VOLUME 4.2

FINANCIAL OFFER

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supply and installation of 20kw** **photovoltaic system and electric car charging station in Resen** | | | | | | | |
| **ELECTRICAL INSTALLATIONS – CONSTRUCTION** | | | | | | | |
| **No** | **Description** | **unit** | | **quantity** | | **unit price** | **total euro** |
| E1.1 | Supply, transport and installation of aluminum profiles ( as sub construction) with all required connecting elements | Piece | | 142 | |  |  |
| - length 54cm |
| E1.2 | Supply of ending holders for attachment of modules | Piece | | 44 | |  |  |
| E1.3 | Supply of middle holders for attachment of modules | Piece | | 98 | |  |  |
| E1.4 | Supply , transport and installation of monocrystal photovoltaic panels with power of 330W  Dimensions: 99 x 164 x 4,00cm  Photovoltaic module should has the following certificates:   * ISO 9001:2015 * ISO 14001:2015 * BS OHSAS 18001 * MKC EN 61215:2010 * MKC EN IEC 61730-1:2018 * MKC EN IEC 61730-2:2018 * CE Certificat * SGS TUV SAAR – IEC 61215 and IEC 61730   Mechanical warranty from the producer with the duration of 10 years. Technical warranty with duration of 25 years. | Piece | | 60 | |  |  |
|  | **TOTAL E1 without VAT (euro)** | | | | | |  |
| E2 | **E2 – ELECTRICAL INSTALLATIONS – INVERTERS AND DISTRIBUTION CABINETS** | | | | | |  |
| E2.1 | Supply , transport and installation of three-phase Grid Connected inverter from European origin 17.5kW , with following specifications :   * nominal power of 17.5 kW * maximum recommended power of PV modules of 20.12 kW ( recommended maximum overload 15% of nominal power) * 2(two) MPP trackers * Working range : 200-1000 VDC * Working range in maximum power point MPP:370-800 VDC * Number of springs per entry : 3X3 * warranty 5 years | Piece | | 1 | |  |  |
| E2.2 | Supply , delivery and wall mounting at a height of 1.5 m in an electrical room, DC distribution cabinet , degree of protection IP65 with cable editorials on the bottom and top side, equipped with following equipment |  | |  | |  |  |
|  | - surge drainer, class 2 , In=20kA, Imax = 40kA, Up>1kV | Piece | | 2 | |  |  |
|  | - cylinder patrons photovoltaic .g PV with nominal voltage of 1000V ( nominal current per project). | Piece | | 3 | |  |  |
|  | - system of busbars for connection of positive and negative potential ( one for "+" and one for "- ") , one for MPPT1 and 1 for MPPT2 | Piece | | 2 | |  |  |
| E.2.3 | Supply , delivery and wall mounting at a height of 1.5 m in corridor, AC distribution cabinet, degree of protection IP65 with cable editorials on the bottom and top side, equipped with following equipment | Piece | | 1 | |  |  |
|  | - automatic fuse B32A 3P , with short circuit current switching power ICU=10kA. The protection device must meet the standard IEC/EN 60269-1 | Piece | | 1 | |  |  |
|  | - system of busbars for L1, L2, L3 , N | Piece | | 1 | |  |  |
|  | - busbar for connection of protective conductor (PE) rail | Piece | | 1 | |  |  |
| Е2.4 | Device for reading the values of the inverter (monitoring system)- DATA LOGGER | Piece | | 1 | |  |  |
| E2.5 | Supply , delivery and wall mounting at a height of 1.5, AC distribution cabinet , degree of protection IP65 with cable editorials on the bottom and top side, equipped with following equipment   * three-pole blade fuse with nominal electricity of 80A * system of busbars for L1, L2, L3 , N * busbar for connection of protective conductor (PE) rail * three-phase CEE 63A power station connection * surge arresters T2 Ucpv ≥ 1.45 x Uf | Piece | | 1 | |  |  |
| E2.6 | Supply, transport and installation of a charging station for electrical cars of European origin, with the following specifications:  -nominal power 2 x 22 KWAC (32A)  -protective housing  - LCD monitor  -load management controller  -RFID authorization  -online 24/7 access to the charger  - ideal for the private sector  -operating temperature: -20 ° C to + 55 ° C  -protective class: IP54  -Dimensions: 1460 x 780 x 200mm  - adjusted with IEC61851 Mode 3  -CE certificate | Piece | | 1 | |  |  |
|  | **TOTAL E2 without VAT (euro)** | | | | | |  |
| E3 | **ELECTRICAL INSTALLATIONS – SOLAR AND INSTALLATION CONDUCTOR** |  | |  | |  |  |
| E3.1 | Supply, delivery and mounting conductor – type:  Solar cable PV1-F 0.6/1kV 1x4mm2  For connection between every springs and appropriate DC distribution cabinet | M | | 230 | |  |  |
| E3.2 | Supply, delivery and mounting conductor – type:  Solar cable PV1-F 0.6/1kV 1x4mm2  For connection between appropriate DC distribution cabinet and the inverter | m | | 5 | |  |  |
| E3.3 | Supply, delivery and mounting conductor - type:  Energy cable PP00-A 0.6/1kV 4x50 mm2  For connection between MDB and electrical car charging station. | m | | 25 | |  |  |
| Е3.4 | Supply, delivery and mounting single core cable type P/F 1x25mm2 0.6/1kV for ground connection between MDB and electrical car charging station. | m | | 25 | |  |  |
| E3.5 | Supply, delivery and mounting conductor – type   * Conductor P/F 1x10mm2   For connection for protective grounding from the modules to the DC cabinet | m | | 42 | |  |  |
| E3.6 | Supply, delivery and mounting conductor – type  Energy cable PP00-Y 5x6mm2  for connection between the inverter and AC distribution cabinet . The cable will be dragged on the walls , within PVC canal ( 60x60) | m | | 2 | |  |  |
| E3.7 | Supply, delivery and mounting conductor – type  Energy cable PP00-Y 5x6mm2  for connection between AC distribution cabinet and DB. The cable will be dragged on the walls , within PVC canal ( 60x60) |  | |  | |  |  |
|  | **TOTAL E3 without VAT (euro)** | | | | | |  |
| E4 | **OTHER ELECTRICAL EQIPMENT** |  | |  | |  |  |
| E4.1 | MC connectors for springs connection |  | |  | |  |  |
|  | - MC4 for „+“ potential | Piece | | 3 | |  |  |
|  | - MC4 for „- “ potential | Piece | | 3 | |  |  |
| E4.2 | - LAN cable, screws and others | total | | 1 | |  |  |
| E4.3 | Supply and installation of metal canal 50x60 for solar cable | m | | 40 | |  |  |
| E4.4 | Supply and mounting of metal canal for energy cable between MDB and electrical cars charging station | m | | 15 | |  |  |
| E4.5 | Supply and mounting of PVC canal ( 60x60) for solar and energy cables guiding | m | | 15 | |  |  |
| E4.6 | Supply of perforated tape for mounting of flexible intestine on aluminum roof | piece | | 1 | |  |  |
| E4.7 | Supply and mounting of flexible intestine with Ф16mm2 | m | | 10 | |  |  |
| E4.8 | Measuring gage for data record on production and consumption of electricity | piece | | 1 | |  |  |
|  | **TOTAL E4 without VAT (euro)** | | | | | |  |
|  | **TOTAL E1+E2+E3+E4 without VAT (euro)** | | | | | |  |
| AW | **ADDITIONAL WORKS** |  | |  | |  |  |
| AW1.1 | Contingency reserve – Additional works, occurred due to unexpected situation, from those planned in tech. document (max 10% of (E1+E2+E3+E4) ) | % | |  | |  |  |
|  | **TOTAL CR without VAT (euro) :** | | | | | |  |
| **M** | **MARKING [[1]](#footnote-1)** | | | | | |  |
| M1.1 | Information sign, with dimensions: 300 x 220 mm | Piece | 2 | |  | |  |
| M1.2 | Explanatory plaque, with dimensions: 1200 x 80mm , manufactured of resistant material – metal with protective layer | Piece | 1 | |  | |  |
|  | **TOTAL : E1+E2+E3+E4+CR+OS without VAT (euro)** | | | | | |  |

**LUMP SUM CONTRACTS**

**Introduction**

1. The breakdown of the lump-sum price (Volume 4.2.3) is the itemised list of prices showing the build-up of the price in a lump-sum contract. This breakdown of the lump-sum price does not derogate in any way to the clause stating that, in a lump-sum contract, the total contract price remains fixed irrespective of the quantity of work actually carried out.

The amounts due will be calculated:

<The breakdown must coincide with the payment-definition chosen in Article 49 of the special conditions:

For example: through the measurement of the percentage of works carried out in relation to the firm quantities of each item of the breakdown of the lump-sum price and by applying that percentage to the lump-sum price of the related item>

For example: by the tranches specified in Article 49(1)(a) of the special conditions>.

2. The item description given in the breakdown of the lump-sum price in no way limits the contractor’s obligations under the contract to provide all the works described elsewhere.

3. The prices of the breakdown of the lump-sum price include all incidental and contingent expenses and all risks necessary to construct, complete and maintain all works in accordance with the contract. Unless separate items are provided in the breakdown of the lump-sum price, prices include all costs involved in the various items of the breakdown.

4. The lump–sum price and the prices of the breakdown of the lump-sum price are all-inclusive and include any non-exonerated tax or fiscal duty.

**VOLUME 4.2.3 — BREAKDOWN OF THE LUMP-SUM PRICE**

| **Item** | **Description** | **Unit** | **Unit price** | **Firm quantities** | **Lump-sum price**  **[EUR] [local currency]** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | - | - |  |
|  |  |  | - | - |  |
|  |  |  | - | - |  |
|  |  |  | - | - |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  | - |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | **Total lump-sum price** |  |  |  |  |
|  |  |  |  |  |  |

1. Visibility should comply with the relevant rules lay down in the Communication and Visibility Manual for EU External Actions published by the European Commission. <http://www.ipa-cbc-programme.eu> [↑](#footnote-ref-1)