



IMPLEMENTATION OF THE QUALITEE BUSINESS MODEL IN GREECE

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QualitEE Project

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1 EXECUTIVE SUMMARY

2020 is the first year in which it seems that Greece has realistic aspirations for continuous economic growth in the next few years. A very important factor is the complete removal of capital controls in September 2019. Compared to 2017 and 2018 the energy services market outlook seems to be improving as access to financing from both the public sector (i.e. low-interest loans to municipal authorities and public authorities, subsidies etc.) and the private sector (i.e. financial institution increasing interest in energy efficiency projects) seems to be becoming more readily available. Moreover, the government is currently planning to introduce measures for the facilitation of EPC. However, lack of trust in energy service providers is still very evident.

In 2020, the energy services market in Greece seems to be more active. This is evident in both the increased number of EPC projects (even though the implemented projects concern budgets lower than 10.000 €) and the number of ESCOs registered. More specifically, in January 2020 there were 12 companies registered in category A and 32 companies registered in category B. Category A refers to ESCOs that offer energy services with EPC contracts and Category B refers to ESCOs that offer energy services without EPC contracts.

The existing Ministerial Decree for the national ESCO registry has gone one step forward towards increasing trust in energy service providers in Greece. However, it still has the following shortcomings:

- The *ex-ante* evaluation criteria for the conformance of the EPC submitted by the companies wishing to register in category A of the registry are quite general and subject to interpretation by the evaluators, making the process difficult
- Even though the submission of both progress report and documentation of EPC projects is mentioned, there are no *ex-post* evaluation criteria available to the evaluators. Furthermore, the evaluation of these submitted documents is also not mentioned and it is therefore not clear whether this is a prerequisite for a company to be able to continue being registered.
- There is no publicly available detailed information about the EPC contracts implemented by the registered companies which would help a potential client to find out more about them and their range and type of activities. All that is available is the category and contact details of the companies.

Due to the immaturity of the energy services market in Greece:

- A quality assurance scheme for energy services is still considered to be premature. In order to not throttle the market with new schemes and requirements it is important to proceed slowly and the first step should be to introduce a new quality assurance scheme for the energy service providers.
- The market is still not ready for a private label. There is neither interest from clients for such a label nor from energy service providers. Accredited certification bodies also expressed their reluctance to start activities for the introduction of a certification scheme for such a label as they deem the market to be too small for it to be of interest to them. Last but not least, there is no credible and trustworthy organization willing to undertake the responsibility of such an endeavor. A national ESCO association would be the ideal candidate, but there is currently no such association in Greece.

- It was almost unanimously decided that the first step should be to provide the Ministry of Energy and Environment with detailed and concrete proposal for the amendment of the current Ministerial Decree of the ESCO registry and to introduce the QualitEE evaluation technical criteria within. The Ministry officials welcomed the initiative and promised to consider the proposals made and pursue all the necessary actions needed.
- The labelling of energy services is something that could follow after the further maturity of the market.

The proposed amendments to the existing Ministerial Decree are the following:

- The adoption of all the 9 technical evaluation criteria of the QualitEE project for the *ex-ante* and *ex-post* evaluation of all EPC projects submitted to the Ministry of Energy and Environment for the ESCO registry. More specifically:
 - For the *ex-ante* evaluation of EPC projects, all energy service providers shall submit signed copies of both the energy audit and EPC. The Ministry officials will use the QualitEE *ex-ante* criteria for their evaluation.
 - For the *ex-post* evaluation of the EPC projects, all energy service providers shall submit signed copies of annual progress reports, commissioning reports and completion reports. The Ministry officials will use the QualitEE *ex-post* criteria for their evaluation.
- The categorization of energy service providers should be modified. The proposed modifications are:
 - **Category A++:** The energy service providers that have EPC contracts and comply with all 9 technical criteria.
 - **Category A+:** The energy service providers that have EPC contracts and comply with 8 of the 9 technical criteria. 7 of the technical criteria (QC1-6, and QC9) are mandatory for registration in categories A and above. QC 8 and 9 are voluntary.
 - **Category A:** The energy service providers that have EPC contracts and comply with the mandatory technical criteria.
 - **Category B:** The energy service providers that do not have EPC contracts.

The reason that the 7 mandatory criteria are considered to be the absolute minimum to register in the Category A, is that these criteria were considered to be essential elements of an EPC and therefore one could not consider an energy service provider that does not fulfill at least these criteria. Categories A+ and A++ were chosen as incentives for Category A class energy service providers to upgrade to a higher category by offering services that EPC's do not usually offer. Category B remains the same as it was in the previous Ministerial Decree.

- The ESCO registry should contain the publicly available information for the EPC contracts submitted by each of the registered energy service providers.

The proposed quality assurance scheme can significantly impact the energy services market in Greece. The main positive impacts from its implementation are the following:

-
- The ESCO registry will certify that the energy service providers registered in it are able to provide energy services of a minimum threshold quality for each of the categories A and above.
 - The quality of services provided by the providers registered in the ESCO registry will be monitored continuously and not only during registration.
 - The public will be able to access updated information concerning the energy services with EPC that the energy service providers registered in the ESCO registry provide.

As a result of the aforementioned, it is expected that trust in the energy services market will increase and this will provide the necessary stimulus for both the private sector and public sector to start implementing more projects with EPC.

In parallel with the above, solutions to the restricted access to financing for EPC projects should also be sought in order to completely liberate the market and to witness a significant stimulation of the market.

2 INTRODUCTION

The objective of this report is to provide information about the national implementation of quality assurance schemes for energy efficiency services (EES). This report has been developed as part of the "QualitEE – Quality Certification Frameworks for Energy Efficiency Services" project supported by the EU's Horizon 2020 programme. The QualitEE project aims to increase investment in EES and improve trust in service providers.

This report aims to cover the practical implementation of the business model selected for Greece. A business model is the core for the growth of business. It can be defined as “the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural or other contexts. The process of business-model construction forms a part of business strategy”¹.

It will describe the basic idea of quality assurance for energy efficiency services in general, the idea of the national scheme and some facts about the development and implementation process of the national scheme (background).

¹ Osterwalder, Pigneur, Smith, *et al.*: “Business Model Generation” (2010)

3 THE CASE OF GREECE

3.1 The situation of the energy services market in Greece

The situation of the energy services market in Greece during the project can be separated into the three distinct chronological phases: the energy services market in 2017, the energy services market in the years 2018 and 2019 and the energy services market as of 2020.

3.1.1 The situation of the energy services market in 2017

The year 2017 in Greece was characterized as the first year in which the country sustained a growth of Gross Domestic Product (GDP) after 8 years of recession (2009-2016) even though capital controls were still in force as of June 2015.

In order of importance, the energy services market in both the private and public sector was characterized by:

- Restricted access to financing by both clients and SME energy service providers (as corroborated by the 2017 QualitEE market survey – Deliverable 2.4)
- A considerable lack of trust in the quality of services provided by the energy service providers (as corroborated by the 2017 QualitEE market survey – Deliverable 2.4)
- Lack of knowledge of the energy service providers due to the complexity of the concepts
- Lack of interest by the large multinational ESCOs due to the relatively small budgets of the potential projects.

Furthermore, in the public sector, public authorities were hesitant to publish tenders for services with EPC contracts even though the possibility to do so was explicitly mentioned in the new Law 4412/2016 which described, in detail, the necessary procedures for the publication of tenders for the procurement of equipment, services and works. The main reason for this was that this was a completely new concept, deviating from their usual practices, and although Law 4412 foresees it, there were no official guidelines issued (i.e. circular or Ministerial Decree) to facilitate the process for the relevant authorities.

Regarding the energy service providers, a voluntary ESCO registry was set up in 2011 by the Ministry of Energy and Environment (Ministerial Decree 13280/2011). This registry categorized energy service providers into the following categories:

- Category A1 – Energy Service Providers that have provided or are currently providing energy services with EPCs with a total budget of at least € 300.000 in the last five years.
- Category A2 - Energy Service Providers that have provided or are currently providing energy services with a total budget of at least € 1.000.000 in the last five years. These need not be accompanied by an EPC contract.
- Category A3 – All the companies belonging to neither category A1 nor A2.
- Category B – Natural persons that offer energy services.

In order to be classified into one of the categories, the energy service providers are obliged to submit necessary documentation to prove both the technical content and the budget of the energy service provided. Although the Ministerial Decree specifically describes the minimum requirements of an EPC contract, there is no formal obligation for the energy service provider to submit this contract to the Ministry so that its compliance with the obligations can be evaluated.

According to the Ministerial Decree, the minimum requirements for an EPC contract are those mentioned in Article 16 of Law 3855/2010 which harmonized the Hellenic Law with European Directive 32/2006 on energy end-use efficiency and energy services. According to this Article, an EPC contract should contain information about and regulate the following:

1. The planning and supervision of the energy service being provided and the implementation of the project,
2. The methodology for the assessment of the energy and cost savings predicted,
3. The purchase, installation and operation of all the equipment and installations that improve the end-use energy performance,
4. The management, operation and maintenance of the related equipment and installations,
5. The total cost of the service, consisting of: the procurement and installation of equipment, its operation and maintenance, financing and the energy service providers' fee,
6. The procedure for the monitoring and verification of the energy savings achieved and
7. The procedure of payments

In 2017, the energy services market in Greece was extremely limited with only a handful of EPCs implemented. These mainly concerned small, indoor lighting energy efficiency projects with budgets < € 20.000. As a matter of fact, two of these were demonstration projects implemented in 2017 within the framework of the HORIZON 2020 EPC+ project.

One must note that there were several “Pay as You Save” projects implemented, particularly for indoor lighting (i.e. replacement of fluorescent luminaires with LED luminaires). However, these were not accompanied by an EPC contract and, therefore, offered no guarantee of energy savings.

In 2017, there were no companies registered in category A1 (i.e. with documented EPC projects), 23 registered companies in category A2, 19 registered companies in category A3 and 14 natural persons registered in category B.

The main reason why the Ministry of Energy and Environment decided to adopt these “lenient” registration prerequisites was that the energy services market in Greece is very small and they did not wish to throttle it at the outset with “strict” registration prerequisites. This would be something that would be done in future amendments of the Ministerial Decree as soon as the market started to grow.

3.1.2 The situation of the energy services market in 2018-2019

The years 2018-2019 were the first two consecutive years in which the country sustained a growth of Gross Domestic Product (GDP) following the 1st year of growth which arrested the 8

previous years of recession (2009-2016). Capital controls were still in force but partially relaxed compared to 2017.

Similarly, compared to 2017, the energy services market in both the private and public sector:

- Still had restricted access to financing for both clients and SME energy service providers although some financial institutions had started to consider relaxing these restrictions.
- The lack of trust in the quality of services provided by the energy service providers remained unchanged.
- The lack of knowledge of the energy service providers seems to have been alleviated mainly due to numerous training sessions and information workshops implemented in Greece within the framework of the European project.
- The lack of interest by large multinational ESCOs due to the relatively small budgets of potential projects also remained unchanged.

In the public sector, public authorities were still hesitant to publish tenders for services with EPC contracts as official guidelines to facilitate the relevant authorities had still not been issued.

Regarding the ESCO registry, a new Ministerial Decree was published in July 2018 (Ministerial Decree 176381/2018) by the Ministry of Energy and Environment superseding the previous one. Compared to the 2011 Ministerial Decree, the main differences were:

- The Categories of energy service providers have been modified as follows:
 - Category A – Energy Service Providers with EPC.
 - Category B – Energy Service Providers without EPC
- In order for energy service providers to be categorized in category A, they have to submit at least one EPC to the Ministry. This is evaluated and if, according to the evaluation criteria set in the previous Ministerial Decree, it is deemed sufficient, then the energy service provider is categorized as category A.
- Energy service providers are required to submit progress reports of their projects to the Ministry in the first three months of each year.
- In order to prove the finalization of a project, an energy service provider can provide official documentation of his choice.

The reason for updating the categories was that the previous classification scheme did not require the submission of an EPC and therefore there was no monitoring of compliance. By demanding the submission of an EPC the Ministry would be able to evaluate the actual compliance of the EPC. Furthermore, the budget thresholds for the previous classification scheme were deemed to be too strict for such a small market. It was therefore decided to split the energy service providers simply into those that offered energy services with documented EPC and those that offered energy services without EPC.

In 2018-2021, the energy services market in Greece remained relatively limited. However, mainly due to the QualitEE project in which three demonstration projects were implemented and due to the new Ministerial Decree, which required an EPC contract to be submitted, some very small indoor lighting projects (< 5.000 €) were implemented. Furthermore, several

municipal authorities were maturing ideas to implement street lighting projects with EPC. However, only 1-2 such project tenders were published.

At the beginning of 2019, there were actually only three companies registered in category A.

Concerning the prerequisites for registration in the ESCO registry, even though the new Ministerial Decree is somewhat stricter than the previous version, these can still be considered as “lenient”. The reasoning of the Ministry remains the same as in 2017 (i.e. they did not wish to throttle the energy service market with “strict” registration prerequisites for the energy service providers).

3.1.3 The situation of the energy services market in 2020

In September 2019, capital controls were completely removed in Greece.

Compared to 2017 and 2018 the energy services market outlook seems to be improving as access to financing from both the public sector (i.e. low-interest loans to municipal authorities and public authorities, subsidies etc.) and the private sector (i.e. financial institution increasing interest in energy efficiency projects) seems to be becoming more readily available. Moreover, the government is currently planning to introduce measures for the facilitation of EPC. However, lack of trust in energy service providers is still very evident.

In 2020, the energy services market in Greece seems to be more active. This is evident in both the increased number of EPC projects (even though the implemented projects concern budgets less than 10.000 €) and the number of ESCOs registered. More specifically, in January 2020 there were 12 companies registered in category A and 32 companies registered in category B.

3.1.4 Shortcomings of the current situation

The new Ministerial Decree has gone one step forward towards increasing trust in energy service providers in Greece. However, it still has the following shortcomings:

- The *ex-ante* evaluation criteria for the conformance of the EPC submitted by the companies wishing to register in category A of the registry are quite general and subject to interpretation by the evaluators. According to the evaluators it is often very difficult for them to evaluate an EPC according to these criteria.
- Even though the submission of both progress report and documentation of EPC projects is mentioned, there are no *ex-post* evaluation criteria available to the evaluators. Furthermore, the evaluation of these submitted documents is also not mentioned and it is therefore not clear whether this is a prerequisite for a company to be able to continue being registered.
- There is no publicly available detailed information about the EPC contracts implemented by the registered companies which would help a potential client to find out more about them and their range and type of activities. All that is available is the category and contact details of the companies.

3.2 Phases of quality assurance scheme procurement

3.2.1 Quality assessment criteria and compliance

The quality criteria presented below have been developed within the QualitEE project and are based on “preliminary quality criteria for energy efficiency services” developed for the Austrian market within the Transparense project.

This comprehensive set of technical, economic, communicational, and other criteria has been defined to be applied on energy efficiency services, with special focus on “Energy Performance Contracting” (EPC) and “Energy Supply Contracting” (ESC) in order to ensure minimum quality requirements which all services must comply with to be labelled as high-quality services.

The quality criteria selected have been object of discussion among stakeholders at both, national and European levels. Consequently, the feedback has been incorporated allowing us to present an extended and agreed set of criteria. These criteria are:

-  **QC1 Adequate analysis:** the analysis of an energy-consuming unit (building, industrial establishment, facility, etc.) with respect to possible energy savings including the identification of possible energy efficiency improvement (EEI) measures is often the first step in an EES. The quality of analysis will thus, also have an enormous impact on the overall quality of EES.
-  **QC2 Quality of implementation of technical energy efficiency improvement measures:** In many cases, the rendering of an EES is connected with the implementation of technical measures. A broad spectrum of quality standards can be met in practice while rendering services in this respect. QC2, therefore, stipulates a range of quality standards that must be complied with when implementing technical measures. In the process, compliance with such standards that regulate the implementation of technical measures is of paramount importance. Moreover, it must be ensured that the operator of the facility will be in a position to operate the newly installed facilities after the end of the project.
-  **QC3 Savings guarantee:** some EES come with the promise that savings of a specific size will be realized. Such promises – routinely known as savings guarantee – must meet specific requirements for them to truly be beneficial to the client.
-  **QC4 Verification of energy savings:** The identification and/or implementation of energy savings is at the center of EES. For this reason, the quality of an EES is also determined by the way that energy savings are verified. Energy savings cannot be measured directly but are always calculated. In simple terms, three approaches are differentiated:
 -  Verification based on measured energy consumption: even in places where measurement equipment is available for the purpose of recording energy consumption, energy saving is determined through the comparison of the current value with a reference consumption (frequently called a “baseline”). At the same time, factors impacting energy consumption that are not caused by EES must be “filtered out” (often referred to as an “adjustment process” e.g. for the impact of variations in weather conditions);
 -  Engineering calculation of energy-savings: usage of complex methods of calculation and simulation largely based on standards;
 -  Expert estimation: derivation from savings realized from similar and comparable cases.
-  **QC5 Value retention and maintenance:** some EES also cover services relating to the maintenance and repairs of newly installed or existing facilities. Quality of these services has a direct influence on the availability of the (energy) system and retention of its value. As

these factors ensure desired benefits and long-term sustainability of projects beyond the contract duration, they also influence the overall quality of the EES.

-  **QC6 Communication between the contractor and the client:** In addition to technical quality, the type and scope of communication between the EES provider and the client contributes to the quality of EES. EES providers assume only partial responsibilities from existing operating personnel. To avoid problems in the implementation of the EES the interfaces between contractual parties must be effectively managed through continuous and well-defined communication.
-  **QC7 Maintenance of users' comfort:** The execution of EES shall not lead to any impediment on the comfort of the user. In this context, users' comfort requirements can be assessed either through physical parameters (temperature, air quality, luminous intensity, etc.) or captured by collecting feedback via a comfort survey tool.
-  **QC 8 Information and motivation of users:** Since in most cases, users have a considerable impact on the energy consumption of an object and thus, also influence the success of EES, selected EES approaches entail actions for the information and motivation of users.
-  Taking into account the heterogeneity of user-information activities, QC 8 contains just a "minimum package". In real EES projects, however, it may be advisable to extend user-information activities beyond the minimum requirements as included in QC 8.
-  **QC9 Comprehensible contractual stipulations for the contracting of specific regulatory requirements:** several years of experience in contracting projects, have shown that their quality is not just of a technical and communicative nature but that the shaping of the Contract also contributes decisively to the quality of a project. The Contract must contain regulations for individual issues such as ownership transfer, handling of energy price risk, insurance or exit regulations, that will repeatedly lead to problems in practice, if they were not regulated.

3.3 Main features of the Quality Assurance Scheme

Following discussion between both the National Promotion Team and the National Discussion Platform it was decided that due to the immaturity of the energy services market in Greece:

- A quality assurance scheme for energy services is still premature. In order to not throttle the market with new schemes and requirements it is important to proceed slowly and the first step should be to introduce a new quality assurance scheme for the energy service providers.
- The market is still not ready for a private label. There is no interest for such a label from neither the clients nor from the energy service providers. Accredited certification bodies also expressed their reluctance to start activities for the introduction of a certification scheme for such a label as they deem the market to be too small for it to be of interest to them. Lastly, there is no credible and trustworthy organization willing to undertake the responsibility of such an endeavor. A national ESCO association would be the ideal candidate, but there is currently no such association in Greece.
- It was almost unanimously decided that the first step should be to provide the Ministry of Energy and Environment with a detailed and concrete proposal for the amendment of the current Ministerial Decree of the ESCO registry and to introduce the QualitEE evaluation technical criteria within. The Ministry officials welcomed the initiative and promised to consider the proposals made and pursue all the necessary actions needed.
- The labelling of energy services is something that could follow after further maturity of the market.

The proposed amendments to the Ministerial Decree are the following:

- The adoption of the all the 9 technical evaluation criteria of the QualitEE project for the *ex-ante* and *ex-post* evaluation of all EPC projects submitted to the Ministry of Energy and Environment for the ESCO registry. More specifically:
 - For the *ex-ante* evaluation of the EPC projects, all energy service providers shall submit signed copies of both the energy audit and EPC. The Ministry officials will use the QualitEE *ex-ante* criteria for their evaluation.
 - For the *ex-post* evaluation of the EPC projects, all energy service providers shall submit signed copies of annual progress reports, commissioning reports and completion reports. The Ministry officials will use the QualitEE *ex-post* criteria for their evaluation.
- The categorization of energy service providers should be modified. The proposed modifications are:
 - **Category A++:** The energy service providers that have EPC contracts and comply with all 9 technical criteria.
 - **Category A+:** The energy service providers that have EPC contracts and comply with 8 of the 9 technical criteria. 7 of the technical criteria (QC1-6, and QC9) are mandatory for registration in categories A and above. QC 8 and 9 are voluntary.

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- **Category A:** The energy service providers that have EPC contracts and comply with the mandatory technical criteria.
 - **Category B:** The energy service providers that do not have EPC contracts.
 - The ESCO registry should contain the following publicly available information for the EPC contracts submitted by each of the registered energy service providers:
 - Brief technical description of the project
 - The budget of the project
 - The percentage of energy savings
 - The type of funding
 - The duration of the EPC contract
 - Type of contract (i.e guaranteed performance, shared savings etc.)

3.4 Canvas analysis

3.4.1 Business Model Canvas Analysis

Table 1 - Canvas analysis

<ul style="list-style-type: none"> • KEY PARTNERS • EES providers: EPC providers, consultancy, supply contracting, operational contracting, etc. • Client: natural or legal entity interested in implementing EE measures 	<ul style="list-style-type: none"> • KEY ACTIVITIES • Through its quality assessment it defines if an energy service provides meets the prerequisites to register in the relevant category of the national ESCO registry, and is categorized according to the quality of its services 	<ul style="list-style-type: none"> • VALUE PROPOSITION • Both ex-ante and ex-post evaluation criteria adopted for the evaluation of energy service providers • Objective criteria established by an external international consortium • Transparency of type and quality of energy services provided by the energy service provider. 	<ul style="list-style-type: none"> • CUSTOMER RELATIONSHIP • There is only a transactional relationship. The Ministry evaluates the documentation submitted by the energy service provider, categorizes it in the relevant category and monitors its progress. 	<ul style="list-style-type: none"> • CUSTOMER SEGMENT • The registry is only for energy service providers.
<ul style="list-style-type: none"> • KEY RESOURCES • The existing ESCO registry will be modified. The officials of the Ministry will continue to be involved. 			<ul style="list-style-type: none"> • CHANNELS • ESCO registry website • Ministry officials contact details. 	
<ul style="list-style-type: none"> • COST STRUCTURE • The only costs incurred are the man-hours of the Ministry official working on the ESCO registry. 		<ul style="list-style-type: none"> • REVENUE STREAMS • No revenue foreseen. Registration in the ESCO registry is voluntary and free of cost. 		

3.4.2 Value proposition

Table 2 - Value proposition of QualitEE in Greece

PROVIDER OF THE EE SERVICE		CLIENT OF THE EE SERVICE	
<p>SERVICES</p> <ul style="list-style-type: none"> ✔ The energy service provider provides energy services, the quality of which are registered in an official national registry and continuously monitored by a national authority. ✔ 	<p>GAIN CREATORS</p> <ul style="list-style-type: none"> ✔ Improve image by being registered in a high-quality category of the ESCO registry. ✔ Provide information concerning the progress of EPC projects ✔ Help reduce energy costs ✔ Reduce impact on environment 	<p>GAINS</p> <ul style="list-style-type: none"> ✔ Savings are guaranteed ✔ Improve energy service quality ✔ Reduce energy and CO₂ consumption ✔ Minimize financial and technical risks: ✔ Increase profitability of the business 	<p>CUSTOMER JOB(S)</p> <ul style="list-style-type: none"> ✔ Run profitable business (reducing costs by maintaining operation equal) ✔ Have functioning operations: <ul style="list-style-type: none"> - “Out-source” non-core activities ✔ Improve energy efficiency in their business. ✔ Improve image by being more environment friendly
	<p>PAIN RELIEVERS</p> <ul style="list-style-type: none"> ✔ Minimize technical risks by following quality criteria. ✔ Reduce lack of trust of the clients. ✔ Disclose information about projects that is currently not available. 	<p>PAINS</p> <ul style="list-style-type: none"> ✔ Influence on core business ✔ Need for resources for non-core activities ✔ Lack of time and resources for business ✔ Upfront investment costs 	

4 IMPLEMENTATION STRATEGY

4.1 Business opportunities

The energy services market in Greece is still very small and restricted. However, compared to previous years its outlook seems to be improving as access to financing from both the public sector (i.e. low-interest loans to municipal authorities and public authorities, subsidies etc.) and the private sector (i.e. financial institution increasing interest in energy efficiency projects) seems to have become more readily available. Moreover, the government is currently planning to introduce measures for the facilitation of EPC.

Therefore, it seems that in 2020, the energy services market in Greece seems to be becoming more active. This is evident in both the increased number of EPC projects (even though the implemented projects concern budgets less than 10.000 €) and the number of ESCOs registered in the national ESCO registry. However, lack of trust in energy service providers is still very evident on behalf of potential clients.

The new Ministerial Decree published in 2018 has gone one step forward towards increasing trust in energy service providers in Greece. However, it still has several shortcomings. These are the following:

- The *ex-ante* evaluation criteria for the conformance of the EPC submitted by the companies wishing to register in category A of the registry are quite general and subject to interpretation by the evaluators. According to the evaluators it is often very difficult for them to evaluate an EPC according to these criteria.
- Even though the submission of both progress report and documentation of EPC projects is mentioned, there are no *ex-post* evaluation criteria available to the evaluators. Furthermore, the evaluation of these submitted documents is also not mentioned and it is therefore not clear whether this is a prerequisite for a company to be able to continue being registered.
- There is no publicly available detailed information about the EPC contracts implemented by the registered companies which would help a potential client to find out more about them and their range and type of activities. All that is available is the category and contact details of the companies.

Due to the immaturity of the energy services market in Greece:

- A quality assurance scheme for energy services is still deemed to be premature. In order to not throttle the market with new schemes and requirements it is important to proceed slowly and the first step should be to introduce a new quality assurance scheme for the energy service providers.
- The market is still not ready for a private label. There is neither interest from the clients for such a label neither from the energy service providers. Accredited certification bodies also expressed their reluctance to start activities for the introduction of a certification scheme for such a label as they deem the market to be too small for it to be of interest to them. Lastly but not least, there is no credible and trustworthy

organization willing to undertake the responsibility of such an endeavor. A National ESCO association would be the ideal candidate, but there is currently no such Association in Greece.

- It was almost unanimously decided that the first step should be to provide the Ministry of Energy and Environment with detailed and concrete proposal for the amendment of the current Ministerial Decree of the ESCO registry and to introduce the QualitEE evaluation technical criteria within. The Ministry officials welcome the initiative and promise to consider the proposals made and pursue all the necessary actions needed.

4.2 Potential partnerships

The Ministry of Energy and Environment is the main strategic partner of the scheme as it is responsible for the operation of the ESCO registry. As the amendment of the prerequisites for registration in the ESCO registry will undoubtedly increase the workload on the Ministry officials, it is up to the Ministry to make a decision concerning its future operation (e.g. by subcontracting work to another public organization).

4.3 Implementation strategy

The implementation strategy for the quality assurance scheme is the following:

- **Elaboration of Ministerial Decree amendment proposal by CRES** – Following internal discussions of the QualitEE NPT a draft amendment proposal of the existing Ministerial Decree was drafted in December 2019. This will be further revised and refined by CRES and the final proposal will be ready by the end of January 2020.
- **Submission of amendment proposal to Ministry of Energy and Environment** – Following the approval of the President and General of Director of CRES, the final proposal will be submitted to the Ministry by the end of February 2020.
- **Discussion with Ministry and preparation of necessary modifications** – Following the submission of the proposal, if requested, CRES will provide any necessary technical support to the Ministry for the preparation of the Ministerial Decree amendment. This is expected to last at least 6 months and, therefore, the final text is expected to be ready by September 2020.
- **Amendment of Ministerial Decree** – The publication of the Ministerial Decree is expected to be finalized by the end of 2020.

5 CONTINGENCY PLAN

5.1 Identification of potential risks

The main risks in the implementation of the business plan are the following:

- **Technical risk** – The main technical risk is that the “stricter” registration obligations will restrict the number of energy service providers that will be included in category A of the registry and this, in its turn, will restrict the energy services market. Furthermore, these “stricter” registration obligations may also discourage potential companies from entering the energy services market. However, without a doubt, the “stricter” registration obligation will ensure that the companies included in the registry provide energy service of a minimum quality. Furthermore, the risk of the energy services market being discredited by energy service providers providing energy services of a poor quality is greatly reduced with the new Registry obligations. Therefore, one can safely say that the advantages significantly outweigh the disadvantages.
- **Management risk** – The management risk is the highest risk for the successful implementation of the business plan. More specifically, it is highly likely that the Ministry will not be able to monitor the Registry as required. Therefore, if all the monitoring activities are not implemented then the “stricter” obligations imposed on the energy service providers will become redundant.
- **Financial risk** – There is no financial risk for the business plan as no funds are required.

Table 3 - Potential risks

Type of risk	Risk	Likelihood	Impact
Technical	A	Medium	Low
Management	B	High	High

5.2 Risk management

In the table below, the mitigation measures for risk management are displayed.

Table 4 - Risk management

Risk	Mitigation measure
A – Technical Risk	<p>In order for energy service providers to accept the stricter obligations for registration in the ESCO registry, both the Ministry and CRES will continuously plan information and training events for energy service providers.</p> <p>Furthermore, information campaigns are also planned to convince public authorities to adopt EPC in their Tender activities and to include obligations for potential contractors to be registered in category A and above of the ESCO registry. This will provide significant motivation for energy service providers.</p>

B – Management risk	As foreseen institutionally, CRES will provide technical support to the Ministry for the monitoring of the ESCO registry.
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6 CONCLUSIONS

The proposed quality assurance scheme can significantly impact the energy services market in Greece. The main positive impacts from its implementation are the following:

- The ESCO registry will certify that the energy service providers registered in it are able to provide energy services of a minimum threshold quality for each of the categories A and above.
- The quality of services provided by the providers registered in the ESCO registry will be monitored continuously and not only during registration.
- The public will be able to access updated information concerning the energy services with EPC that the energy service providers registered in the ESCO registry provide.

As a result of the aforementioned, it is expected that trust in the energy services market will increase and this will provide the necessary stimulus for both the private sector and public sector to start implementing more projects with EPC.

In parallel with the above, solutions to the restricted access to financing for EPC projects should also be sought in order to completely liberate the market and to witness a significant stimulation of the market.