence of a SEAP in the context of mapped initiatives and the funding of initiatives. Looking in particular at the right-sided graph (funding on total basis), which comprises more data, the implied mean value of funding for initiatives of regions with a SEAP is positioned in the range 500.000-1.000.000€, whereas for regions without a SEAP it is positioned in a lower range (100.000-500.000€).

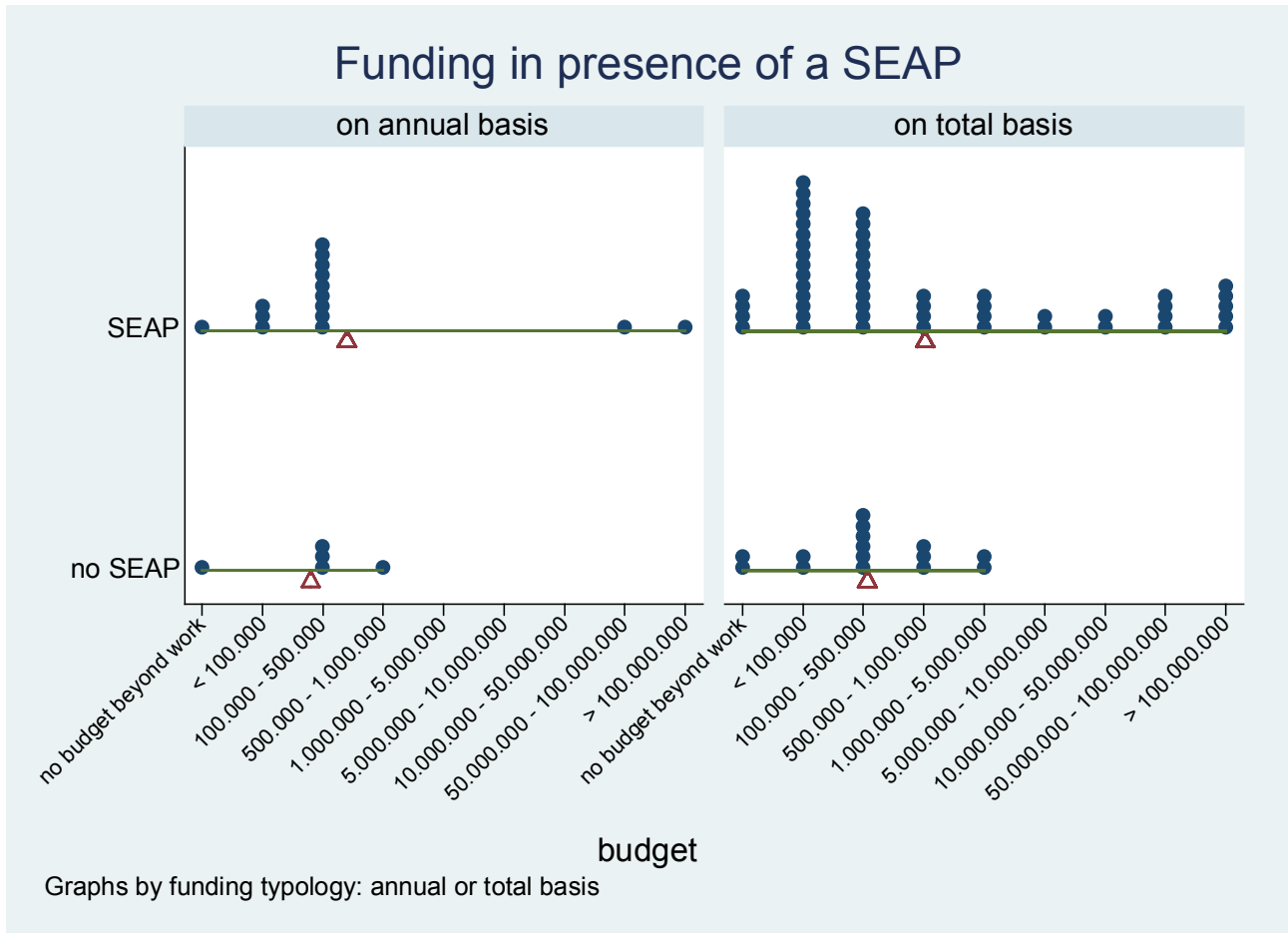


FIGURE 44 - RELATION BETWEEN PRESENCE OF SEAP AND FUNDING OF THE COLLABORATION

The presence of a regional SEAP could be considered as an element which facilitates a more structured process on sustainable energy planning and that supports the activation of MLG initiatives in this field, also from the financing point of view.

### C3. RELATION BETWEEN MLG INITIATIVE'S LINK TO A REGIONAL SEAP AND INITIATIVE'S FUNDING

Figure 44 combines in the same graph the initiative's link to a SEAP with the funding of the initiative. Looking in particular at the right-sided graph (funding on total basis), which comprises more data, the implied mean value for initiatives linked to a SEAP is positioned in a slightly higher range than unlinked initiatives. It seems that initiatives linked to SEAPs have a slightly higher funding on total basis compared with initiatives not linked with a SEAP, but the difference is quite small.

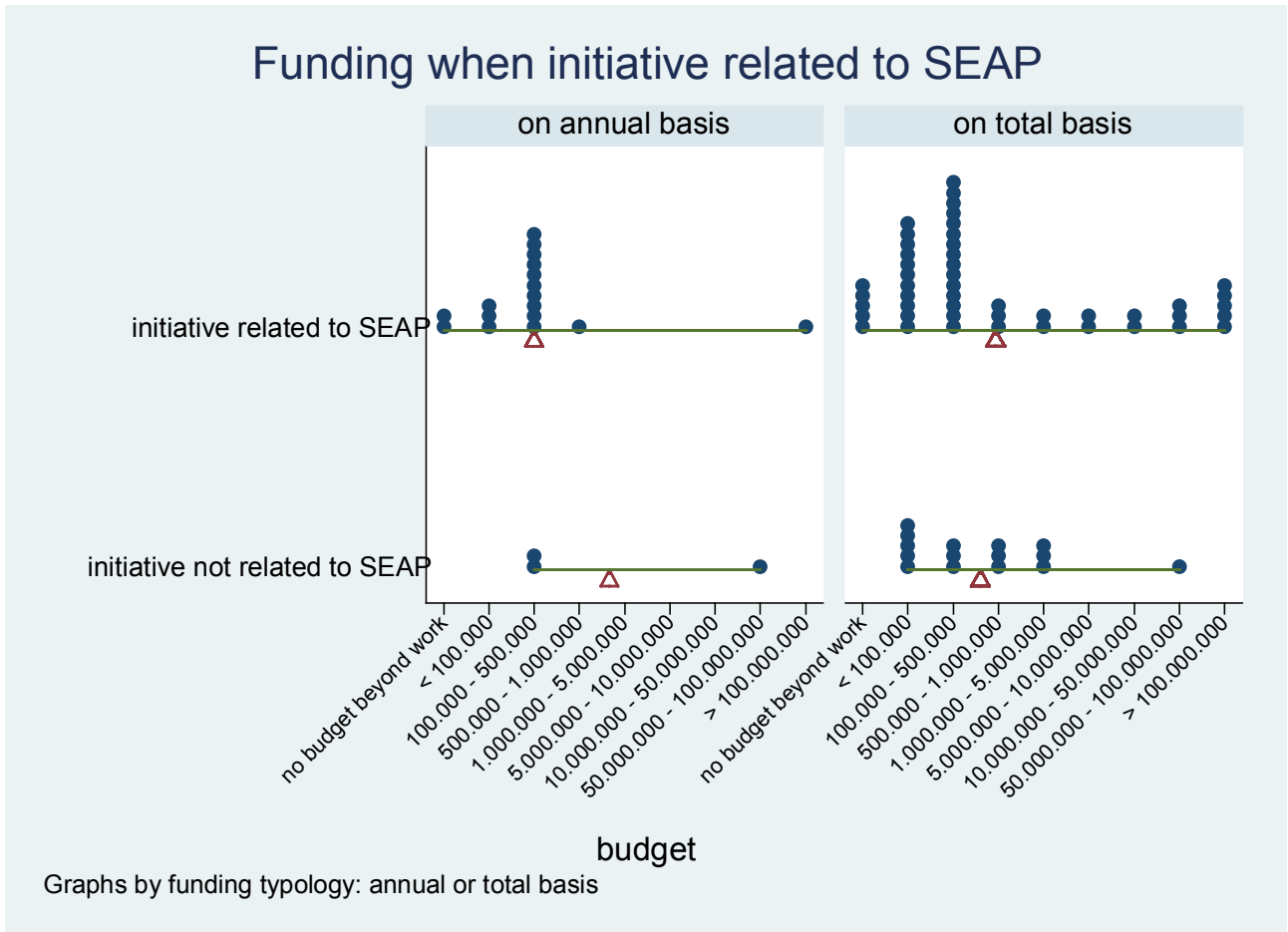


FIGURE 45 - RELATION BETWEEN INITIATIVE'S LINK TO REGIONAL SEAP AND FUNDING

The link of the initiative to a regional SEAP could be considered as an element which facilitates a more structured process for the MLG initiative, also from the financing point of view.



#### C4. RELATION BETWEEN MLG INITIATIVE'S AREA OF COLLABORATION AND ITS FUNDING

As shown in Section 4 (Figure 26), most of initiatives whose budget data was expressed on annual basis have an annual budget comprised between 100.000 € and 500.000 €; most of initiatives whose budget data was expressed on total basis rely on less than 500.000 € in total.

In this paragraph the amount of funding is put in relationship with the areas of collaboration characterizing the initiative, in order to verify if and how the theme of collaboration influences the budget of the initiative.

Figure 45 shows the distribution of initiatives per area/theme of collaboration in relation to their funding range. The figure displays only initiatives which have been categorized with one theme of collaboration namely:

- only strategic energy planning -> blue
- only financial mechanism (Pillar 1) -> red
- only modelling, planning, monitoring (Pillar 2) -> orange
- only awareness raising initiatives (Pillar 3) -> yellow

Most of initiatives which focus primarily on **operational energy planning**, and in particular those on Pillar 2 (**Modelling, planning, monitoring**) and Pillar 3 (**Awareness raising**) have less budget than 100.000 € on total basis, or no budget beyond hours allocated to staff. On the other hand, initiatives pertaining primarily Pillar 1 (**financial mechanisms**) have a higher budget, with 4 initiatives placed in the range 100.000-500.000 € and other 4 in the range 5.000.000-10.000.000€.

Only a limited number of initiatives has been classified exclusively as **strategic energy planning**, and this is reflected in the low number of cases in the graph. Almost all of them do not have a specific budget and rely on staff hours.

Figure 46 expands the analysis to initiatives categorized with more than one theme of collaboration, dividing in particular between:

- initiatives pertaining strategic energy planning and at least one theme of collaboration of operational energy planning (label: **"Strategic and operational energy planning"**)
- initiatives pertaining one or more themes of collaboration of operational energy planning (label: **"Only operational energy planning"**).

Most of initiatives which pertain only operational energy planning have less budget than 100.000 € or a budget comprised between 100.000 and 500.000€ on total basis (several cases have a budget comprised between 100.000 and 500.000 € on annual basis).

On the other side, initiatives which combine strategic and operational energy planning are more scattered across the funding ranges. Nonetheless, a relevant number of them is positioned in the range 100.000-500.000€ on total basis.

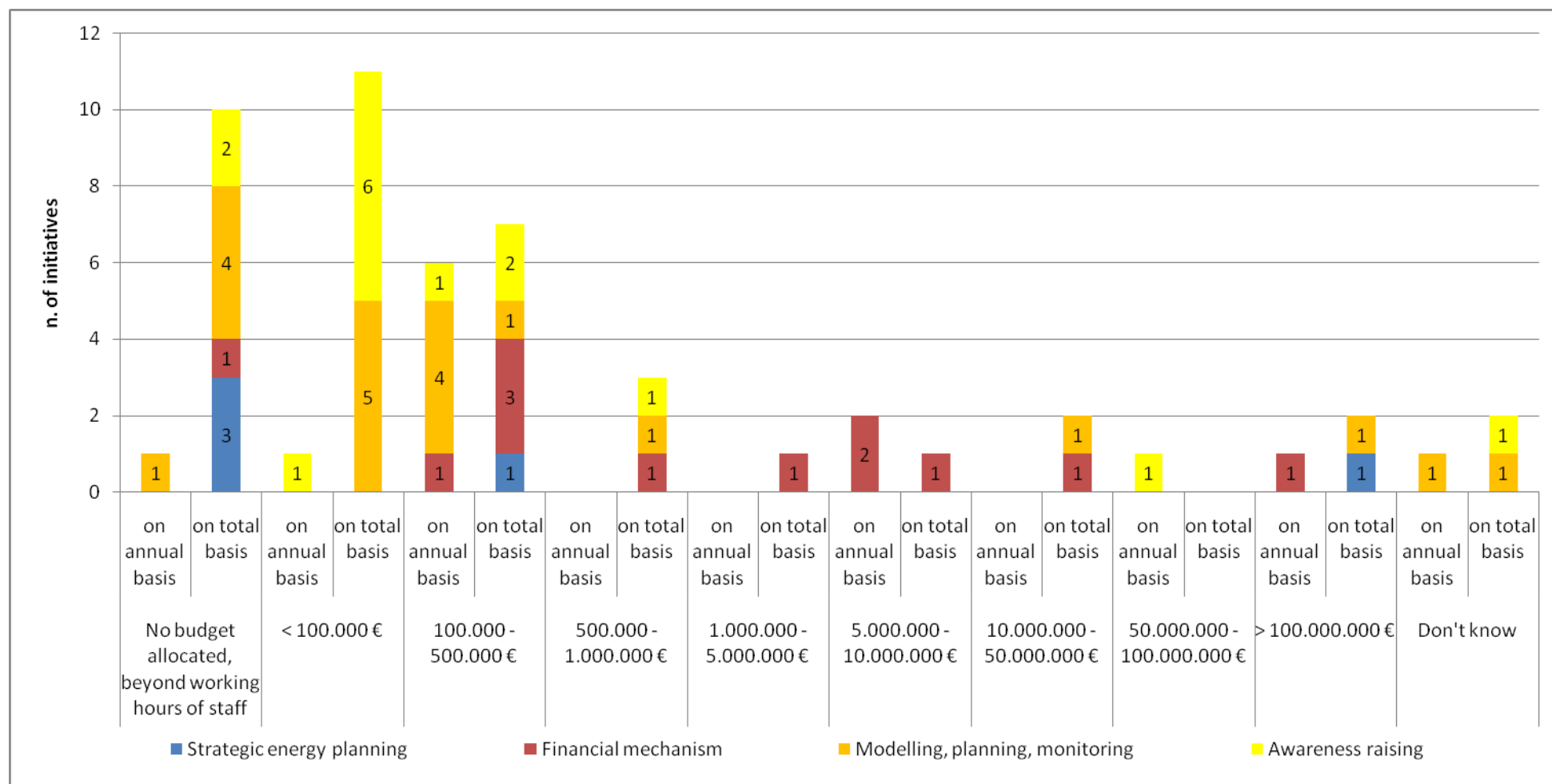


FIGURE 46 - DISTRIBUTION OF INITIATIVES PER AREA/THEME OF COLLABORATION IN RELATION TO THEIR FUNDING RANGE (ONLY MONO-THEMATIC INITIATIVES)

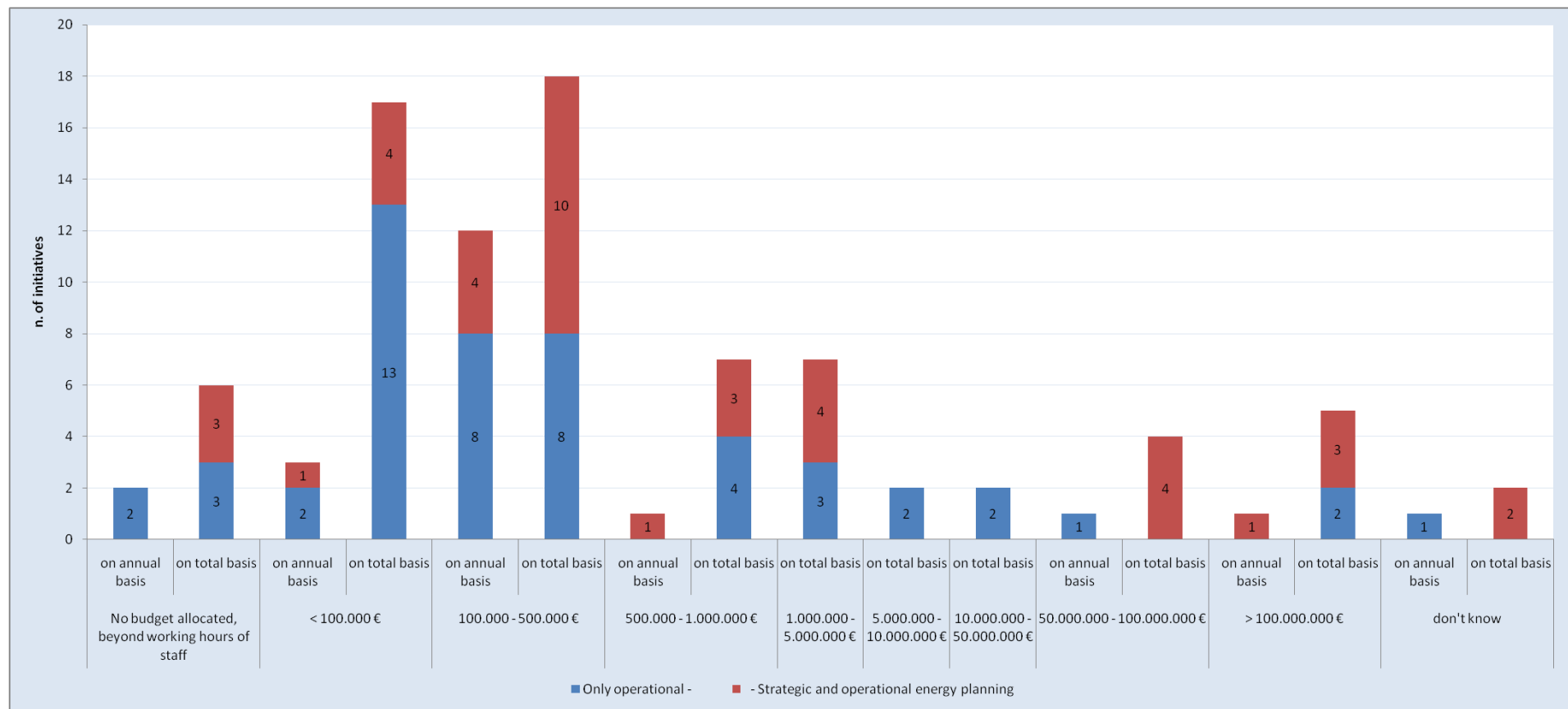


FIGURE 47 - DISTRIBUTION OF INITIATIVES PER AREA OF COLLABORATION IN RELATION TO THEIR FUNDING RANGE (PLURI-THEMATIC INITIATIVES)

## D. RELATION BETWEEN CITIZENS' INVOLVEMENT AND OTHER DIMENSIONS

This paragraph aims at investigating if citizens involvement in an MLG initiative has relations with other features, namely with its degree of formalization and its link with the regional SEAP.

### D1. RELATION BETWEEN DEGREE OF FORMALIZATION OF MLG INITIATIVE AND CITIZENS INVOLVEMENT

Figure 47 combines in the same graph the degree of formalization of the initiative and citizens involvement in the initiative. Looking at the graph, the percentage of initiatives involving citizens is higher for formalized initiatives than for not-formalized ones.

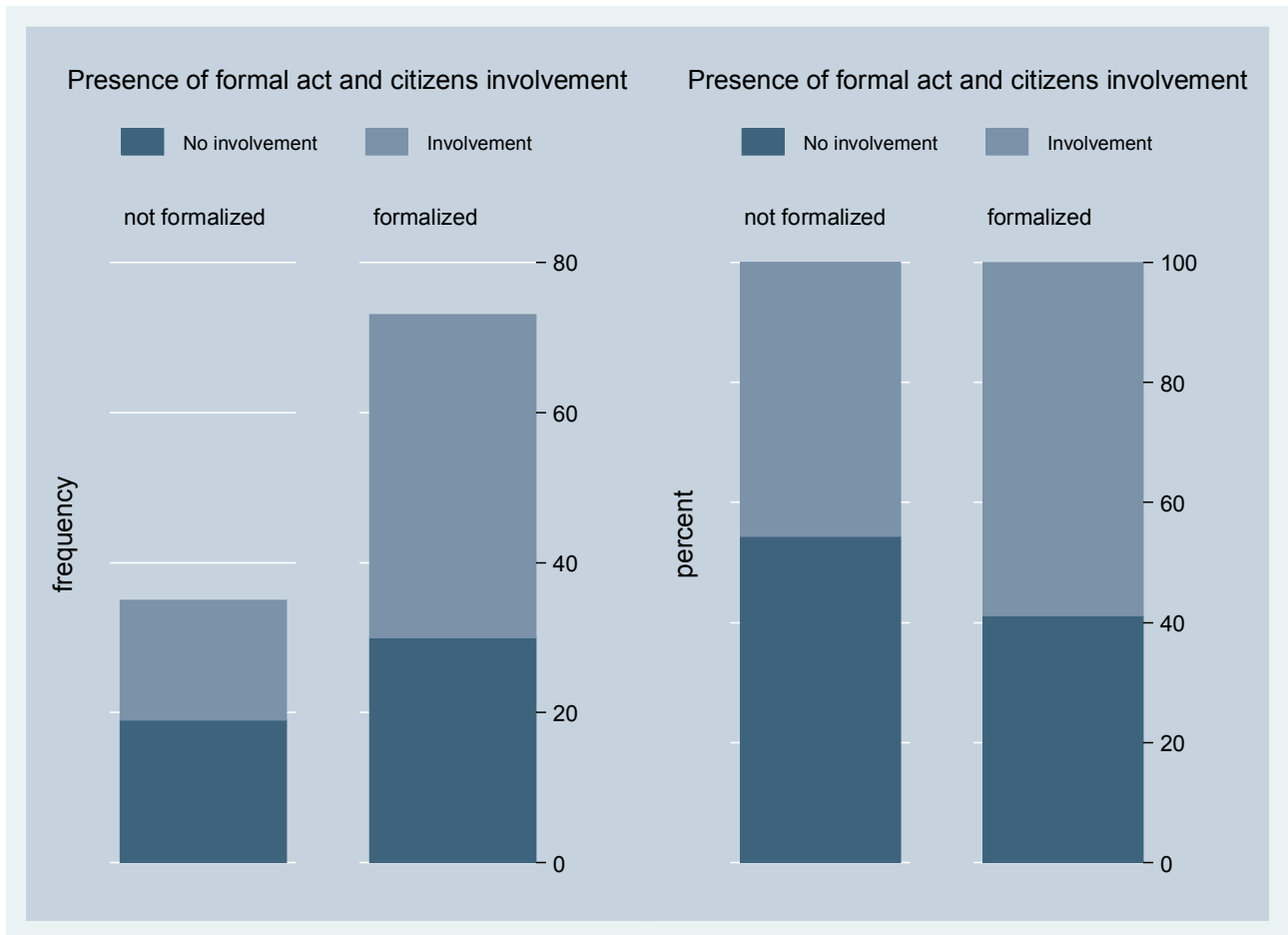
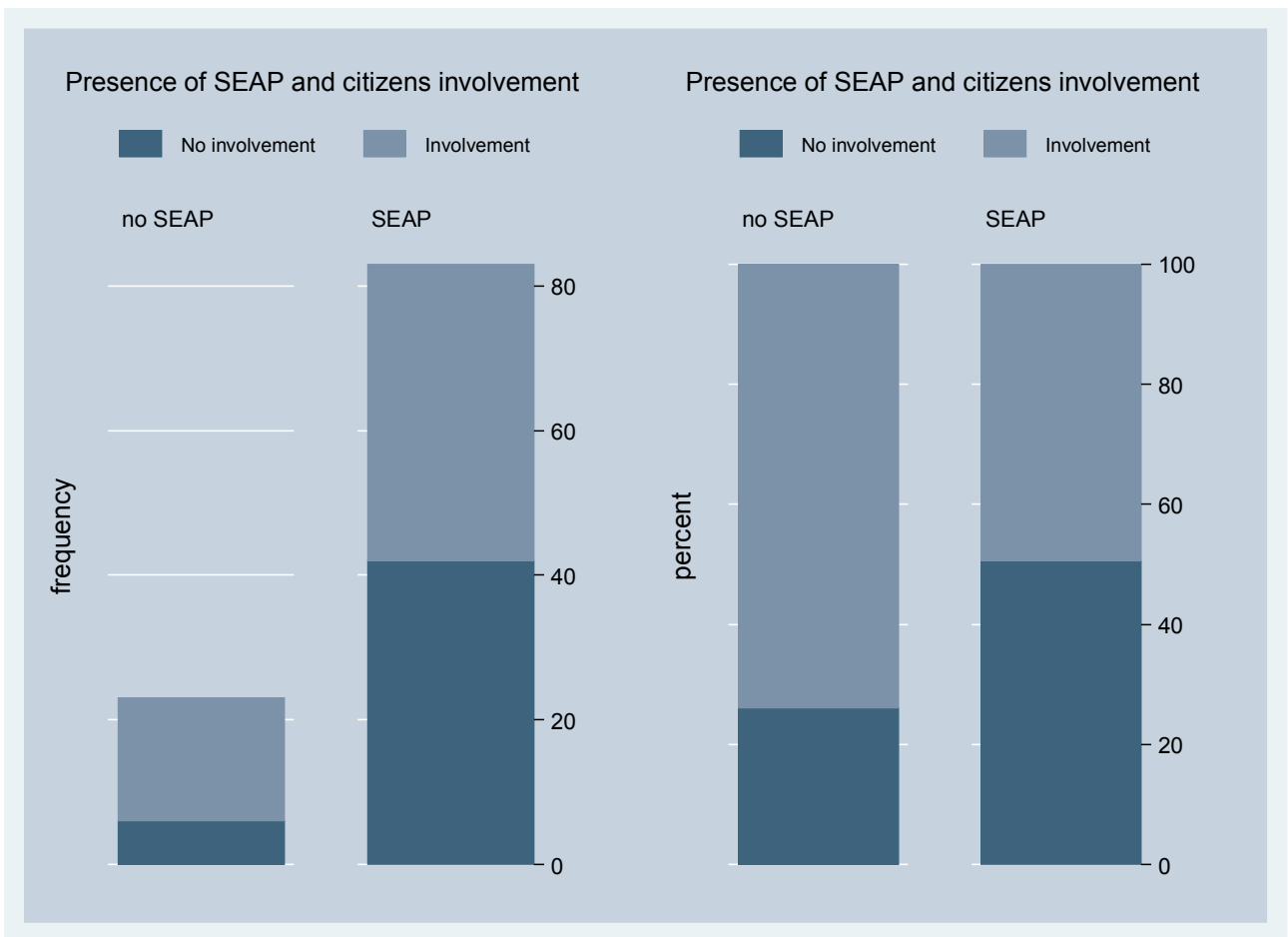


FIGURE 48 - RELATION BETWEEN FORMALIZATION AND CITIZENS' INVOLVEMENT

As recalled in the previous paragraphs, formalized initiatives can be considered more structured processes than not-formalized ones. It seems that the presence of a structured processes facilitates citizens involvement.

**D2. RELATION BETWEEN PRESENCE OF A REGIONAL SEAP AND CITIZENS INVOLVEMENT**

Figure 48 combines in the same graph the presence of a SEAP in the region related to the MLG initiative and citizens involvement in the initiative. Looking at the graph, the percentage of initiatives involving citizens is higher for regions without a SEAP than for those with it.

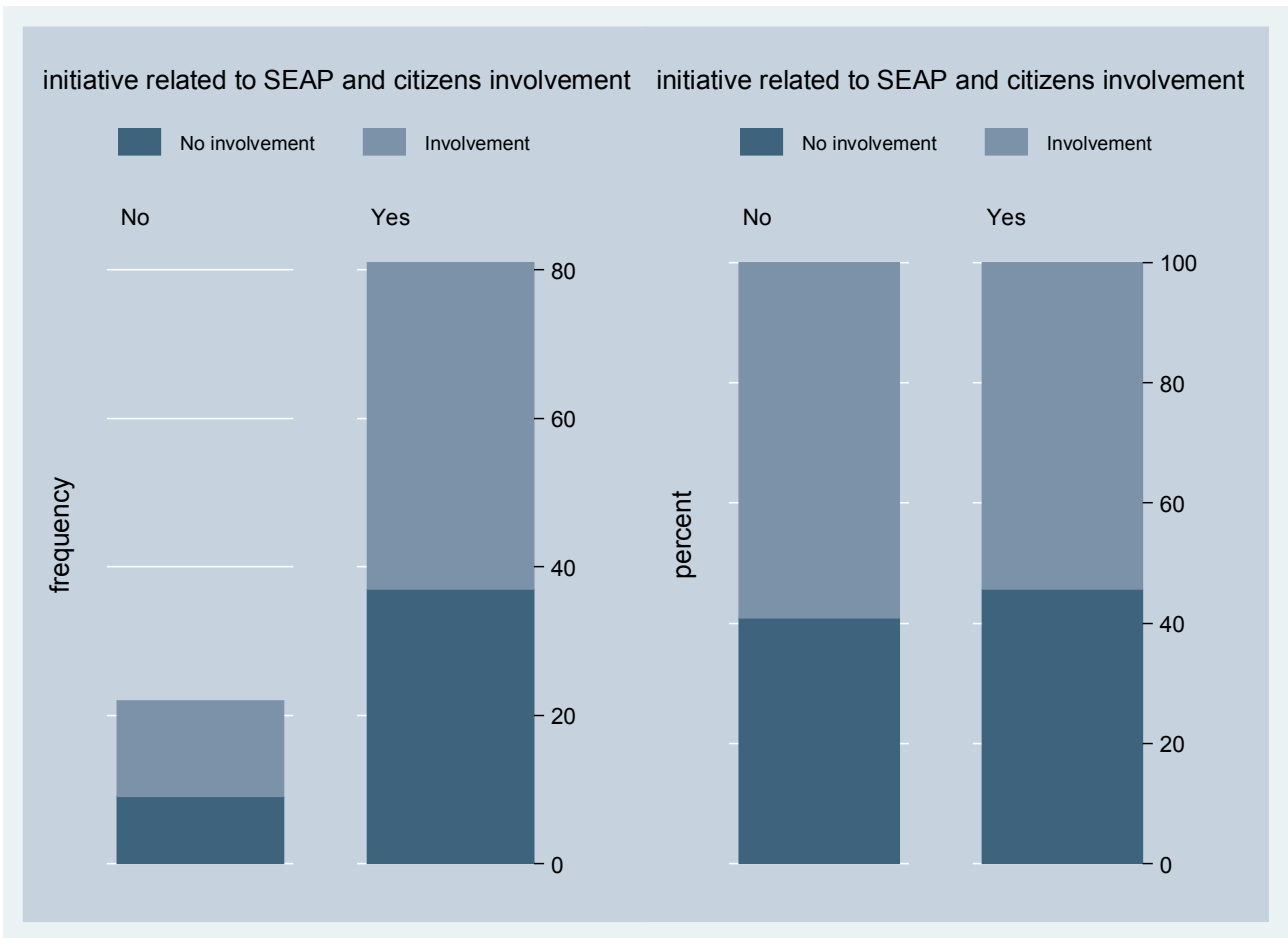


**FIGURE 49 - RELATION BETWEEN PRESENCE OF SEAP AND CITIZENS' INVOLVEMENT IN THE COLLABORATION**

It seems that the presence of a structured process like a SEAP fills the lack of participation in specific projects.

**D3. RELATION BETWEEN MLG INITIATIVE'S LINK TO A REGIONAL SEAP AND CITIZENS INVOLVEMENT**

Figure 49 combines in the same graph the MLG initiatives' link with the SEAP and citizens involvement in the initiative. The level of citizens involvement is similar for initiatives linked to the regional SEAP and those not linked with it (the percentage of citizens involvement is slightly higher for not-linked initiatives).



**FIGURE 50 - RELATION BETWEEN INITIATIVE'S LINK TO REGIONAL SEAP AND CITIZENS' INVOLVEMENT**

It seems that being framed within a SEAP is not a necessary condition for MLG initiatives involving citizens. Public participation can take place also within individual, out-of-SEAP, projects.

## FINAL REMARKS

It is widely recognized that Multi-Level-Governance is a fundamental approach to fight against climate change and promote a more sustainable use and production of energy. The European Commission is supporting several projects to address Multi-Level-Governance for sustainable energy in European regions, among which COOPENERGY. This report provides descriptive statistics on a wide sample of MLG collaborations on sustainable energy planning conducted between European regions and municipalities. It is based on the results obtained from the European survey carried out within COOPENERGY project. In reading the results it should be reminded that two countries, Sweden and France, were much more represented in the sample than the other European countries, because of their higher response rate to the survey.

### *Overview of main results*

According to the analysis of the results, most of collaboration initiatives mapped by the survey started between **2010 and 2012**, and most of them are still **ongoing**. For concluded initiatives, the average duration is around **3 years**.

**Spreading information about sustainable energy** emerges as one of the main aims of collaborations, as well as **improving the decision-making process** on sustainable energy and low carbon policies, but most of initiatives target simultaneously a broader variety of aims.

When **themes of collaboration** characterizing MLG models are considered (strategic energy planning; operational energy planning and thematic pillars), they are represented in the sample with a very **similar frequency**, except for the financial mechanism pillar which is the least represented. Among the **topics of collaboration**, stakeholder engagement, technical support as well as cooperation in regional planning emerge as the most present ones, whereas financial counselling and Public Private Partnerships are the least represented.

**Energy efficiency** is by far the most relevant area involved by collaboration initiatives, followed by renewable energy and GHG reduction, whereas, unsurprisingly, the most relevant sectors concerned are **buildings** and **transport/mobility**.

In addition to **Regional and Local Authorities**, which are intrinsic partners of all mapped cases, experiences mapped by the survey frequently involved **companies** and **energy agencies** as other partners, whereas the national level is seldom present. Responsibilities are reported as clearly defined in most of initiatives.

As far as the involvement of internal departments is concerned, more than half initiatives has seen the **participation of other regional departments** (on average one or two additional departments), which most frequently are the energy or the environmental ones.

Most of initiatives have been **managed** through the use of a single instrument, most frequently a **dedicated agency** or **meetings**. In more than half of the sample the collaboration has been formalized through **formal acts** or **agreements**, most often a single document (formal agreement, followed by Memorandum of Understanding).

A strong impulse from the **political level** has been evidenced in the decision to activate the collaboration, less prominent the administrative one and least of all the technical one.

A great majority of the regions involved in mapped experiences has approved a **sustainable energy plan**, and most of initiatives mapped by the questionnaire are **related to this plan**. A bit more than half of initiatives are related to **other regional plans**, mostly often to the **sustainability** or **territorial development plans**.

Looking at **total funding** of initiatives, most of them rely on **less than 500.000€**, with a relevant presence of **public actors** (regional and local authorities involved in the initiative, national government) as **funding sources**.

In most of initiatives, activities to **monitor** and **report** results are performed, whereas only in a few initiatives third-independent parties are involved in such activities. Energy efficiency and energy savings results, as well as CO2 reduction, are among the most frequent result obtained by initiatives.

Focusing on the **enabling conditions** of these collaborations, **political commitment** emerges as the element considered as determinant in a relevant number of experiences, as well as **access to funds**.

A variety of **communication instruments and tools** is used to inform the public about the collaboration initiatives. In almost every initiative some form of **web-based information** or communication tool is used, whereas more traditional means (press, newspapers, TV...) are used in fewer initiatives.

In more than half of initiatives **citizens** have been **involved**, in most cases through **public meetings**.

**Experiences of other regions** emerge as a relevant **inspiring source** for several initiatives, but also international and national guidelines play a role. Almost half of reported initiatives are known to have been **replicated by other regions**.

Finally, looking at the **Regional Energy Agency (REA)**, this typology of actor stands out as an often present structure, with a **frequent involvement in collaboration initiatives** of regions with local authorities. The REA very often has a **role of promotion of low carbon technologies** and **technical support for the development of local SEAPs**. Most of Regional Energy Agencies involved in collaboration initiatives are quite independent from the region in their action, not having to obtain pre-authorizations from the Region itself to develop or manage such initiatives.

#### *Success and weakness factors*

Taking a comprehensive look at initiatives, the most frequent **success factor** is considered to be the presence of **political support and commitment**, which is consistent with the relevance attributed to this element as an enabling condition of collaboration initiatives. On the **weaknesses** side, **lack of funding and financial sources** is considered as a key undermining factor for several respondents.

#### *Cross-feature analysis*

Regarding **funding**, it seems that being a structured processes, within a formalized initiative and within a regional context provided with a SEAP, facilitates the finding of financial resources, from regional as well as from other sources.

Looking at the themes of collaboration, initiatives focused on modelling, planning, monitoring and on awareness raising show lower total budgets in comparison to those focused on financial mechanisms, whereas no single funding dimension results from the survey for initiatives focusing on strategic energy planning.

Regarding **citizens involvement**, It seems that the presence of a structured processes, within a formalized initiative, facilitates citizens involvement, whereas the presence of a SEAP is not always matched with citizens involvement in specific initiatives. SEAPs seem thus to fill the lack of participation in specific projects.



ANNEX I - TYPES OF COLLABORATION MAPPED BY COOPENERGY QUESTIONNAIRE

Theme of collaboration	Topic of collaboration	Type of initiative
Concerted strategic energy planning	Cooperation in Regional SEAP design	<ul style="list-style-type: none"> <li>• Assembly promoted by the County Council involving all municipalities in the definition of proposals to realize energy and climate targets;</li> <li>• Steering Committee on climate protection and sustainable development launched by the Region involving counties and cities on CO2 reduction commitments;</li> <li>• Implementation of a Sustainable Energy Action plan developed in collaboration with the Provincial Energy Agency;</li> <li>• Island Sustainable Energy Action Plan of the County developed within the Pact of Islands;</li> <li>• Cooperation in delivering the Island Sustainable Energy Action plan and mapping renewable energy resources in the territory.</li> </ul>
Concerted strategic energy planning  Awareness raising and stakeholders involvement	Cooperation in Regional SEAP design  Stakeholder engagement	<ul style="list-style-type: none"> <li>• Setup of regional energy action plan in a democratic process involving all relevant stakeholders;</li> <li>• Involvement of regional stakeholders in a series of meeting to provide inputs for the governmental climate strategy to 2050;</li> <li>• Series of projects to implement the vision of an Energy-sufficient island, involving citizens through local public meetings and groups;</li> <li>• Development of the regional strategy for climate change mitigation and adaptation, in collaboration with municipalities and sub-regional entities.</li> </ul>
Concerted strategic energy planning  Modelling, planning and monitoring tools for decision making	Cooperation in Regional SEAP design  Planning/modelling tool	<ul style="list-style-type: none"> <li>• Evaluation of landscape issues in RES promotion policies applied to a specific area to update the territorial provincial energy guidelines; cooperation with other administrative levels (Regions, Municipalities) on governance and methodological issues .</li> </ul>
Concerted strategic energy planning	Cooperation in Regional SEAP design, Networking	<ul style="list-style-type: none"> <li>• Joint initiative of the regional and provincial government taking place through the set up of “climate commissions”, to increase progress towards energy and climate targets and exchange information and knowledge with other regions;</li> <li>• European project aimed at inspiring and promoting interaction between regions to fulfil the 20-20-20 targets.</li> </ul>
Concerted strategic energy planning  Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement	Cooperation in Regional SEAP design  CoM-related technical support  Awareness initiative	<ul style="list-style-type: none"> <li>• Energy Agency assisting local authorities in the Covenant of Mayors, Pact of Islands and European Energy Award initiatives.</li> </ul>

<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement</p>	<p>Cooperation in Regional SEAP design</p> <p>Planning/Modelling tool</p> <p>Stakeholder engagement</p>	<ul style="list-style-type: none"> <li>• Development of cooperation methods, knowledge and computer-assisted modelling for strategic energy planning at municipal level delivered by the regional energy agency in collaboration with municipalities and other stakeholders.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Cooperation in Regional SEAP design, Networking</p> <p>Awareness raising initiative</p>	<ul style="list-style-type: none"> <li>• Involvement of regional and local authorities in the framework of two European projects to develop a regional Sustainable Energy Action Plan and to establish bilateral contacts with public and private actors to disseminate information on best practices and best available technologies in the field of energy efficiency, renewable energy and sustainable transport.</li> </ul>
<p>Concerted strategic energy planning</p>	<p>Cooperation in Regional SEAP design, Joint planning of sectoral actions</p>	<ul style="list-style-type: none"> <li>• Support to municipalities in planning waste management and energy supply, in connection with the regional energy plan.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making</p>	<p>Cooperation in Regional SEAP design, Support and promotion of local initiatives and good practices</p> <p>CoM-related technical support</p>	<ul style="list-style-type: none"> <li>• Set of integrated actions to promote a sustainable energy vision for the region and support local authorities in their energy and climate strategies.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making</p>	<p>Joint local SEAP</p> <p>CoM-related technical support</p>	<ul style="list-style-type: none"> <li>• European project aimed at developing a model to elaborate and implement joint SEAPs in rural territories with the support of a territorial coordinator.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement</p>	<p>Joint local SEAP</p> <p>CoM-related technical support</p> <p>Awareness raising initiative</p> <p>Stakeholder engagement</p>	<ul style="list-style-type: none"> <li>• European project aimed at overcoming social, administrative and legal barriers to the uptake of renewable energy use, especially through training, information and raising awareness activities addressed both to the local policy makers and to citizens.</li> </ul>
<p>Concerted strategic energy planning</p>	<p>Joint planning of sectoral actions</p>	<ul style="list-style-type: none"> <li>• Check and preparation in collaboration with public authorities of a project on a power plant for emergency power supply during black-outs;</li> <li>• Collaboration between the Regional Energy Agency, towns and local utilities on a project to replace a natural gas boiler to use local solid biofuels and upgrade the district heating</li> </ul>

		<p>system;</p> <ul style="list-style-type: none"> <li>• Collaboration between the Regional Energy Agency, municipalities and non-governmental organizations to increase energy efficiency of public buildings with the use of local materials and to support local SMEs;</li> <li>• Programme investigating possible energy savings linked to building refurbishment and a savings allowance mechanism.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Financial mechanisms</p>	<p>Joint planning of sectoral actions</p> <p>Setting up of regional funding entities</p>	<ul style="list-style-type: none"> <li>• Cooperation between counties to develop a model region for the production of renewable energy from biomasses.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making</p>	<p>Joint planning of sectoral actions</p> <p>Technical support</p>	<ul style="list-style-type: none"> <li>• Assessment of energy use and biomass potential for a group of municipalities and drafting of an action plan for utilization of local biomass resources, delivered by a regional energy agency.</li> </ul>
<p>Concerted strategic energy planning</p>	<p>Joint planning of sectoral actions, Plans/Policies evaluation</p>	<ul style="list-style-type: none"> <li>• Plan for the revitalization of an economically depressed area, with actions regarding energy production from biomass, including the attraction of companies of this sector in the area;</li> <li>• Feasibility studies to analyse the potential for production and distribution of biogas from waste in municipalities of the county and establish bioenergy plants linked to existing industries and power plants.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Joint planning of sectoral actions</p> <p>Joint communication campaign</p>	<ul style="list-style-type: none"> <li>• Programme to encourage municipalities to work with energy efficiency in municipal water pumping systems in a strategic way and disseminate results to other municipalities.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Financial mechanisms</p>	<p>Joint planning of sectoral actions</p> <p>PPP – Public-Private Partnership</p>	<ul style="list-style-type: none"> <li>• Collective effort of different local authorities to improve energy efficiency of properties in their areas, making use of new government financial schemes.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Joint implementation of sectoral actions</p> <p>Awareness raising initiative</p>	<ul style="list-style-type: none"> <li>• Energy-sufficient island relying on innovative storage solutions for renewable energy, through a company participated by the local authority and other local stakeholders.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Support and promotion of local initiatives</p> <p>Stakeholder engagement</p>	<ul style="list-style-type: none"> <li>• Implementation by the region, National government and National energy agency of a supporting mechanism for the development of climate plans at specific territorial scales;</li> <li>• Technical and financial support from the region and National energy agency to consolidate already developed climate plans elaborated at specific territorial scales.</li> </ul>

<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making</p>	<p>Support and promotion of local initiatives</p> <p>Monitoring tool</p>	<ul style="list-style-type: none"> <li>• Provision of GHG emissions data to local territories from the Regional council.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making</p>	<p>Support and promotion of local initiatives and good practices</p> <p>Knowledge sharing tool</p>	<ul style="list-style-type: none"> <li>• Sharing of experience between municipalities of the county to promote a systematic and effective energy management in public buildings and fleets, delivered through a dissemination platform.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Support and promotion of local initiatives and good practices</p> <p>Joint communication campaign</p>	<ul style="list-style-type: none"> <li>• Regional programme aimed at supporting several players in energy saving and renewable energy production measures, through sharing, evaluation, promotion and dissemination of projects.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement</p>	<p>Support and promotion of local initiatives and good practices</p> <p>CoM-related technical support</p> <p>Awareness raising</p>	<ul style="list-style-type: none"> <li>• Regional Authority acting as CoM coordinator, informing all municipalities of the Region about the initiative and supporting them in the development of SEAPs.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement</p>	<p>Support and promotion of local initiatives and good practices</p> <p>Planning/Modelling tool</p> <p>Awareness raising initiative</p>	<ul style="list-style-type: none"> <li>• Promotion and encouragement of eco-friendly housing and settlement policies by Local Authorities and housing providers in the region.</li> </ul>
<p>Concerted strategic energy planning</p> <p>Awareness raising and stakeholders involvement</p>	<p>Networking</p> <p>Stakeholder engagement</p>	<ul style="list-style-type: none"> <li>• Regional network on biogas involving regional authorities, the local association of municipalities and several other players.</li> </ul>

Financial mechanisms, Modelling, planning and monitoring tools for decision making	Financial counselling Technical support	<ul style="list-style-type: none"> <li>Support and advice on investment opportunities created by Feed-in Tariffs and the Renewable Heat Incentive for small and medium-sized businesses and social enterprises delivered by county and local authorities.</li> </ul>
Financial mechanisms	Financial counselling Financial support programme Setting up of regional funding entities	<ul style="list-style-type: none"> <li>Technical assistance to mobilise large-scale investment in local energy infrastructure. Development of a fund for energy and low carbon transport infrastructure.</li> </ul>
Financial mechanisms, Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement	Financial counselling CoM-related technical support Awareness raising initiatives	<ul style="list-style-type: none"> <li>CoM promotion, coordination, economic, technical and legal assistance, SEAP validation</li> </ul>
Financial mechanisms	Financial support programme	<ul style="list-style-type: none"> <li>Citizen Investment fund supported by the Regional Council;</li> <li>Eco-loan with zero-interest rate for energy efficiency work subsidised by the Regional Council;</li> <li>Public call for subsidies to households who wish to install solar collector system for heating and domestic hot water or biomass boilers for hot water, launched by the County Authority in collaboration with municipalities, environmental protection and energy efficiency fund;</li> <li>Financial supporting programme for technical assistance for municipalities which commit to the CoM;</li> <li>Energy efficiency projects in public schools co-financed by the European Investment Bank , Energy Efficiency Fund and the national Environmental Protection Agency.</li> </ul>
Financial mechanisms, Modelling, planning and monitoring tools for decision making	Financial support programme Technical support	<ul style="list-style-type: none"> <li>Financial instrument managed by EIB and funded by EU funds and by the province, covering technical assistance costs for project design and to enable municipalities to publish tenders in the field of energy efficiency;</li> <li>Technical assistance and financial support from regional funds to municipalities.</li> </ul>
Financial mechanisms, Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement	Financial support programme Knowledge sharing tool Awareness raising initiative	<ul style="list-style-type: none"> <li>Development of a platform on solar energy to train and raise awareness among all stakeholders (municipalities, building owners, installers, R&amp;D companies...) and pilot funding scheme for demonstration plants.</li> </ul>
Financial mechanisms	Setting up of regional funding entities	<ul style="list-style-type: none"> <li>Regional sustainable energy fund - Public local company created and owned by the Regional council and local municipalities to support EE projects;</li> <li>Dedicated structure for Third party financing;</li> </ul>

Financial mechanisms	PPP - Public-Private Partnership	<ul style="list-style-type: none"> <li>• Pilot energy savings projects based on Energy Performance Contracting with guaranteed savings on buildings owned by the region.</li> </ul>
Modelling, planning and monitoring tools for decision making	Planning/modelling tool	<ul style="list-style-type: none"> <li>• Sustainable energy friendly land use and spatial planning procedures.</li> </ul>
Modelling, planning and monitoring tools for decision making	Planning/modelling tool Technical support	<ul style="list-style-type: none"> <li>• Project to support municipalities in applying an analysis and monitoring tool for energy renovation projects on public buildings;</li> <li>• Support and training from the regional energy agency to municipalities in the use of a web-based tool for energy management.</li> </ul>
Modelling, planning and monitoring tools for decision making	Monitoring tool	<ul style="list-style-type: none"> <li>• Common web tool to collect and manage energy data at municipal and provincial level;</li> <li>• Certification scheme designed to encourage local companies to reduce their carbon emissions, endorsed and supported by the local authorities.</li> </ul>
Modelling, planning and monitoring tools for decision making	Monitoring tool, Setting up of support organizations	<ul style="list-style-type: none"> <li>• Set up of an observatory and software tools providing indicators for several themes (air quality, energy, climate..) for specific territorial units of the region.</li> </ul>
Modelling, planning and monitoring tools for decision making	Setting up of support organizations	<ul style="list-style-type: none"> <li>• Energy, GHG emissions, air observatories;</li> <li>• Regional network for Energy and GHG emission observation.</li> </ul>
Modelling, planning and monitoring tools for decision making	Knowledge sharing tool	<ul style="list-style-type: none"> <li>• Platform for data collection which documents what is being done on climate change and energy conservation in municipalities and counties and identifies best practices;</li> <li>• Web-portal promoted by the regional authority for households, businesses, communities, schools and organizations that want to engage in climate protection.</li> </ul>
Modelling, planning and monitoring tools for decision making	Knowledge sharing tool Technical support	<ul style="list-style-type: none"> <li>• Training programme for energy managers for municipalities delivered by the regional energy agency and coordinated by the regional authority through an electronic register.</li> </ul>
Modelling, planning and monitoring tools for decision making	Plans/Policies evaluation	<ul style="list-style-type: none"> <li>• Analysis of the regional energy sector to determine the energy balance and indicators of regional energy independence.</li> </ul>
Modelling, planning and monitoring tools for decision making	Plans/Policies evaluation Technical support	<ul style="list-style-type: none"> <li>• Case studies conducted on municipalities having implemented an Environmental Management System for transports, to monitor results and share them with all municipalities of the county;</li> <li>• Regional energy company supporting municipalities in activities related to the analysis, control and management of energy use and aggregated purchase of energy; feasibility studies for energy efficiency measures and realization of renewable energy supply plants; technical assistance in the development of SEAPs;</li> <li>• Promotion of the use of renewable energy ( biomass , solar and geothermal ) in buildings and public facilities and</li> </ul>

		transboundary cooperation.
Modelling, planning and monitoring tools for decision making	Technical support/CoM related technical support	<ul style="list-style-type: none"> <li>• Technical support in the development of SEAPs for the municipalities of the region/province/county, support to implementation of actions, information and training for municipalities, monitoring;</li> <li>• Province acting as CoM coordinator, Provincial Energy Agency assisting municipalities in planning activities and delivering SEAPs;</li> <li>• Consulting services shared among municipalities and financially supported by Regional Council;</li> <li>• Joint commitment between local authorities to reduce energy consumption in their own operations and fleets, to monitor and report their success;</li> <li>• Detection of local needs and opportunities in the field of energy and sustainability, promoted by the Regional Authority, delivered by the regional energy agency and co-funded by the National government;</li> <li>• Program to support energy efficiency investments in buildings and public agencies, in which the regional authority prepares tenders' models and assists municipalities in their evaluation;</li> <li>• Pilot Action to assess and demonstrate measures to reduce electricity consumption by Local Authorities developed by the Regional Authority and County Council;</li> <li>• Training for certified "municipal energy managers" delivered by the regional authority to its member municipalities, organized in cooperation with Ministry of the Environment, energy agencies, climate change and energy consultancies;</li> <li>• Series of workshops and field trips involving staff from different municipal departments to inform and inspire participants on available approaches for sustainable transport planning;</li> <li>• Information campaign on self-production of electricity for the public and companies, delivered through a study tour to micro and small-scale plants, lectures and discussions;</li> <li>• Training and Technical Assistance regional programme for Municipalities delivered by the regional energy agency regarding energy certification of Municipalities and projects on renewable sources and efficient energy management;</li> <li>• Selection of pioneer municipalities which will benefit from technical assistance in the development of their SEAP, delivered by a multidisciplinary team of experts;</li> <li>• Provincial programs in the framework of the CoM, delivered with the support of the Provincial Regional Energy, aimed at realizing concerted actions to reduce energy demand and energy consumed for local activities developed by Local Authorities of the province as a result of the provision of local services, as well as modernizing and prolonging the useful life of the equipment and municipal facilities and promoting the implementation and use of renewable energy.</li> </ul>
Modelling, planning and monitoring tools for decision making, Awareness raising	Technical support  Awareness raising	<ul style="list-style-type: none"> <li>• Creation of demonstration centers for best practices exchange and training on photovoltaics, for professionals, Local Authorities and students;</li> <li>• Promotion of the CoM (conference, training courses,</li> </ul>

and stakeholders involvement	initiative	meetings) and support to municipalities of the province which signed the CoM in developing SEAPs;
Modelling, planning and monitoring tools for decision making, Awareness raising and stakeholders involvement	Technical support Plan/policies evaluation Stakeholder engagement	<ul style="list-style-type: none"> <li>• Development of a mobility plan for companies with a participated approach, in collaboration with the municipality and through the setting up of a Mobility Group.</li> </ul>
Awareness raising and stakeholders involvement	Joint communication campaign  Awareness raising initiative	<ul style="list-style-type: none"> <li>• Information campaign to promote energy efficiency in private buildings.</li> </ul>
Awareness raising and stakeholders involvement	Awareness raising initiative	<ul style="list-style-type: none"> <li>• Insulation programme for residents delivered by a partnership of County Council and all its councils;</li> <li>• Risk check programme on home fire including also energy efficiency and energy audits delivered by Fire Officers, involving County Councils, district councils and fire service;</li> <li>• Project to encourage residents to insulate their homes, coordinated by the County Council;</li> <li>• Website displaying renewable electricity currently produced, to help energy users to reduce their energy costs and carbon emissions;</li> <li>• Exhibition promoted by the regional authority on renewable energy and energy efficiency, involving other local authorities and foreseeing business meetings and roundtables;</li> <li>• Competition to promote cycling and sustainable mobility involving the regional authority and municipalities.</li> </ul>
Awareness raising and stakeholders involvement	Awareness raising initiative Stakeholder engagement	<ul style="list-style-type: none"> <li>• Regional network involving several stakeholders, actively working to promote and develop the production, distribution and use of biogas in the region.</li> </ul>
Awareness raising and stakeholders involvement	Stakeholder engagement	<ul style="list-style-type: none"> <li>• Participative evaluation process of SEAP with citizens involvement;</li> <li>• Implementation of an overall body to promote cooperation and coordination for climate change policies among several players in the county;</li> <li>• Development of a roadmap for biogas production and distribution in the region, through a series of workshops with local and regional politicians and decision makers.</li> <li>• Cooperation and dialogue between local authorities and stakeholders of the building and property sector in the county through projects and groups;</li> <li>• Development of a vision shared by a broad range of stakeholders for sustainable energy supply in a group of European regions, development of roadmaps and formalized energy citizenships.</li> </ul>