Capacity Building: Industrial Energy Audit Analysis for Bankable Projects
(Component II: Proposals for Secondary Legislation)
CWP.05.AM (AHEF.90.AM)

INOGATE Technical Secretariat and Integrated Programme in Support of the Baku Initiative and the Eastern Partnership Energy Goals

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</table>
## Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviations</td>
<td>2</td>
</tr>
<tr>
<td>1. PART 1 – EUROPEAN COMMISSION</td>
<td>3</td>
</tr>
<tr>
<td>1.1. Background</td>
<td>3</td>
</tr>
<tr>
<td>1.2. Essence of the Activity</td>
<td>3</td>
</tr>
<tr>
<td>1.3. Key Findings</td>
<td>4</td>
</tr>
<tr>
<td>1.4. Ownership and Benefits of the Activity</td>
<td>4</td>
</tr>
<tr>
<td>1.5. Recommendations</td>
<td>5</td>
</tr>
<tr>
<td>1.6. Challenges Faced</td>
<td>5</td>
</tr>
<tr>
<td>2. PART 2 – BENEFICIARY</td>
<td>6</td>
</tr>
<tr>
<td>2.1. Executive Summary</td>
<td>6</td>
</tr>
<tr>
<td>2.2. Introduction</td>
<td>7</td>
</tr>
<tr>
<td>2.3. Energy Services in Armenia</td>
<td>8</td>
</tr>
<tr>
<td>2.4. Legal and Regulatory best practice for energy services in the European Union</td>
<td>9</td>
</tr>
<tr>
<td>2.5. Recommendations</td>
<td>12</td>
</tr>
<tr>
<td>ANNEX 1: Text of Draft Decree on the Promotion of Energy Services in Armenia</td>
<td>16</td>
</tr>
</tbody>
</table>
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
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<tr>
<td>A3e</td>
<td>The Spanish Association of Energy Efficiency Companies</td>
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<td>AHEF</td>
<td>Ad hoc Expert Facility</td>
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<td>AMI</td>
<td>The Spanish Association of Integral Maintenance and Energy Service Companies</td>
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<td>ANESE</td>
<td>The Spanish National Association of Energy Service Companies</td>
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<tr>
<td>BFEE</td>
<td>The German Federal Office for Energy Efficiency</td>
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<tr>
<td>EOI</td>
<td>The Spanish School of Industrial Organisation</td>
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<tr>
<td>EPC</td>
<td>Energy Performance Contract / Contracting</td>
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<td>ESCO</td>
<td>Energy Service Company</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>IDAE</td>
<td>The Spanish Institute for Energy Saving and Diversification</td>
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<td>IFI</td>
<td>International Finance Institution</td>
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<td>ITS</td>
<td>INOGATE Technical Secretariat</td>
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<td>LFI</td>
<td>Local Financial Institution</td>
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<td>MoENR</td>
<td>The Ministry of Energy and Natural Resources</td>
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<tr>
<td>PAREER</td>
<td>The Spanish Aid programme on Energy Renovation of Existing Buildings in the residential sector</td>
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<tr>
<td>PC</td>
<td>Partner Country (INOGATE Partner Country)</td>
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<tr>
<td>R2E2</td>
<td>The Armenian Renewable Resources and Energy Efficiency Fund</td>
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<tr>
<td>SEAI</td>
<td>The Irish Sustainable Energy Authority</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Sized Company</td>
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<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>ToR</td>
<td>Terms of Reference</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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1. PART 1 – EUROPEAN COMMISSION

1.1. Background

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<tr>
<th>Assignment Title:</th>
<th>Capacity Building: Industrial Energy Audit Analysis for Bankable Projects (Component II: Proposals for Secondary Legislation), CWP.05.AM (AHEF.90.AM)</th>
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<tr>
<td>Beneficiary Organisation:</td>
<td>Association of Energy Service Companies for supporting the development of the energy sector in Armenia” Alliance of legal entities (Association of ESCO)</td>
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<td>Developed draft legislation act, presentations and this final report</td>
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1.2. Essence of the Activity

The Technical Assistance (TA) assignment on Industrial Energy Audit Analysis for Bankable Projects was implemented during the period February – May 2015. The TA was requested by the Armenian Association of ESCO and included two components: 1) Workshops on SE Project Financing and 2) Proposals for Secondary Legislation.

While this report relates only to the second component of the TA, it is important to view both components of this assistance as a fully integrated and unified intervention. The technical assistance provided by the ITS experts was carefully designed to meet the overall project objective through a two-pronged approach, that taken together would both remove legislative and administrative barriers to ESCO development while simultaneously increasing the capacity of ESCO personnel to implement projects that would flow more freely as a result of the removal of barriers.

The second component of the TA aimed to provide a contribution to the improvement of energy efficiency in Armenia through the development of ESCO Market and further approximation of national legislative framework with that of the EU. The specific goals included the development of recommendations for improving ESCO legal and regulatory framework conditions as well as access to project financing. As a result of this activity, the Ministry of Energy and Natural Resources (MoENR) used ITS recommendations for the development of draft Regulation on the promotion of energy services in Armenia that is currently under discussion with interested stakeholders.

As an additional activities to support the development of ESCO market in Armenia, ITS conducted a regional combined event on lessons learned on Energy Performance Contracts (EPC), EU experience and applicability in the Partner Countries that took place in Stockholm, Sweden, between 9 and 11 February 2016. The regional event showed the implementation of the EPC in practice and provided participants with a set of effective tools on how to improve efficiency in buildings and promote viable energy service markets in their countries.

The ITS fully achieved the overall and specific objectives of the TA assignment (see section 2.2) that were related to the development of secondary legislation for the efficient promotion of ESCO market and the approximation of Armenia with EU legislation.
1.3. Key Findings

1. There is presently no Energy Service Companies (ESCOs) operating in Armenia that specialise in a conventional range of energy services as would be commonly understood in the EU. The existing Armenian ESCOs provide only a limited form of energy service and typically do not deliver such services as a main business but rather as an additional service to their core business, for example as an ancillary service to a company’s construction business.

2. The existing legislative framework in Armenia does not make reference to energy services and/or ESCOs and does not provide for guidance that would promote a better understanding and awareness on the energy services concept and their deployment in a functioning EPC market.

3. There is no governmental authority responsible for the development of EE in Armenia. At the same time, the Armenian Renewable Resources and Energy Efficiency Fund (R2E2) functions as the implementing agency responsible for achieving a decrease of greenhouse gas emissions by facilitating the implementation of energy efficiency and renewable energy investments in the public sector.

4. There are no governmental financial instruments that are dedicated to providing specific support to the development of energy services in Armenia. At the same time, the R2E2 Fund has used the existing funding instruments to support public entities with the take-up of energy services in the context of energy efficiency related investment.

1.4. Ownership and Benefits of the Activity

The main benefits of the activity for the Beneficiaries are:

1. The Armenian experts and decision makers improved their understanding on the promotion of ESCO market in accordance with the EU best practices.

2. The draft legislation acts developed within this assignment will allow Armenian decision makers to lay the foundation of sustainable growth and development of ESCO market in the future.

The Beneficiaries took ownership in the following way:

1. The Beneficiary and local stakeholders provided ITS with all requested information and necessary support during the preparation and implementation stages.

2. The recommendations and draft Decree (Annex 1) developed within this assignment were endorsed by ESCO Association and submitted to the Ministry of Energy and Natural Resources.

3. The Ministry of Energy and Natural Resources used ITS recommendations for the development of draft Regulation on the promotion of energy services in Armenia that is currently under discussion with interested stakeholders.
1.5. Recommendations

Taking into account the lack of legislation and awareness on ESCO and EPC in Armenia, the three complementary key measures were recommended as a foundation for supporting the development of energy services and ESCOs in Armenia:

1. The adoption of legislation dedicated at promoting the development of energy services and ESCOs;
2. The removal of legal and regulatory barriers impeding the take-up of energy services and ESCOs; and
3. The introduction dedicated financial support instruments for energy services and ESCOs.

1.6. Challenges Faced

The ITS experts had an efficient cooperation with the beneficiary, the Association of ESCO, and did not face any challenges during the preparation and the implementation of the TA assignment.

Table 1. Impact Matrix

<table>
<thead>
<tr>
<th>Impact Area</th>
<th>Developments</th>
<th>2012 (%)*</th>
<th>Feb 2016 (%)*</th>
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<tbody>
<tr>
<td>Policy</td>
<td>Facilitation of ESCO market and implementation of cost-effective energy efficiency measures</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>Regulation</td>
<td>Support of the development and approval of ESCO Regulation</td>
<td>10%</td>
<td>50%</td>
</tr>
<tr>
<td>Technology</td>
<td>Support of the development and utilisation of modern EE technologies, primarily in buildings</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>Environment</td>
<td>ESCO Model can provide guaranteed energy savings that might not be achieved under the normal contract conditions</td>
<td>5%</td>
<td>35%</td>
</tr>
<tr>
<td>Economics</td>
<td>Indicators of decreased energy dependency</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>Social</td>
<td>Better indoor climate and living conditions for citizens.</td>
<td>5%</td>
<td>45%</td>
</tr>
</tbody>
</table>

* The impact is estimated based on the experts’ opinion under the current circumstances and can be changed over time
2. PART 2 – BENEFICIARY

2.1 Executive Summary

This report summarises the work carried out under the "legal component" of AHEF.90.AM, “Capacity Building: Industrial Energy Audit Analysis for Bankable Projects” implemented by the EU funded INOGATE Technical Secretariat (ITS) project. The legal component generally focussed on making recommendations for improving legal and regulatory framework conditions for ESCOs and energy services in Armenia.

While this report relates only to the legal component of CWP.05.AM (AHEF.90.AM), it is nevertheless important to view both components of this assistance as a fully integrated and unified intervention. This is one project with two mutually reinforcing sets of activities. The technical assistance provided by the ITS experts was carefully designed to meet the overall project objective through a two-pronged approach, which taken together would both remove legislative and administrative barriers to ESCO development while simultaneously increasing the capacity of ESCO personnel to implement projects that therefore would flow more freely as a result. The removal of barriers without proper capacity building and vice versa would have been unlikely to yield the desired results. The combined results of these two project aspects are however, far more likely to successfully delivery the project objectives.

The body of this Report is presented in the following chapters:

Section 2.2 provides background information on the scope of work, missions, meetings and activities under this assignment.

Chapter 2.3 analyses the present framework conditions for energy services in Armenia in order to determine the scope of further legislation that may be required in order to support the further development of the energy services market in Armenia.

Chapter 2.4 presents the legal framework conditions in the European Union and some of its Member States as best practice in the field of legislation aiming at promoting the development of national energy services markets.

Chapter 2.5 presents three complementary key measures recommended to be adopted in order to promote the development of the energy services and ESCOs in Armenia.

As a result of this assistance, the Ministry of Energy and Natural Resources of Armenia has already used ITS recommendations and draft Decree (Annex 1) for the development of draft Regulation on the promotion of energy services that is currently under discussion with interested stakeholders. A mid-term impact of this work will be the adoption and implementation of this Draft Regulation.
2.2 Introduction

The assignment was carried out in compliance with the application for technical assistance AHEF.90.AM, "Capacity Building: Industrial Energy Audit Analysis for Bankable Projects". It was implemented by the EU funded INOGATE Technical Secretariat (ITS) project during the period February to May 2015.

The scope of work of the legal component of the assignment according to the Terms of Reference (ToR)\(^1\) included the following tasks:

1. Reviewing the current regulatory and investment promotion framework in relation to energy services and ESCOs in Armenia, including meetings with stakeholders;
2. Making recommendations for improving legal and regulatory framework conditions for ESCOs and energy services in Armenia;
3. Making recommendations for improving access to project financing for ESCOs and other energy service providers;
4. Proposing a draft section on energy services, to be included in the Decree on energy efficiency that the Ministry of Energy intends to adopt under the new Renewable Energy and Energy Efficiency Law that has already been presented to the Armenian Parliament and to discuss the proposal with the Ministry of Energy and Natural Resources, the beneficiary and stakeholders during the second mission.

All tasks under the legal component of the AHEF.90.AM assignment have been fully and successfully implemented. The assignment started with a fact-finding mission to Yerevan in February 2015. The mission enabled the expert to familiarise himself with the existing legal framework conditions for energy services and ESCOs in Armenia and furthermore, to clarify the envisaged scope of work to be carried out subsequently. In addition, the expert attended the workshop "Industrial Energy Audit Analysis for Bankable Projects" also held under this assignment and provided clarifications on bankability related legal issues discussed during the course of the workshop.

During a second mission to Yerevan in May 2015, the recommendations on legal measures to improve the conditions for energy services and ESCOs in Armenia were presented and discussed with a number of key stakeholders. Firstly, with the Ministry of Energy and Natural Resources and also with a wider range of private and public sector stakeholders who were participating in the two-day workshop on bankable SE and EE projects that was organised as a complementary activity under the same assignment.

\(^1\) The Terms of Reference for the Senior Energy Legal Expert were complemented by a Memorandum agreed upon during the first mission of the expert, which extended the Senior Energy Legal Expert’s scope of work.
2.3 Energy Services in Armenia

2.3.1 General Framework Conditions
Based on discussions with public and private stakeholders during the course of the first mission to Armenia and a review of existing legislation, it can be generally concluded that the market for energy services in Armenia is not yet mature. In this respect, despite some promotional efforts, the present understanding and experience of the energy services concept is quite low. There is little awareness of its potential benefits in terms of energy savings nor of the relevant business models such as energy performance contracting (EPC) and similar types of contract. There are presently no ESCO companies operating in Armenia that specialise in a conventional range of energy services as would be commonly understood in the EU. Energy Service companies as do exist in Armenia presently provide only a limited form of energy service and typically do not deliver such services as a main business but rather as an additional service to their core business, for example as an ancillary service to a company’s construction business.

2.3.2 Legal Framework Conditions
The existing legal framework that is relevant to energy services in Armenia confirms the general situation as described above. The key body of legislation relevant to energy efficiency in Armenia is comprised of the following Acts:


While the Energy Law establishes the general legal framework conditions that govern the functioning of the energy sector in Armenia, the Law on Energy Saving and Renewable Energy establishes the specific principles for state policy and development instruments in the field of renewable energy and energy efficiency. In the field of energy efficiency, the key instrument envisaged by the law is the promotion of energy audits. Beyond this the law foresees some general promotional measures such as the dissemination of information on energy efficiency and inclusion of energy efficiency as a topic in the national curricula at different educational levels. However, existing legislation does not make reference to energy services and/or ESCOs and does not provide for guidance that would promote a better understanding and awareness on the energy services concept and their deployment in a functioning EPC market.

2.3.3 Institutional Framework
The key entities relevant to energy services and ESCOs in Armenia are the Ministry of Energy and Natural Resources, the Association of Energy Service Companies of Armenia, and the Armenian Renewable Resources and Energy Efficiency Fund (R2E2) that was established by the Government of Armenia in 2005. Since then it has functioned as the implementing agency responsible for achieving a decrease of greenhouse gas emissions by facilitating the implementation of energy efficiency and renewable energy investments in the public sector.

2.3.4 Financial support instruments
To date there are no financial instruments that are dedicated to providing specific support to the development of energy services and/or ESCOs in Armenia. The energy efficiency support instruments
that do currently exist in Armenia, are generic in nature and do not provide specific support for energy services and/or ESCOs. Despite this situation, some financial support from existing funds has been dedicated to the promotion of energy services and ESCOs. In this respect, the R2E2 Fund has used the existing funding instruments to support public entities with the take-up of energy services in the context of energy efficiency related investment. This has involved some rehabilitation projects that were based on simplified performance contracts and which shifted some performance risks to private construction firms/contractors. Under these contracts, firms were selected based on the net present value of the projects that they proposed, and a portion of their final payment was based on a commissioning test.

2.4 Legal and Regulatory best practice for energy services in the European Union

2.4.1 Energy Efficiency Directive 2012/27/EU

The key legislation relevant to promoting the development of energy services and ESCOs at the EU level is the Energy Efficiency Directive (Directive 2012/27/EU). This Directive establishes a set of measures, including measures related to energy services, to help the EU reach its 20% energy efficiency target by 2020. Amongst other topics, the Directive aims to promote the development of the energy services markets in the Member States.

The Directive defines the term energy service as a "...physical benefit, utility or good derived from a combination of energy with energy-efficient technology or with an action that may include necessary operations, maintenance and control, which is delivered on the basis of a contract and results in a verifiable and measurable or estimable energy efficiency improvement or primary energy savings".

The specific measures in the Directive whose aim is to promote the development of energy services markets in the Member States are contained in Article 18. In this respect, the Directive identifies five key measures that must be implemented by all Member States. These are:

- Disseminating information on available energy service contracts and financial instruments and incentives;
- Supporting the public sector in taking up energy service offers, in particular for building refurbishment by providing model contracts for energy performance contracting; a list of

2 Existing support instruments in the field of energy efficiency in Armenia in particular include:
- The EBRD Armenia Sustainable Energy Financing Facility supporting private enterprises’ access to energy efficiency investment funds through a credit line to local commercial banks with a total of US$ 20m
- The World Bank supporting with energy efficiency improvements in public and social facilities (e.g. schools, kindergartens, hospitals, street lighting) and further improvement of the legal and regulatory environment for energy efficiency with US$ 10m
- UNDP supporting with the development of building codes with energy efficiency requirements, control, testing and certification of energy efficiency of materials and awareness raising and piloting of integrated building design with US$ 3m
minimum issues to be addressed by energy performance contracts is included in the Annex of the Directive;

- Making publicly available and regularly updating a list of available energy service providers who are qualified and their qualifications;
- Removing regulatory and non-regulatory barriers that impede the uptake of energy performance contracting to the degree necessary; and
- Reviewing the current and future development of the energy services market (in the context of National Energy Efficiency Action Plans to be periodically presented by the Member States to the Commission).

2.4.2 Examples of Legal Framework Conditions for Energy Services in EU Member States

This section of the Report provides some examples of measures that EU Member States have adopted in order to promote the development of energy services markets in the respective Member States in compliance with European legislation in the field of energy services. It will serve both as an illustration as to how the Directive has been implemented in the Member States and therefore as a guide to possible ways in which its fundamental aspects could be incorporated into Armenian legislation.

Germany

In Germany energy services are governed by the Law on energy services and other energy efficiency measures (EDL-G) whose objective is the further improvement in energy efficiency in general and the development of the energy services market in Germany. As a general principle of the Law, the public sector is expected to fulfil an exemplary role in respect of improving energy efficiency. To this end the Federal Government, the federal states and the municipalities are each expected to set a good example regarding the utilisation of energy services (and other energy efficiency measures). As regards energy services, the Law designates the Federal Office for Energy Efficiency (BfEE) as the central authority to implement measures aimed at the further development of the German energy services market. The BfEE’s enabling measures in this respect include:

- Market observation, market evaluation and market activation: the BfEE works on proposals for meeting the prerequisites for further development and promotion of the market for energy services as well as proposals for overcoming existing market constraints by surveying, monitoring and analysing the market in each of its various segments;
- Maintenance of an energy service providers’ database: providers of energy services can be registered on an electronic database of energy service providers that is maintained by the BfEE and accessible by all citizens. The main objective of this database, which is based on the principles of voluntary participation and self-disclosure and is free of charge, is increasing market transparency for the consumer and thus promotion and further development of the market;
- Notification of the public and market participants: the BfEE informs the public about the measures that the public sector takes in respect of energy efficiency, including energy services, in order to fulfil its exemplary role. In this respect it informs market participants
about existing mechanisms and the established regulatory framework and regularly publishes reports and makes available model contracts on financial instruments, such as energy performance contracting (EPC).

Ireland

In general, the market for Energy Services Companies (ESCOs) in Ireland is not yet fully developed. In order to promote the energy services market and access for SMEs to this market and comply with the EED the Irish government has transposed the Directive via the 2014 Energy Efficiency Regulations. The Regulations designate the Irish Sustainable Energy Authority (SEAI) as the central authority for measures aimed at further developing the Irish energy services market. In this respect the SEIA is responsible for the following promotional measures:

- Disseminating clear and easily accessible information on available energy service contracts and clauses that should be included in such contracts and on financial instruments, incentives, grants and loans to support energy efficiency service projects;
- Encouraging the development of a quality labelling system for energy services;
- Making publicly available and regularly updating a list of available qualified or certified energy services providers along with their relevant qualifications or certifications;
- Supporting the public sector in taking up energy service offers, in particular for building refurbishment, or by providing model contracts for EPC, providing information on best practices for energy performance contracting. The SEIA also monitors the development of the energy services market and advises the Government if it detects regulatory and non-regulatory barriers that impede the uptake of EPC and other energy efficiency service models. The SEAI has also made publicly available a detailed and comprehensive guide on EPC;
- Undertaking a regular qualitative review regarding the current and future development of the energy services market.

Spain

In Spain, the Spanish National Institute for Energy Diversification and Saving (IDAE) has been tasked by the Government to promote the further development of energy services. Its principal activities include:

- The dissemination of information on energy services: IDAE disseminates information on energy services via a dedicated section of its website. Disseminated information includes general information on energy services, information on financial instruments, incentives,
subsidiaries and loans to support projects undertaken by energy service companies, links to the three existing national associations of energy service companies (Association of Integral Maintenance and Energy Service Companies (AMI), National Association of Energy Service Companies (ANESE) and Association of Energy Efficiency Companies (A3e)) and information on an action plan for the training of energy service companies as part of the collaboration agreement between the IDAE and the School of Industrial Organisation (EOI);

- Maintaining a list of energy service providers: in order to raise the awareness for energy services and energy service companies, IDAE has established and maintains a database of energy service companies which contains information on these companies (their contact information, services provided and geographic coverage area). Presently this list of energy service providers contains information on a total of 968 companies;

- Publishing and promoting the models of energy service agreements drafted in collaboration with AMI and the Spanish Federation of Municipalities and Provinces, which were used in public competitions involving the different administrations. Working groups have since been established which continuously improve these documents, the models for which are publicly available on the IDAE website.

In addition to the above listed measures some economic support instruments also exist that contribute to the development of energy services in Spain and that are open to energy service companies. An example is the JESSICA Holding Fund/FIDAE (Energy Diversification and Saving Investment Fund) with a total budget of € 122 million for financing sustainable urban development projects which improve energy efficiency, use renewable energy sources and are implemented by energy service companies or other private enterprises. Another is example is the Aid Programme for the Energy Renovation of Existing Buildings in the residential sector (PAREER) with a budget of €125 million that promotes comprehensive measures to improve energy efficiency and promote the use of renewable energies in the existing building stock and that may be carried out through energy service companies.

2.5 Recommendations

As outlined in the previous section, despite some promotional efforts, the present understanding and experience of the energy services concept in Armenia is quite low. There is little awareness of its potential benefits neither in terms of energy savings nor of the relevant business models such as energy performance contracting (EPC) and similar contract types. Furthermore, there is no existing dedicated legislation or financial support instruments promoting the development of energy services in Armenia. In addition the existing legal framework has to date not been reviewed and aligned with a view to its adequacy for the development energy services and EPC, and therefore potentially existing legal and regulatory barriers have not been eliminated.

In view of this situation, the three complementary key measures presented in the following section of this Report are recommended as a foundation for supporting the development of energy services and ESCOs in Armenia. The complementary measures are:

- The adoption of legislation dedicated at promoting the development of energy services and ESCOs;
The removal of legal and regulatory barriers impeding the take-up of energy services and ESCOs; and
The introduction dedicated financial support instruments for energy services and ESCOs.

The following section of this Report elaborates each measure in detail and are accompanied by the text of a draft Decree (in Annex 1) which, when implemented will provide the necessary foundation for a successful and functioning energy service market in Armenia.

2.5.1 Recommended Measure 1: the adoption of legislation dedicated at promoting the development of energy services and ESCOs

As a first promotional measure it is recommended that a Draft Decree that aims to support the development of the energy services market and ESCOs in Armenia is adopted. This Decree should be adopted together with the Renewable Energy and Energy Efficiency Law that is currently under discussion in the Armenian Parliament.

The full text of the proposed Decree is presented in Annex 1 to this report. Generally the proposed Decree aims to support the development of the energy services market and ESCOs in Armenia by:

- Promoting awareness and better understanding for energy services amongst public and private stakeholders, in particular regarding its meaning and key instruments (energy performance contracting), existing service providers and the available fiscal and financial instruments;
- Creating a knowledge base that public and private stakeholders can consult when engaging energy services;
- Providing the groundwork for further developing legislation/regulation towards greater sophistication and full maturity; and
- Attributing the implementation of the tasks foreseen in the Decree to promote energy services in Armenia to a single national entity.

To this end the Decree proposes the following five concrete measures:

1. Attributing the implementation of the tasks foreseen in the Decree to promote energy services in Armenia to the R2E2 Fund: the R2E2 Fund shall be designated as the national legal entity with overall responsibility for implementing the measures foreseen in the Decree in relation with the promotion of the energy services market in Armenia. The R2E2 Fund possesses the required capacity and technical skills to assume the responsibility and execute the implementation of the proposed promotional measures. In this regard, the R2E2 Fund also possesses considerable expertise and high credibility in matters of energy efficiency in general, including energy service related matters (national champion). Furthermore, it has sufficient representation from relevant ministries and different branches of government to have credibility and influence throughout all sectors of economic activity in Armenia. To this end its board includes members of the executive branch of government (including Deputy Ministers or Ministers) and broad cross-sectoral representation from relevant industry. The R2E2 Fund thus has sufficient high-level representation and backing (including from IFIs) to fully and successfully assume the role of national legal entity.
2. Disseminating information on energy services: the R2E2 Fund shall disseminate information on energy services to the public. Disseminated information shall be clear and accessible and include information on common types of energy services such as energy performance contracting, energy management, monitoring and evaluation of savings and information on available financial instruments, incentives, grants and loans to support the development of energy services and other existing financial support instruments.

3. Making available and maintaining an open list of energy service providers: The R2E2 Fund shall make publicly available and keep updated an open list of qualified energy service providers. Interested entities shall be included in the list of energy service providers upon request provided they are sufficiently qualified. For an interim period of three years interested entities shall be regarded as sufficiently qualified if they provide evidence that they have delivered at least five energy services or other energy efficiency improvement measures in a final customer’s facility or premises during the last three years.Within 24 months the Ministry of Energy and Natural Resources of the Republic of Armenia, shall adopt a set of clear, transparent, non-discriminatory and adequate qualification criteria that interested applicants are required to fulfil in order to be included in the list of energy service providers.

4. Supporting public authorities to assume an exemplary role in the take-up of energy services: the decree emphasises that public bodies shall assume an exemplary role in the take up of energy services. In this respect public bodies shall prioritise energy performance contracting over other available options in the tendering of relevant service contracts. The R2E2 Fund shall support this measure by disseminating information on best practices in energy performance contracting to relevant public and private stakeholders, by making available standard terms and conditions for energy performance contracting that shall at the least include the items listed in Annex I of the proposed Decree and by making available an energy performance contracting guide.

5. Monitoring and evaluating the functioning of the energy service market and making proposals for its improvement: in order to ensure that the energy service market in Armenia develops progressively towards full maturity, the proposed Decree obliges the Ministry of Energy and Natural Resources to regularly monitor, evaluate and report the progress made on the development of the energy services market to the public in a regular progress report. The progress report shall describe any significant developments and achievements related to the functioning of the energy services market, measures taken under the proposed Decree and legal and regulatory developments and proposals, including the removal of existing market impediments and proposals for new legal or regulatory proposals. In addition the R2E2 Fund shall assist the Ministry of Energy and Natural Resources with monitoring and evaluating the functioning of the energy services market and preparing proposals to improve the existing conditions as and when required. Such proposals may include recommendations for legal and regulatory measures to remove current regulatory and non-regulatory barriers that are found to impede the take-up of energy services and for any new or additional measures required to further strengthen the functioning of the energy service market. For this purpose the R2E2 Fund shall reports the findings regarding its monitoring and evaluation
brief and its proposals for improvements to the Ministry of Energy and Natural Resources in a detailed and systematic manner on an annual basis.

2.5.2 Recommended Measure 2: removal of legal and regulatory barriers impeding the take-up of energy services

In addition to the adoption of promotional legislation, existing barriers in the legal and regulatory framework relevant to the development of energy services and ESCOs in Armenia should be identified and removed. Existing legislation would in this respect need to be reviewed and aligned to the degree required, for example with a view to permitting public entities to:

- Engage in EPC type contracts permitting payment for the energy services from achieved cost reductions achieved over a longer period of time;
- Retain achieved energy savings from energy services projects;
- Procure and prioritise EPC (or similar energy service agreements) for energy efficiency measures in public buildings.

2.5.3 Recommended Measure 3: introducing dedicated financial support instruments for energy services and ESCOs

As previously mentioned in this Report, a series of IFI sponsored financial support instruments currently exist in Armenia that support activities in the field of energy efficiency. However none of them provides dedicated and specific support to energy services and ESCOs. Given the crucial importance of financial support for take-up of energy services and ESCOs it is therefore recommended to discuss with IFIs the possibility of designing specific financial support instruments promoting the up-take of energy services and ESCOs in Armenia. This could be achieved for example, by reserving a certain share of existing funds or by introducing new funds dedicated exclusively to the promotion of such services.
ANNEX 1: Text of Draft Decree on the Promotion of Energy Services in Armenia

Based on Article XXX of Law no XXX dated XXX (Official Gazette No. XXX, pages XXX) the Government of Armenia hereby adopts the following Decree:

**DECREE ON THE PROMOTION OF ENERGY SERVICES**

**Article 1**

**Purpose of the Decree**

The purpose of the Decree on the promotion of energy services is to establish a legal framework that promotes the development and deployment of the energy services market thereby contributing to the achievement of existing national energy saving targets.

**Article 2**

**Definitions**

For the purposes of this Decree, terms shall have the following meanings:

"energy service" shall mean the physical benefit, utility or good derived from a combination of energy with energy-efficient technology or with action, which may include the operations, maintenance and control necessary to deliver the service, which is delivered on the basis of a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement of primary energy savings;

“energy service provider” shall mean a natural or legal person who delivers energy services or other energy efficiency improvement measures at a final customers facility or premises;

“energy performance contract” shall mean a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion such as financial savings;

“final customer” shall mean a natural or legal person who purchases energy for own end use;

“policy measure” shall mean a legal, regulatory, financial, fiscal voluntary or information provision instrument formally established and implemented to create a supportive framework, requirement or incentive for market actors to provide and purchase energy services;

“R2E2 Fund” shall mean the Armenia Renewable Resources and Energy Efficiency Fund.
Article 3

Responsible Legal Entity

1. The R2E2 Fund shall be the legal entity to implement the measures under the present Decree.

2. The Ministry of Energy shall ensure that the R2E2 Fund has available sufficient economic, human and technical resources to implement the measures within its responsibility under the present Decree.

Article 4

General Responsibilities of Responsible Legal Entity

The R2E2 Fund shall promote the development of the energy services market by:

1. Disseminating of information on energy services to the public;
2. Supporting the public sector in taking up energy service offers;
3. Making available and maintaining a list of energy service providers;
4. Assisting the Ministry of Energy and Natural Resources in monitoring and evaluating the functioning of the energy service market and making proposals for its improvement as envisaged under Article 9 of the present Decree.

Article 5

Dissemination of information energy services to the public

Information on energy services disseminated to the public shall be clear and accessible and include:

1. Information on common types of energy services such as energy performance contracts and business models, energy analysis and audits, energy management, monitoring and evaluation of savings and other common types of energy services;
2. Information on financial instruments, incentives, grants and loans to support the development of energy services and other existing financial support instruments;

Article 6

List of Energy Service Providers

1. The R2E2 Fund shall make publicly available and keep updated an open list of qualified energy service providers.
2. Interested entities shall be included in the list of energy service providers upon request provided they are sufficiently qualified.
3. For an interim period of two years following the entry into force of the present Decree, interested entities shall be regarded as sufficiently qualified if they provide evidence that they have delivered at least five energy services or other energy efficiency improvement measures in a final customer's facility or premises in the last three years.
4. The R2E2 Fund shall carry out random checks in order to verify the veracity of the information provided by registered service providers. Service providers who have provided false information shall be deleted from the list.
5. Within 24 months from the date of entry into force of the present decree the Ministry of Energy and Natural Resources shall develop and adopt a set of clear, transparent, non-discriminatory and adequate qualification criteria that interested applicants need to fulfil in order to be inserted in the list of energy service providers.

6. The list of energy service providers shall be readily accessible to the public by internet and shall be free of charge.

7. The qualification criteria for inclusion of energy service providers shall be reviewed and modified as required on a six monthly basis.

8. The R2E2 Fund shall assist the Ministry of Energy and Natural Resources with a definition and review of the qualification criteria.

**Article 7**

**Support to Public Sector in take-up of energy service offers**

The take-up of energy service offers in the public sector shall be supported by:

1. Disseminating information on best practices for energy performance contracts;
2. Preparing standard terms and conditions for energy performance contracts which shall at the least include the items listed in Annex I of the present Decree;
3. Preparing an energy performance contract guide.

**Article 8**

**Exemplary Role of Public Bodies**

1. Public bodies shall have an exemplary role in the field of energy services.
2. When tendering service contracts with significant energy content, public bodies shall prioritise the possibility of concluding energy performance contracts that provide long-term energy savings whenever admissible and economically justified.
3. Public bodies shall give notice of any energy performance contract concluded to R2E2 Fund.

**Article 9**

**Progress Monitoring and Reporting**

1. The Ministry of Energy and Natural Resources shall monitor and evaluate and report the progress made towards the establishment of functioning energy services market.
2. The Ministry of Energy and Natural Resources shall publish a progress on an annual basis.
3. The progress report shall describe any significant developments and achievements related to:
   (1) The functioning of the energy services market;
   (2) Measures under the present decree;
   (3) The legal and regulatory developments and proposals, including removal of existing impediments and proposals for new policy measures required to further strengthen the functioning of the energy service market.
4. The R2E2 Fund shall assist the Ministry of Energy and Natural Resources for the purpose of this task by:
   (1) Monitoring and evaluating the functioning of the energy services market;
   (2) Preparing proposals to improve existing the framework conditions of the energy services market, including proposals for legal and regulatory measures required to remove existing regulatory and non-regulatory barriers impeding the uptake of energy services and proposals for new policy measures required to further strengthen the functioning of the energy service market.

5. The R2E2 Fund shall report its findings regarding its observation and evaluation and its proposals for improvements to the Ministry of Energy and Natural Resources in a detailed and systematic manner on an annual basis.

Article 10
Entry into force

This Decree shall enter into force on the XXX day following that of its publication in the Official Bulletin of Armenia.

ANNEX
Guidance on Energy Performance Contract Standard Terms and Conditions

Minimum items to be included in the general terms and conditions of energy performance contracts:

- Clear and transparent list of the efficiency measures to be implemented or the efficiency results to be obtained.
- Guaranteed savings to be achieved by implementing the measures of the contract.
- Duration and milestones of the contract, terms and period of notice.
- Clear and transparent list of the obligations of each contracting party.
- Reference date(s) to establish achieved savings.
- Clear and transparent list of steps to be performed to implement a measure or package of measures and, where relevant, associated costs.
- Obligation to fully implement the measures in the contract and documentation of all changes made during the project.
- Regulations specifying the inclusion of equivalent requirements in any subcontracting with third parties.
- Clear and transparent display of financial implications of the project and distribution of the share of both parties in the monetary savings achieved (i.e. remuneration of the service provider).
- Clear and transparent provisions on measurement and verification of the guaranteed savings achieved, quality checks and guarantees.
• Provisions clarifying the procedure to deal with changing framework conditions that affect the content and the outcome of the contract (i.e. changing energy prices, use intensity of an installation).

• Detailed information on the obligations of each of the contracting party and of the penalties for their breach.