TrustEE

Co-funded by the Horizon 2020
Framework Programme
of the European Union

Supplier and End-user contract template

Work package 3

D3.4 and D3.5

TrustEE

Grant number: 696140

Date: 01/06/2017

H2020-EE-2014-2015/H2020-EE-2015-3

TrustEE

INNOVATIVE MARKET BASED TRUST FOR ENERGY EFFICIENCY INVESTEMENTS IN INDUSTRY

Report Prepared by:

Alfredo Rodrigo, Roberto Giralda (ainia, centro tecnológico); Winfried Braumann, Mafalda Soto (REENAG), Christoph Brunner, Jürgen Fluch, Anna Grubbauer (AEE –Institute for Sustainable Technologies);

This project has received funding from the European Union's (EU) Horizon 2020 research and innovation programme under grant agreement No 696140.

Table of Contents

1 Executive summary

The report summarizes the results of Task 3.3 “System supplier contract” and Task 3.4 “End-user contracting” on development of the Energy Supply Contract (ESC) and Energy Performance Contract (EPC) between the “system supplier” and the “end-user”. These tasks are within the Work Package 3 “Risk mitigation” of the project TrustEE funded by the Horizon 2020 framework programme of the European Union. As these contracts involve both, the supplier and the end-user, the deliverable is merged to one document and uploaded for both.

Within TrustEE a Securitization Vehicle (SV) is established. This financing vehicle proposed by TrustEE is not aimed to finance investment in the development, construction, testing and starting up phases of EE/RE projects, but acquiring from the supplier the receivables resulting from the payment plan as a true sale transaction after successfully launched and commissioned projects. These purchases allow industrial SMEs (end users and suppliers) to create flexible project payment plans, and are financed by tradable securities offered to investors on the capital market. Investors are de-coupled from most technical risks as projects are already commissioned.

This innovative re-financing method requires a framework of contractual elements between the involved stakeholders (the end-user, the supplier, TrustEE and the securitization vehicle itself). In fact, four different contracts will be necessary: (1) Consultancy Agreement between TrustEE and the SV, (2) Assignment agreement between supplier and the SV, (3) Frame agreement between the supplier and TrustEE and (4) EPC/ESC agreement between supplier and end-user. A basic description of these contracts and the interrelations among them are included in this report.

The report finally is focussed in the assessment of the key issues to be considered for the definition of the basic contract framework between Supplier and End-User, taking into consideration the other stakeholders involved (Securitization Vehicle, TrustEE,). The report includes a basic template for the EPC/ESC agreement between supplier and end-user. This EPC/ESC states the reference basic obligations and agreements which the heat energy supplier and end-user are bounded to acquire (minimum amount of energy, predetermined price conditions, etc.) when is formalised in a publishing agreement. Clauses related to development, construction, testing and starting up phases of the project have not been considered.

Finally, a basic Supplier and End-user contract template is proposed. The templates for the other contracts need to be aligned to the regulatory conditions of the SV.

2 TrustEEs contractual model

Measures in the area of renewable energies and energy efficiency must become more attractive in order to prevent them from being rejected due to lack of time, experience or financing costs. For the financing of these projects, there are many different contracting models in Austria and the rest of the world. However, this form of financing has not yet been established, especially for small and medium-sized enterprises. [94]

The objective of all these contracting models is to reduce overall costs, minimize risks and reduce transaction costs. [95]

In order to improve the comparability of these projects and to complete the standardized project evaluation, it is also necessary to examine these contracts within the framework of the TrustEE project. Thus, advantages and disadvantages of the respective contracting models can be worked out and proposals for a TrustEE contracting model can be developed.

The financing model in TrustEE is based on forfaiting. A supplier plans, finances, builds and commissions a plant, which is set up at the end-user. A contract between supplier and end-user covers the services of the supplier, such as planning, financing, construction, and commissioning, as well as regulations on operation and maintenance. In addition, supplier and end-user must regulate which services must be checked and provided during commissioning. These include the maximum heat output, the capacity of the system or energy and cost savings. During the term of the contract, there exist rights and obligations for both sides. [96]

Once the end-user has approved the commissioning, the technical risks of the project are minimized and TrustEE comes into play. The Securitization Vehicle established by TrustEE acquires the supplier's claims including a certain interest rate on the investment.

The end-user continues to pay his monthly installments, but no longer to the supplier but to the Securitization vehicle. There are no changes in contract terms or total costs in this context. The contract between supplier, end-user, and TrustEE can be decoupled from the performance, as the performance is regulated in advance by the contract between supplier and end-user. The supplier remains responsible for operation and maintenance and has the opportunity to invest in further energy efficiency and renewable energy projects.

2.1 TrustEEs contractual relations

Within TrustEE a Securitization Vehicle (SV) is established. This financing vehicle proposed by TrustEE is not aimed to finance investment in the development, construction, testing and starting up phases of EE/RE projects, but acquiring from the supplier the receivables resulting from the payment plan as a true sale transaction after successfully launched and commissioned projects. This financing vehicle is aimed to acquire the supplier’s receivables on instalment as a true sale, after project commissioning is completed. By not investing in the development, construction phase and start-up of the, investors are de-coupled from most technical risks as projects are already operational. . These purchases allow industrial SMEs (end users and suppliers) to create flexible project payment plans, and are financed by tradable securities offered to investors on the capital market.

This innovative re-financing method requires a framework of contractual elements between the involved stakeholders (the end-user, the supplier, TrustEE and the securitization vehicle itself). In fact four different contracts will be necessary (see Figure 1): (1) Consultancy

Agreement between TrustEE and the SV, (2) Assignment agreement between supplier and the SV, (3) Frame agreement between the supplier and TrustEE and (4) EPC/ESC agreement between supplier and end-user.

.

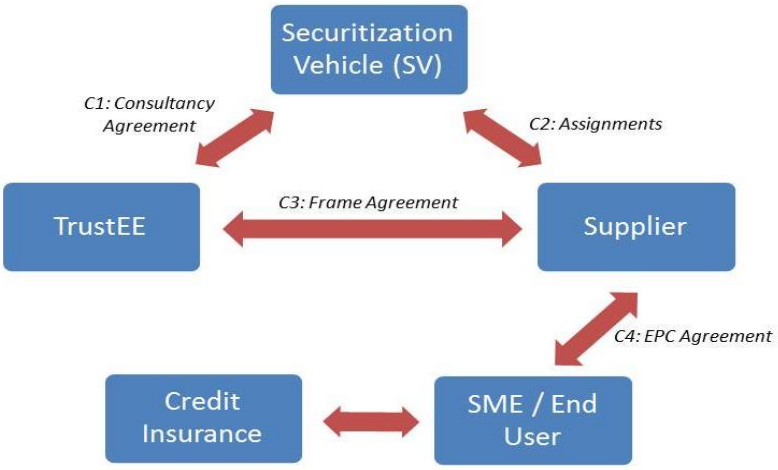

Figure 1: Contractual relations within TrustEE

1. C1 – Consultancy Agreement

The consultancy agreement will be signed between the Luxemburg based Securitisation Vehicle (hereinafter "SV") and TrustEE. The need for such an agreement derives from the fact that the SV must, by legal definition, limit its activity to carrying out securitisations in a way that allows isolating the obligations of the SV from those of the originator, which means that the SV must outsource any activity related to managing the SV´s assets.

The aim of the Consultancy Agreement will be to provide the SV with all the expertise, knowledge, business contacts and strategic advice required to:

- Analyse and select the receivables to be assigned to the SV based on C2
- Entrust collection of the non-performing credits
- Determine the liability of TrustEE against SV in case of damages caused to SV as a consequence of non-compliance with its consultancy duties
- Determine TRUSTEE´s Retribution

2. C2 – Assignment of receivables

Based on the Frame Agreement (C3), the supplier will have to assign, in favour of the SV, all credits he holds against the SME as derived from the EPC/ESC Agreement (C4). Note that only receivables will be assigned and that SV will in no case assume any other rights or obligations hold by the supplier even if directly related to the assigned credit, independently on whether such rights / obligations derive from the EPC/ESC (C4) or from the Frame Agreement (C3).

The aim of the assignment agreement will be therefore be limited to:

- Transfer the credits assigned;
- Determine the supplier´s liability for the assigned credit: supplier will have to warrant that the credit he holds against the SME exists, is legally fully validity and enforceable but the supplier shall not assume any responsibility for the debtor´s (ie SME) solvency as all risks related creditworthiness shall be covered through a credit insurance to be purchased by the SME (as a mandatory element to proceed to credit assignment).

3. C3 – Frame Agreement

The Frame Agreement will be the most crucial of all 4 agreements. It shall be signed between the supplier and the TrustEE and will, in fact, serve as a basis for all other three agreements (C 1, C2 and C 4) as exposed bellow:

- **Relation C1 - C3:** in order to be able to provide the consultancy services to the SV based on C1, TrustEE necessarily needs to work closely with the supplier which will be done based on the Frame Agreement.
- **Relation C2 - C3:** C3 will define the characteristics that a credit hold by the supplier against the SMA needs to fulfil in order to be eligible for assignment based on C2.
- **Relation C3 - C4:** as for C2, C3 will define the essential issues that need to be agreed between supplier and SME to ensure that the credits that the supplier will hold against the SME in virtue of the C4 are eligible for financing through the assignment structure herein described.

The main elements of the Frame Agreement are as follows:

- Determining the conditions that must be fulfilled to confirm end of construction and full functioning of the plant. Note in this light that credits shall only be assigned once the installations are fully functioning. The Frame Agreements must therefore clearly regulate the point in time in which an installation is deemed as fully functioning, describing exactly the standards of the final certificate of acceptance that is acceptable for TrustEE
- Ruling the warranties and representations to be granted by the supplier to the SME (based on C4) to ensure full functioning of the installation;
- Determining the O&M services that must be mandatorily provided by the supplier to SME (as a condition to ensure that installation will function through its whole projected duration as initially planned) as well as the consequences in case O&M services are no longer provided by the supplier;
- Defining the characteristic and standards of the credit insurance (to be purchased by the SME)
- Defining the main rules applicable in case of insolvency of the supplier and/or the SME (such as, among others, applicable law in case of insolvency and

measures to ensure that assigned credits can be separated from the insolvency mass in case of insolvency etc.)

- Ruling the use of the Platform by way of establishing i) the procedure to use the Platform, ii) timelines in which TrustEE must determine where a project (and the credit derived thereof) qualifies as assignable asset and iii) formal acceptance by TrustEE of a concrete project
- Determining the main economic conditions applicable once a credit has been chosen as eligible.

4. C4 – EPC/ESC Agreement

The EPC/ESC agreement will be signed between the supplier and SME. The agreement will be signed based on the local customs for such agreements but according to the minimum standards as set forth in the Frame Agreement.

The EPC/ESC agreement will be further described in chapter 3.

2.2 Contract roadmap under TSV

The financing function of TrustEE is based on the creation of a TrustEE Securitization Vehicle (TSV) as a Forfaiting Fund.

As described in Deliverable 3.6 and Deliverable 4.1, the financing vehicle proposed by TrustEE is not aimed to finance investment in the development, construction, testing and starting up phases of EE/RE projects, but purchases the receivables arising from successfully launched and commissioned projects. Given that the Securitization Vehicle applies after the successful launch and commissioning of the EE/RE project, this means avoiding the risks of the design and construction phase.

The purchase of the receivables can be executed as a securitization transaction, provided the contractual structure of the EPC contract and the risk allocation are in accordance with the formal and financial standards defined for the origination policy of the Securitisation Vehicle.

The roadmap of the Supply Contract under TrutEE Securization Vehicle (TSV) can consist of the following steps (not necessarily in this order):

1. A technical and economic evaluation is done by the TrustEE Platform. The project submission in the platform could be done by the supplier or the end-user itself.
2. The EPC/ESC will be assigned between the end-user and the supplier. The TrustEE Frame Agreement (see chapter 2) will define the essential issues that need to be agreed between the supplier and the end-user to ensure that the credits that the supplier holds against the end-user in virtue of the EPC/ESC agreement are eligible for financing through the assignment structure herein described. Supplier and end-user contract considering clauses established in the framework contract proposed by TrustEE.
3. The Consultancy Agreement is signed between the SV and TrustEE. The Frame Agreement is signed between TrustEE and the Supplier
4. The Assignment agreement is signed between the Supplier and the end-user

3 C3 - Framework agreement

3.1 Background

The TrustEE Framework contract is based on the template of a leasing contract for photovoltaic systems provided by the project partner REENAG Holding GmbH (Austria).

In this section, the components and amendments which were identified the most essential for setting up a template contract are discussed.

3.1.1 Contractual partners and subject of the contract

As for all contracts, it is important state between which legal entities enter the contract. Therefore all legal entities are. A list with their affiliates should be attached in the appendix of the contract. It should be noted that refinancing will only take place if the end-user can provide a warranty agreement, a maintenance contract, rules on claims, a credit risk insurance, and a performance insurance. These parts must still be specified in the course of the contract in the individual chapters. In addition, these documents should be attached to the contract.

3.1.2 Contractual coverage

The contract should cover the performances of the individual contract partners. The supplier is responsible for planning, financing, construction, and commissioning. The end-user is responsible for the operation, maintenance, servicing, and monitoring. In order to ensure these services, the end-user should conclude a maintenance contract. This maintenance contract can, but does not necessarily has to, be concluded with the supplier. The securitization vehicle is responsible for refinancing the supplier and processing with the end-user as soon as the commissioning has been successful and all points of the specification have been fulfilled. This section can also regulate who owns the plant over what period of time. It can be specified whether the plant belongs to the Securitization vehicle until the end of the contract and the end-user has only rented the plant in between or whether other regulations are made. Especially considering the security of the SV such a regulation can be advantageous.

3.1.3 Term

A schedule could be added to the chapter on the contract term to determine when the supplier will install and commission the plant and when the supplier can expect the securitization vehicle to take over the receivables. In addition, the access rights of all contractual partners to the plant for maintenance and operation should be regulated during the term of the contract. If the contracting parties agree that the implementation of further economy and efficiency measures during the term of the contract has no influence on this framework contract, this can also be stated here.

3.1.4 Payment

Payments should be regulated precisely. When and in what form the installments are to be paid and what will happen if payments are delayed or refused should be as firmly laid down

as possible inflation adjustments. The Framework contract can describe the collectable; the payment should however be arranged with the End-User

3.1.5 Delivery of the plant to the end-user

When the plant is handed over to the end-user, the plant is transferred to contractual continuous operation. The supplier must provide proof of the contractually agreed performance parameters. Parameters from the standardized project evaluation can also be included in this performance specification. Only when all points from the performance specification have been fulfilled the commissioning completed and the refinancing can be carried out by the Securitization Vehicle. Under these contractual points, regulations should also be listed in the event of failure to meet the specifications.

3.1.6 Maintenance of the plant

The regulations for the maintenance of the plant are not described in adequate detail in the leasing contract, as it is not enough to write down that the end-user covers the costs that arise. Normally, maintenance is a duty of the end-user and/or is described in the warranty part in the contract between the supplier and the end-user. Such a maintenance contract might cover the issue of this duty by the supplier or another party. As the end-user is not part of this contract, at least the necessity of such a contract between end-user and supplier (or another party) has to be requested.

In this chapter, regulations on malfunctions, possible emergency services for fault clearance, maintenance, inspections, liabilities or guarantees for the functionality of the system should be added. These points should be described in detail in the maintenance contract of the end-user and a guarantee period should also be specified for the individual points. In this chapter, rules can also be laid down for legal succession in the event of sale of the property and insolvency.

3.1.7 Termination of contract

When the contract is terminated, it should be specified that the plant passes into the ownership of the end-user, unless it has already been regulated beforehand that the plant is always the property of the end-user. Regulations for premature contract termination including notice periods and contractual penalties must be regulated. If land register security has been agreed beforehand, this should expire after the contract has been terminated.

3.1.8 Protection of the contracting parties

The most important chapter of the framework contract is the protection of the contracting parties. Even if the claims are purchased by the securitization vehicle, the end-user bears the risk and not the SV or the supplier. In the event of non-payment, only the end-user and not the supplier can be prosecuted. The end-user must provide the supplier and the securitization vehicle with a bank guarantee, maintenance contracts and credit insurance. The end-user should take out a company, environmental and production liability insurance policy for property, personal and financial losses with a European insurance company and should not neglect insurance against fire, vandalism, strike, force majeure, and flooding.

In addition, the Securitization Vehicle may also consider the retention of title or an entitlement, which means a right of first refusal in the event of non-payment. Penalty payments should be contractually agreed between the contractual partners.

3.1.9 Information exchange / communication

There are no arrangements in the leasing contract for the exchange of information and communication between the contracting parties. Documents and documentation must be regulated in the course of the contract. For this purpose, there are rights and obligations that must be fulfilled prior to refinancing and documents that are required after refinancing. Prior to refinancing, Supplier and Securitization Vehicle have the right to view data on connection values, operating times and monthly payments of recent years in addition to the data entered in the TrustEE platform. In addition, the end-user has to provide the contracts with supply and disposal companies and the maintenance contracts. The supplier must supply the planning documents and the technical description of the plant to the other two contracting parties. Suppliers and Securitization Vehicles can have the right to inspect the plant, talk to employees and obtain information from contractors or authorities before and during refinancing. It can be stipulated in the contract whether and how often the end-user is obliged to report on maintenance and operation to the other contracting parties. This chapter can also contain regulations on the free transfer of project documents to the contracting parties.

3.1.10 General Terms and Conditions

In the general terms of the contract, the choice of law and place of jurisdiction are always regulated. In addition, it is advantageous to stipulate that contract amendments, additions and terminations must be made in written form. The protection of trade and business secrets can be regulated in this section as well as the regulations on the involvement of an expert for dispute resolution. Any taxes, fees, and charges arising from the establishment of this contract may be paid by the end-user if this is contractually agreed.

3.1.11 Appendix and signature

The appendix should contain all the previously mentioned agreements and time tables that must be in place before refinancing takes place. These include the maintenance contract, the credit insurance and the bill of quantities.

4 C4 – EPC Agreement

4.1 Background

The 2012 Energy Efficiency Directive (EED) sets the overall policy framework and the binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the EED, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption. EED support the provision of energy services to achieve energy and environmental goals. This activity related with providing energy services to final energy users, including the supply and installations of energy efficient equipment, is growing in the European market.

Following EED, Energy service means 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 based on a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement or primary energy savings.

Energy supply contracting based on the offer of energy from renewable sources or based on preceding energy efficiency improvement measures lead to a reduction in energy consumption, so that they shall be considered an energy efficiency service. On other side, Energy Service Companies (ESCOs) offer energy savings and/or provision of the same level of energy service from renewable energy at lower cost. The energy service shows two different basic models of energy contracting:

- **Energy Supply Contracting (ESC):** The contracting partner provides energy products such as heat, chilling or electricity produced by renewable energy systems (as biomass, biogas or solar heating). The subject of the contract is not the energy value but the utility value. ESC is based on a business model that guarantees renewable energy supply at lower price and lower environmental impact.
- **Energy Performance Contracting (EPC):** The contracting partner provides energy savings by means of energy efficiency. In this case, EPC is a business model for energy savings.

The ESCO that implements a project to deliver energy efficiency, or renewable energy, uses the difference between the energy selling price and the cost of the energy production (or energy savings in EE projects) to repay the costs of the project, including the costs of the investment. Essentially the ESCO will not receive its payment unless the project delivers energy/cost savings as expected. The ESCO takes over complete responsibility for the provision to the client of an agreed set of energy services (e.g. space heat, lighting, motive power, etc.). This arrangement is an extreme form of energy management outsourcing.

ESC shall be signed between the energy supplier and the end-user to assure that the economic conditions assumed in the investment economic analysis will be maintained within a reasonable range, rendering it beneficial to both parties.

In addition to offering energy at lower prices, an ESC also offers energy with lower environmental impact than conventional, from a Life Cycle perspective (i.e. carbon emission, radioactive emissions, etc.)

The level of transference of technical risks between the end-user and the supplier should be also defined in the ESC, such as, deliver infrastructure improvements to facilities that lack energy engineering skills, manpower or management time, capital funding, understanding of risk, or technology information.

The main variables related to the economic and technical risks that should be defined in the ESC are:

- Energy cost during the project time (considering the investment lifetime, inflation and the variability of energy market prices)
- Energy consumption profile or minimum annual energy supply/consumption
- Energy quality
- Environmental impact (using selected indicators)
- Monitoring of these variables
- Operation and maintenance of the heat supply plant

Heat supplier (ESCO) and technology provider do not necessary coincide. In this case, they should sign a specific contract technology provider-ESCO concerning technical performance, certification, quality standards, warranty period, etc., so that ESCO minimize the risks regarding system performance.

The benefits of ESC are a significant boost in energy efficiency, simplicity and security in supply and increase in environmental performance.

In conclusion, the HESC lead to the following advantages to the end-users:

- Lower energy costs: HESC offer a predictable cost of heat for the duration of the agreement.
- Lower environmental footprint of the heat energy
- Limited risk since the supplier is responsible for system performance and operating risk.
- No or low upfront capital costs: The supplier handles the upfront costs of sizing, procuring and installing the PHES.

4.2 Supply contract

This section compiles the main relevant aspects to be taken into account in a Renewable Heat Supply Contract. The subject of the contract is the heat utility value (steam, hot water) which presupposes that the energy system (biogas+boiler, biomass boiler, solar heat system) belongs to the supplier.

4.2.1 Energy supply

4.2.1.1 Quantity of energy

In biogas, biomass or heat solar thermal, the heat is normally supplied (energy carrier) as hot water, thermic oil or steam.

The energy carrier (steam/hot-water) is supplied by the supplier at the Heat Delivery Point, the physical point at which the interconnection is made between the Steam/Hot-water transportation system of supplier and the Steam/Hot-water transportation system of the end-user.

The supply contract shall define the quantity of steam or hot water delivered by the supplier at the Heat Delivery Point during the term of the agreement. End user shall either consume, dissipate or condense all such heat.

The end user is required to purchase heat energy based on the predicted annual demand.

If required by the type of PHES technology or end-user heat requirement, agreement should indicate any hourly/daily/monthly variations between the minimum and maximum heat supply/consumption obligations.

Parameters defining the quantity of thermal energy supplied/consumed as steam are: specific heat value of steam (pressure and temperature) and the steam flow.

Parameters defining the quantity of thermal energy supplied/consumed as hot water or thermic oil are: temperature and flow.

The production risk concerning the production line which consumes the energy has to be borne by the customer or transferred to insurance companies (elementary risks, business interruption risks). The claims from such insurances have to be assigned to the supplier/investor. In this case, the consumer acquires the risk related to the credit repayment in a scenario where company has closed the production in the meantime and therefore cannot use the produced heat any more.

4.2.1.2 Quality of heat supply

<u>Steam</u>

Pressure and temperature can be also considered the main quality parameters of steam. The HESC should define the set point and the range of variation for both variables considering the supply plant type and characteristics.

However, in some cases, the end-user could directly control certain variables which directly impact on steam pressure and temperature, as in the case of feed water pressure and

temperature, steam load or the condensing station operation. In this case, the supplier cannot be held unilaterally responsible for the pressure or temperature of the Steam delivered under the Agreement. The HESC should also define the set point and the range of variation for these variables

Other quality parameters related to steam are: air and condensed gases. The steam should be free from air and condensed gases. The presence of water droplets in the steam will reduce the actual enthalpy of evaporation, and will also lead to scaling on the pipe wall and damage to turbine blades.

Steam should be no crust (e.g., corrosion or sediment carbonate) or impurities that can increase the rate of erosion in the pipe, orifice and valve.

Water

In case energy carrier is hot water, main quality parameters are temperature and purity of the water (total solids, pH, Electric conductivity, concentration of specific ions…)

If required, the HESC should also define the set point and the range of variation for these variables

4.2.1.3 Monitoring of heat consumption

Steam

The monitoring of steam supply/consumption can include the monitoring of steam flow (flowmeter), steam pressure (manometer) and steam temperature, located at the supplier and/or at the end-user side. When both Steam Flow Meters are operable, the average reading of the Steam Flow Meters (adjusted for pressure and temperature) could be used to determine the quantity of Steam delivered.

Daily or annual consumption can be calculated as the hourly and daily average, respectively.

Water

The monitoring of hot water supply/consumption can include the monitoring of water flow and temperature.

A calculation methodology should be defined to determine if occurred heat delivery shortfalls, and the penalty in case of heat delivery shortfalls happens.

The contract should indicate the agreed accuracy of the instruments involved in monitoring (in terms of percentage or measurement units) The frequency of calibration should also be defined (even by the frequency recommended by its manufacturer or even determined by the parts).

The contract shall define which part is responsible for undertaking and pay the maintenance, repair, calibration and where required, the replacement of monitoring instruments.

4.2.2 PHES plant

4.2.2.1 Ownership

The heat supply system is owned by the Supplier Company.

The location of the energy supply plant should be defined (outside the end-user installation or at the end-user installation)

4.2.2.2 Operation of the plant

In case the supply plant is located at the end-user's installations, it should be defined if the operation of the plant is on the behalf of the Supplier or on the behalf of the End-user.

In the former case, the end-user should operate the system as described in the operation manual.

If required, the contract should indicate who pay for the electricity and the water used by the PHES system (biomass, biogas, Solar heat).

4.2.2.3 Maintenance

In case the heat supply plant is on the behalf of the end-user, annual maintenance calendar shall be defined. The maximum annual days' time for annual maintenance shall be also defined.

The Supplier shall submit a detailed written description of the planned and scheduled maintenance for the Equipment during the contract.

Scheduled maintenance should be in accordance to the manufacturer recommendations or the Customers procedures. It should be provided by qualified and approved technicians and will maintain all relevant warranties.

4.2.2.4 Insurances and responsibilities

A performance guarantee should be defined to protect the end-user (heat consumer) from all related delivery, health and safety and performance risk for the life of the contract, in case heat supply system (PHES) is installed at its facilities.

On other hand, there are insurance products which protects the suppliers from damages in the supply system from sudden accidents, malfunctions caused through operating error of the user or poor maintenance (in case it is on the behalf of the end-user). The end-user should be obliged to conclude a long-term O&M contract either with the supplier or with a reliable third party, if he is operating the heat production equipment.

4.2.3 Duration of the contract

The supplier and end user may agree an appropriate supply contract period, considering the time required by the supplier to manage cash flow and investment in the heat supply plant. The contracts typically run for 10-15 years.

Agreement should establish if it renew automatically, and the renewal period.

4.2.4 Energy price

4.2.4.1 Energy unit

The energy unit can be MWh, MJ or Kg steam /hour or tons steam /hour.

4.2.4.2 Price

The total price paid by the client under a ESC arrangement can be calculated on the basis of its existing energy bill minus a percentage saving (often in the range of 5-20 %).

The client is guaranteed an immediate saving relative to its current bill and the more efficiently and cheaply ESCO can provide the agreed level of energy service, the greater its earnings. ESC gives the strongest incentive to ESCOs to provide services in an efficient way.

Total price that the Customer pays for the purchase of Energy (supply price) could be divided in some component or charges.

- Energy Consumption component: will account for the total heat consumption in the billing period. It is calculated as the agreed price (€/kWh) in the billing period, multiplied by the metered quantity of energy supplied to the Supply Point within such billing period.
- Power component: could account for the agreed heat power supply in the billing period.
- Any other charges, penalties or costs specified in the Energy Supply Contract or imposed from time to time.

4.2.4.3 Price indexation

To consider the variation of energy costs, supplier shall be entitled to vary the agreed initial unitary heat price over time by periodically applying the agreed indexation.

Several forms of price indexation and combinations could be applied:

- The price vary time to time to reflect any changes in electricity prices, commodity prices or other input costs such as commodity fuel cost, financial cost, or any other input costs resulting from any change in Law or a Regulatory Authority.
- The price is amended on the basis of the forecast for inflation
- Price index based on the price of a major fuel, such as Natural Gas, for an industrial household consumers within the European Union (EU) (http://ec.europa.eu/eurostat/statistics-explained/index.php/Natural_gas_price_statistics)
- The price could increase at an agreed rate per annum; e.g. 2% or 4%.

Supplier should notify price changes to the Supply Price with an agreed time before the change comes into effect.

Biogas and Solar Thermal Systems have less sensitivity to the variation of fuel energy cost than Heat Biomass Systems.

The contract shall define the periodicity in which the price of heat should be upgraded by such additional amount as agreed with the end user.

Deliverable 4.5-Report on energy pricing strategies will define the strategies to be considered in the contract.

4.2.4.4 Receivables

The cost of the total energy supplied/saved by the EE/RE service during the billing period (on the assumption of an agreed quantity as defined in 4.2.1.1) is calculated as the sum of the following items:
Corresponding to the supplier

1. Operational costs corresponding to the agreed heat supplied/saved (i.e. biomass cost, electricity for pumping, etc)
2. Installation amortisation
3. Maintenance costs (where appropriate)
4. Components
5. Insurance
6. Supplier staff costs
7. Margin

Corresponding to the TrustEE Securization Vehicle (financing cost for the supplier)

- Interest for the bonds
- SV staff
- Origination of receivables (TrustEE platform)
- Margin and risk reserve

The cost of the receivables shall be calculated as the sum of the costs of the following items divided by the number of receivables to be delivered during the duration of the service.

Penalties for the supplier should be considered on the receivables if the quantity or quality of heat supply is out of the agreed ranges of variation.

The EPC contract shall stipulate how end-user will pay for the agreed heat supplied or heat saved in form of receivables, i.e. monthly basis.

5 Basic contract template

A template for Heat Energy Supply Contract from renewable energy sources is attached in Annex I. The template has been developed based on:

- IEA-SHC-T45.C.2.3: INFO-ESCO-Contract-template-extended-version.pdf
- Carbon Trust: Specimen contract for the supply of heat energy from biomass for (site)
- RASLRES Project: Model ESCO Contract Template– Biomass, Version 6, November2012

This contract template is not intended to be prescriptive since considerations to site specific issues and the supplier/end user relationship must be thoroughly considered.

ANNEX 1:

5.1 Preamble

- <SUPPLIER COMPANY NAME> is the private company, whose registered office is at <ADDRESS>, Company Number XXXX, hereinafter referred to as “the Supplier”;
- <END USER NAME> is the private/public company whose registered office is at <ADDRESS>, Company Number XXXX, hereinafter referred to as “the end user”;
- <<ADDRESS> is the site (owned and) operated by the end user where the delivery by the Supplier of heat energy is required, hereinafter referred to as “the site”.

5.2 Definitions

- “End.user” means the purchaser of the thermal energy
- “Supplier” means the supplier of the thermal energy from the Renewable Energy Production Plant (REPP)
- “Renewable Energy Production Plant (REPP)” means Solar Thermal, Biogas or Biomass Plant.
- “Securization Vehicle” means the financing vehicle proposed by TrustEE aimed to buy the receivables arising from successfully launched and commissioned RE/EE projects.
- “Subcontractors” means the appointed sub-contractors who will supply services to the Supplier.
- Contract Documents means this agreement and all related schedules and End-users Invitation to Tender, Suppliers Tender and relevant guidance documents issued.
- “Contract Term” means the duration of this contract and can mean the period over which the capital repayment fee is paid.
- "Metering Equipment" shall mean the meters measuring the quantities of heat energy provided by Supplier.
- “Metered Heat Energy” or Metered Heat means the steam or hot water supplied by the REPP.
- “Equipment” means all the items that the Supplier specifies and installs as part of the REPP. Depending on the technology, this term shall include the biomass/biogas boiler and all its ancillary items and controls such as the flue, ash bins, accumulator tanks, heat meters etc. It shall also include the fuel silo and the fuel transfer mechanism. It shall also include the builders’ works and civil works required to house and operate all this equipment. It shall also include all the mechanical and

electrical works required to connect the biomass/biogas system to the End-user heating system up to the connection point.

- "End-user heating system" mean all pipes, fittings, radiators or similar items installed, on the Site, on the End-user's side of the final heat exchangers at the Connected Points.
- "kWh" means Kilowatt Hours of heat supplied
- "Connection Point" mean the points at the final heat exchangers on the Site to which the System pipes will be connected by the Supplier and through and from which the Supplier will provide Heat to the End-user
- "Law or Laws" means (i) all law applicable in the COUNTRY and the European Union and includes, without limitation, common law, statutes, regulations, acts, bylaws, rules, codes, decisions, proclamations, notices, statutory instruments, orders, directives, instruments, rules of court and/or delegated legislation and (ii) any regulatory policies, guidelines or industry codes which apply to the supply of heat pursuant to this Contract; and (iii) any directions, rules or regulations issued by any competent or regulatory authorities.
- "Delivery point" means the location where the REPP Equipment shall be installed.
- "Indexation" means the agreed method of adjusting the cost of the Contract as set out in Schedules to this Contract.
- "Minimum Off - Take" shall mean the minimum annual quantity of energy to be consumed and paid for by End-user.
- (h) "End-users Premises" mean the location of the site where the Supplier shall supply and install the Equipment – as defined by the schedules to this contract.
- " Commencement Date" means the date this Contract commences.
- "Operations" shall mean the activities as set out in clause 5.9
- "Confidential Information" shall mean information of commercial value which has been kept confidential by the Party from whom the information originates and which has not come into the public domain during the term of this Agreement in breach of any obligation of confidence

5.3 Contract

- The Supplier agrees to supply to the end user and the end user agrees to purchase from the Supplier heat energy generated from the REPP to the specifications, for the period, at the price, and on the terms and conditions set out below.
- The end user shall provide the end user's Facilities fit for the installation of the REPP, provide all Interfaces for such installation and shall procure and pay for its requirements of water, electricity, and eventually cooling energy, in accordance with this Agreement.
- The Supplier shall install, maintain and operate the REPP at the end user's facilities for the Term and shall provide the end user with hot water/steam, and eventually cooling energy, in accordance with this Agreement.

5.4 Energy Tariff

- The Tariff stipulates the fees and charges invoiced to End-user for energy generated by the REPP and to be utilized by End-user at the takeover points (interfaces) and measured by the Heat Meters installed at the interfaces.
- The cost per kWh will be indexed linked based on conditions laid out in Deliverable 4.5.

- Heat meters will be installed by the Supplier to monitor and accurately record the heat used.
- The Supplier will pay for electricity used by the REPP equipment.
- The Supplier will pay for water used by the biomass boiler equipment. This will be outside the scope of this Contract

5.5 Supply and consumption of energy

- The Minimum Heat Off-Take during the defined contract period will be *XX* megawatt hours (MWh).
- End-user undertakes to purchase all energy generated by the REPP (provided at the agreed Interfaces) based on the predicted annual demand and at the tariff specified in clause .
- Supplier undertakes to provide an annual minimum amount of heat equal to the Minimum Off-Take. If in any year Supplier should not be able to provide the Minimum Off-Take for reasons Supplier is responsible for, Supplier shall be obliged to optimize the REPP over a period of three (3) years.
- If End-user is not able, for operational reasons, to take all the energy provided by the REPP, End-user shall be obliged to pay for the Minimum Off-Take.
- End-user shall, as a back-up, operate its own energy system for steam, cooling or hot water which shall provide energy if and to the extent the energy provided by the REPP is not sufficient to cater for End-user's needs.

5.6 Heat supply and metering

- The total quantity of heat provided by the Supplier to the End-user shall be measured by means of the Heat Meter(s) such measurements being expressed in megawatt hours ("MWh").
- International Performance Measurement & Verification Protocol (IPMVP) could be used to monitor and verify energy data.
- Energy data shall accurately record the daily, weekly and seasonal heat load.
- The technical specification and location(s) of the Heat Meter(s) is to be provided and agreed by a competent independent Engineer.
- The Metering Equipment as per [country/institution] standard shall be installed and maintained by Supplier and remain, during the Term, the property of Supplier.
- The quantity of heat measured by the Heat Meter(s) shall be taken to provide a definitive record of the quantity of heat supplied to the End-user unless it has demonstrably ceased to operate effectively.
- The Supplier shall provide the End-user with Heat Meter(s) readings taken from the Heat Meters within ten (10) working days of the end of each calendar month. The End-user shall be given access on site to check and record these readings.

- The total quantity of Heat supplied by the Supplier to the End-user during any one month shall be calculated by subtracting the previous reading from the current reading.
- In the event of failure of the Heat Meter(s) the quantity of heat supplied during the period since the previous Heat Meter Reading shall be agreed between the parties based upon heat supplied during equivalent historical periods adjusted according to the actual number of days during the period in question.
- In the event that the Heat Meter(s) has demonstrably ceased to operate effectively the Supplier shall ensure that it is either repaired or replaced as appropriate within thirty (30) working days of such a failure becoming apparent.
- The operation and accuracy of the Heat Meter(s) will be verified every 2 years by a means that both the End-user and Supplier agree to.
- The main quality parameter of steam (Pressure, Temperature and Flow) will be stipulated and agreed upon with End-user and client during project period. Other quality parameters could also be agreed (as air content, condensed gases or impurities).
- The quality parameter of hot water (Temperature and Flow) will be stipulated and agreed upon with End-user and client during project period. Other quality parameters related with water purity could also be agreed.

5.7 Terms of payment

- The monthly invoices will include three components:

  a) A variable monthly heat charge per kWh based on the metered heat provided from the REPP for the duration of the contract. This will be paid monthly in arrears. This will include all the costs of operating the Contract.

  b) O&M charge based on the cost of operating, servicing and maintaining and repairing the REPP.

  c) Adjustment tariff, payable annually or twice annually (depending on the preferences and agreement of both parties) which will depends on the difference between the Minimum Heat Off-Take defined for the period and the real heat consumption in the same period.

- The monthly heat can be calculated as:

  - Pro-rated heat off-take during the defined contract period in *XX* megawatt hours (kWh).
  - Actual monthly heat consumption in *XX* megawatt hours (kWh).

- Payments shall be due and payable within <XX> days from the date of invoice. In case of delayed payments, interest of <XX>% above EURIBOR shall accrue on a daily basis.
- In the event that any payments are overdue the Supplier has the right to refuse to make further supplies until all outstanding overdue invoices have been settled.

- Objections against the Annual Account may be raised by End-user within a period of thirty days of receipt of the Annual Account. Thereafter the Annual Account is considered approved.
- Supplier shall be entitled to demand a pre-payment of the Fee up to an amount of two monthly payment rates if payments have been overdue for more than twenty days.
- In case of any damage of the metering equipment Supplier is entitled to bill on the basis of the Minimum Off-Take in respect of the time quantities have not been measured correctly.

5.8 Term/Duration of contract

- This contract is for a period of *<XX>* year, and will commence on *<DATE>* and end on *<DATE>.*
- This contract may be extended by agreement of both parties not less than three months before the end of the original contract period.

5.9 Operations

- The Operations shall consist of the following activities of Supplier:
  a) Annual servicing of the REPP in accordance with the respective specifications of the manufacturer; and
  b) Maintenance and repair in case of defects of the REPP; and
  c) Constant supervision and optimizing of the operation of the REPP via telemonitoring facilities; and
  d) Modifications as well as replacement of non-economical parts of the the REPP as deemed necessary by Supplier; and
  e) Provision of online data and the input information of the REPP for the educational system of End-user The monitoring hardware and graphical displays will be provided by End-user.
- In case of any works at the REPP, Supplier shall be entitled to suspend the provision of steam, water heating or water cooling for the period required to conduct such works. If possible, Supplier shall notify End-user sufficiently in advance of such works.
- The cost of Operations shall be borne by Supplier and are included in the Fee. However, the cost for any defect which has not been caused by the willful misconduct or gross negligence of End-user shall be paid for by End-user.
- End-user shall ensure that End-user's facilities, its steam, hot and cold water distribution system as well as all Interfaces are at all times properly maintained and fully functioning to supply steam, hot or cold water, in order to ensure the performance of REPP.

- End-user shall provide the following, free of charge, during the Term

    1. connection (Interfaces) and in house distribution system for steam, hot and cold water of sufficient size and quality, properly maintained at all times, for the supply of steam, hot and cold water; and
    2. electrical connectivity which ensures a secure and undisturbed operation of REPP; and
    3. sufficient electric energy/power supply to ensure a proper function of all equipment of the REPP; and
    4. a water supply and discharge system of sufficient size and quality; and
    5. sufficient water for re-cooling the cooling towers of the Solar Thermal Plant. The demand will be between 8 – 10 liters per kWh cooling production Solar Thermal Plant.
    6. water for the filling of the Solar Thermal Plant; and
    7. all necessary permissions and approvals in the country for the operation of the REPP as a user
    8. a data link with continuous internet access for the supervision of the REPP.

5.10 Ownership of the REPP

- Title to the REPP shall remain at all times with Supplier.
- End-user shall either obtain or support Supplier in obtaining all necessary approvals from relevant authorities for the installation, operation and maintenance of the REPP.
- End-user shall not remove, alter (except as otherwise required or permitted under this Agreement) or assign, pledge, mortgage, permit any lien to exist on the REPP. For the avoidance of doubt, End-user unreservedly acknowledges that the REPP shall not constitute part of the actual building and throughout the Term shall not cause damage to or permit anything which may damage the REPP.

5.11 Easement

- End-user shall grant, or cause to be granted, to Supplier, its representatives and/or agents all rights-of-way, access rights, easements, licenses and other rights with respect to End-user's facilities as are necessary for Supplier to perform its obligations and exercise under this Agreement. End-user shall obtain, or cause to be obtained (in form and substance satisfactory to Supplier) non-disturbance agreements or, if applicable, waivers and/or consents from each of its mortgagees or landlords with respect to all rights of way, access rights, easements, licenses and other property rights which Supplier requires to perform its rights and obligations under this Agreement.
- Any access shall be in compliance with safety, security and operational requirements of End-user.

- The Parties shall, upon Supplier's request, execute a separate agreement, based on the acceptance of the building owner, for the grant of such rights-of-way, access rights, easements, licenses and other rights in relation to the obligations contained in this Agreement, especially unobstructed access to the REPP.

5.12 Supplier's Warranties

- Supplier warrants that the REPP will fulfil the EU certification and quality standards defined by TrustEE (Deliverable 3.1).
- During installation and building the REPP Supplier shall ensure that Installer shall follow strictly the local laws and regulations.
- Supplier warrants that the REPP during the Term, will provide the annual Minimum Off-Take quantities, if End-user fulfils its obligations were not hindered for reasons of Force Majeure or third party's actions or inactions. The sole remedy for breach of the warranty under this clause shall be correction of defects by Supplier within a reasonable time from notification by End-user of the defect.
- The above warranties are in lieu of all other express or implied warranties or conditions including, but not limited to, implied warranties or conditions of merchantability and fitness for a particular purpose.
- Any unauthorised modifications, use or improper installation of the REPP by End-user shall render all the Supplier's warranties and support obligations null and void.

5.13 End-user's warranties

- End-user warrants to provide End-user's facilities fit for the installation of the REPP, provide all Interfaces for such installation and to procure and pay for its requirements of water heating and cooling energy in accordance with this Agreement.
- End-user warrants not to remove, alter (except as otherwise required or permitted under this Agreement) or assign, pledge, mortgage, permit any lien to exist on the REPP.

5.14 Insurance

- Upon Securitisation Vehicle Acceptance Date, End-user shall insure and keep insured during the Term the REPP in the joint names of End-user and Supplier against all damage, loss or injury from whatever cause arising up to the value determined by Supplier. Such insurance shall be effected with an insurer in terms approved by Supplier. In the event that End-user defaults in taking out or maintaining such insurance policies as aforesaid, Supplier (without prejudice to any other rights or remedies available) may itself insure against any risk in respect of which the default has occurred and any amount paid by it in respect of premiums shall be recoverable from End-user.
- This Contract, and all liability and obligations of the Supplier pursuant to this Contract and/or any Contract, shall terminate at the end of the Term.

5.15 Termination

- Except as previously provided by this Agreement, each Party may only terminate this Agreement pursuant to this clause 5.15
- This Agreement will continue on and from the Commencement Date, and after that, unless terminated earlier in accordance with its terms, and will then automatically expire and terminate on the xxx (xxx) anniversary of the date of Acceptance unless otherwise agreed in writing between the Parties by mutual consent.
- Either party shall be entitled to terminate this Contract if the other party is in material breach of any of its obligations under this Contract and has failed to rectify same within thirty days of having received notice to that effect from the other party. Either party may refer a dispute regarding termination to the Expert for dispute resolution in accordance with the terms of this Contract.
- The End-user is entitled, at its discretion, to terminate this contract immediately by notice in writing if:

(a) the Supplier is bankrupt, has a petition presented for its winding up, has a liquidator appointed to it or has a receiver or an examiner appointed to it or over part or all of its assets or enters into a composition with its creditors (save for the purposes of a bona fide reconstruction or amalgamation), is unable to pay its debts as they fall due within the meaning of section 214 of the Companies Act 1963 or any event similar to the foregoing occurs in any other jurisdiction;

(b) the Supplier breaches a material term of this contract and, if it is capable of remedy, is not remedied within thirty (30) days of notice from the End-user requiring such breach to be remedied (provided that the End-user is not obliged to issue notice requiring it to be remedied);

(c) the Supplier consistently or repeatedly fails to achieve, satisfy or adhere to the Heat Availability Standards and/or Support Standards and/or Heat Failures consistently or repeatedly occur;

(d) the Supplier consistently or repeatedly breaches this contract with material or substantial detriment to the End-user;

(e) there is a Change of Control of the Supplier, or any Guarantor of the Supplier, without the prior written consent of the End-user and where such Change of Control materially prejudices the End-user.

5.16 In the event of a dispute

- In the event of a dispute over delivery, fuel quality or other issues, both parties will seek resolution by consultation and discussion. Initially the party who wishes to bring the dispute to the notice of the other will do so in writing. The other party will respond to this in writing within 5 working days of receiving the notification of a potential dispute. Where the potential dispute relates to on-site issues at either the End-user or Supplier sites, a joint site meeting will normally take place within 8 working days of the potential dispute being brought to the other party's attention.

- Where a resolution has been agreed after one or more meetings, including a site meeting (if appropriate), this shall be communicated in writing and noted by both parties.
- Where a resolution cannot be agreed after several attempts, the parties will attempt to settle it by mediation.

5.17 Force Majeure

- Force Majeure shall mean any event that prevents or delays a Party from performing in whole or in part any obligation arising under this Agreement and neither was within the reasonable control of the non-performing Party nor could have been prevented by reasonable actions taken by the non-performing Party, including, without limitation, an act of God, explosion, fire, lightening, earthquake, storm, civil disturbance, strike, lock-out, changes in law, orders of governmental authorities, and equipment failures that are not due to the negligence of the non-performing party.
- The corresponding obligations of the other party will be suspended to the same extent as those of the party first affected by the Force Majeure Event.
- Neither the End-user nor Supplier shall be in default in respect of any obligation under this Agreement if the Party is unable to perform its obligation by reason of an event of Force Majeure, provided that the suspension of performance shall be commensurate with the nature and duration of the event of Force Majeure and the non-performing party is using its best efforts to restore its ability to perform.
- Any party that is subject to a Force Majeure Event shall not be in breach of this agreement provided that:

(a) it promptly notifies the other parties in writing of the nature and extent of the Force Majeure Event causing its failure or delay in performance; and

(b) it could not have avoided the effect of the Force Majeure Event by taking precautions which, having regard to all the matters known to it before the Force Majeure Event, it ought reasonably to have taken, but did not; and

(c) it has used all reasonable endeavours to mitigate the effect of the Force Majeure Event to carry out its obligations under this agreement in any way that is reasonably practicable and to resume the performance of its obligations as soon as reasonably possible. If the Force Majeure Event prevails for a continuous period of more than six months, any party may terminate this agreement by giving 14 days' written notice to all the other parties. On the expiry of this notice period, this agreement will terminate. Such termination shall be without prejudice to the rights of the parties in respect of any breach of this agreement occurring prior to such termination.

5.18 Confidenciality

- Each of the Parties shall treat as confidential all Confidential Information of the other Party supplied under or in relation to this Agreement. No Party shall divulge any such Confidential Information to any person except to its own employees and

then only to those employees who need to know the same. Each Party shall ensure that its employees are aware of, and comply with, the provisions of this clause.

- The foregoing obligations shall remain in full force and effect notwithstanding any termination of this Agreement.

5.19 Notices

- Any notice required to be given under this Agreement shall be sufficiently served if sent by facsimile (subject to confirmation of receipt by the receiving Party), telegram, registered post, courier or hand and addressed to the principal or registered office of the Party to be served. Any such notice shall be deemed to have been received and given at the time when in the ordinary course of transmission, it should have been delivered at the address to which it was sent. However, all official court related process shall be served according to the Rules of Court.
- The initial point of contact shall be as stated in clause 5.22.

5.20 Promotion

- The REPP and its utilization by End-user may be used by both Parties as a reference project towards third parties, in particular towards TrustEE Project. The Parties therefore shall undertake all reasonable endeavors to support each other's requests for the presentation of the REPP.
- Both Parties agree that each can make use of the REPP at End-user's facilities for advertising and public relations purposes like: pictures, videos, internet links, visitors of potential clients, etc. However End-user retains the control of visitors, but the permission to visit the REPP together with prospective suplier's clients should not be unreasonably withheld.

5.21 Authority

- Each party warrants that it has full capacity and authority, and all necessary licenses, permits and consents to enter into and perform this Agreement and that those signing this Agreement are duly authorized to bind the Party for whom they sign.

5.22 Correspondence & Registered Address

All the correspondence, invoices, credit or debit notes, etc., must be issued in the name of End-user must be addressed to:

[[END-USER, FULL NAME]]

Address

Address

ZIP Code, Town

Email: name@domain.suffix

Tel: +xx yyy zzzzzzzz Mobile: +xx yyy zzzzzzzz Fax: +xx yyy zzzzzzzz

All the correspondence with Supplier must be duly identified with either of the ESCo Agreement or related references and addressed to:

[[subsidiary, full name]]

Address

Address

ZIP Code, Town

Email: name@domain.suffix

Tel: +xx yyy zzzzzzzz Mobile: +xx yyy zzzzzzzz

Fax: +xx yyy zzzzzzzz

IN WITNESS WHEREOF the Parties have caused this Agreement to be duly executed and delivered as of the date and day first above written

……. …….

Date, Place Date, Place

…… ……..

[[local XXX, full name]] [[CLIENT, FULL NAME]]

6 References

Carbon Trust. Guidance notes for completion of biomass heat supply contract. Available at: https://www.carbontrust.com/media/74616/guidancenoteforsupplyofheatcontractcttemplate.pdf

David Wargert. 2011. Energy Contracting models in Germany and Sweden. Master Thesis 2011. Lund University.

Energia. Energy Supply Contract: Non-Household Customers. Available at <https://www.energia.ie/getmedia/90d8c1a6-d698-49e6-92f5-8648f84e2fa1/3236-energia-terms-and-conditions-jan-17-web.pdf.aspx;pdf;ppt>

European Association of Energy Service Companies. Energy Contracting. Successful energy services business models. Available at https://www.eu-esco.com

European Union. Energy Service Companies. https://ec.europa.eu/jrc/en/energy-efficiency/eed-support/energy-service-companies

IEA-SHC INFO SHEET 45.C.2.3. Task 45 Large Systems. Template for ESCo contract – short version. Available at: http://task45.iea-shc.org/fact-sheets.

RASLRES Project (Regional Approaches to Stimulating Local Renewable Energy Solutions project) http://www.raslres.eu/about-raslres/

Wargert D. 2011. Energy Contracting models in Germany and Sweden. Master Thesis 2011. LUND UNIVERSITY Department of Technology and Society. Environmental and Energy Systems Studies