|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ANNEX-2 **PROJECT COMPONENTS SUMMARY TABLE – 1 (EQUIPMENT)** | | | | | | | | | | | | | |
|  |  | |  | | | | | | | | | | |
| **Project Efficiency Components** | | | | | | | | | | | | | |
| **Component Code** | | **Component Price**  **(TL)** | | **Pre-Application Nominal Power / Installed Capacity**  **(kW)** | **Post-Application Nominal Power / Installed Capacity**  **(kW)** | | **Pieces** | **Power Measured Before Application**  **(kW)** | **Projected Power After Application**  **(kW)** | | **Component Annual Operation Period**  **(h)** | **Component Annual Energy Gain**  **(kWh)** | **Component Financial Savings (TL/Year)** |
|  | | (a1) | |  |  | | (ı) | (i) | (j) | | (k) | (b1)= (ı)x(i-j)x(k) | (c1) |
|  | | (a2) | |  |  | |  |  |  | |  | (b2) | (c2) |
|  | | . | |  |  | |  |  |  | |  | . | . |
|  | | (an) | |  |  | |  |  |  | |  | (bn) | (cn) |
|  |  | |  | | | | | | | | | | |
| **Project Preparation Price (TL)** | | | | (d) | |  | | | | | | | |
| **On-Site Pre-Examination Price (TL)** | | | | (m) | |  | | | | | | | |
|  |  | |  | | | | | | | | | | |
| **TOTALS** | | | | **Project Price (PB)**  **(TL)** | | | **Project Energy Gain (PEK) (kWh)** | | | **Project Financial Savings (PMT) (TL)** | | **Project Payback Period (PGÖS) (Year)** | |
| (e)= [(a1)+(a2)+…+(an)]+(d)+(m) | | | (f)=(b1)+(b2)+...+(bn) | | | (g)=(c1)+(c2)+...+(cn) | | (h)=(e)/(g) | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PROJECT COMPONENTS SUMMARY TABLE – 2 (SYSTEM)** | | | | | | | | | | | |
|  |  |  | | | | | | | | | |
| **Project Efficiency Components** | | | | | | | | | | | |
| **Component Code** | | | **Component Price**  **(TL)** | | **Power Measured Before Application**  **(kW)** | | **Projected Power After Application**  **(kW)** | **Component Annual Operation Period**  **(h)** | **Component Annual Energy Gain**  **(kWh)** | | **Component Financial Savings (TL/Year)** |
|  | | | (a1) | | (i) | | (j) | (l) | (b1)=(i-j)x(l) | | (c1) |
|  | | | (a2) | |  | |  |  | (b2) | | (c2) |
|  | | | . | |  | |  |  | . | | . |
|  | | | (an) | |  | |  |  | (bn) | | (cn) |
|  |  |  | | | | | | | | | |
| **Project Preparation Price (TL)** | | | | (g) |  | | | | | | |
| **On-Site Pre-Examination Price (TL)** | | | | (m) |  | | | | | | |
|  |  |  | | | | | | | | | |
| **TOTALS** | | | **Project Price (PB)**  **(TL)** | | | **Project Energy Gain (PEK) (kWh)** | | **Project Financial Savings (PMT) (TL)** | | **Project Payback Period (PGÖS) (Year)** | |
| (e)= [(a1)+(a2)+…+(an)]+(d)+(m) | | | (f)=(b1)+(b2)+...+(bn) | | (g)=(c1)+(c2)+...+(cn) | | (h)=(e)/(g) | |

**PROJECT COMPONENTS SUMMARY TABLE – 3 (COGENERATION SYSTEM)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Efficiency Components** | | | | | | | | | | | | |
| **Component Code** | | | **Component Price**  **(TL)** | | **Installed Capacity**  **(kW)** | | **Total Yield**  **(%)** | **Primary Energy Source Saving**  **(kW)** | **Component Annual Operation Period**  **(h)** | **Primary Energy Source Annual Savings**  **(kWh)** | | **Component Financial Savings (TL/Year)** |
|  | | | (a) | |  | |  | (i) | (j) | (b) =(i)x(j) | | (c) |
|  |  |  | | | | | | | | | | |
| **Project Preparation Price (TL)** | | | | (d) |  | | | | | | | |
| **On-Site Pre-Examination Price (TL)** | | | | (m) |  | | | | | | | |
|  |  |  | | | | | | | | | | |
| **TOTALS** | | | **Project Price (PB)**  **(TL)** | | | **Project Energy Gain (PEK) (kWh)** | | | **Project Financial Savings (PMT) (TL)** | | **Project Payback Period (PGÖS) (Year)** | |
| (e)=(a)+(d)+(m) | | | (f)=(b) | | | (g)=(c) | | (h)=(e)/(g) | |

**PROJECT COMPONENTS SUMMARY TABLE – 4 (ELECTRICITY GENERATION SYSTEM FROM WASTE HEAT)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Efficiency Components** | | | | | | | | | | | |
| **Component Code** | | | **Component Price**  **(TL)** | | **Net Electric Maximum Output Power**  **(kW)** | | **Component Annual Operation Period**  **(h)** | | **Annual Electricity Generation**  **(kWh)** | | **Component Financial Savings (TL/Year)** |
|  | | | (a) | | (i) | | (j) | | (b) =(i)x(j) | | (c) |
|  |  |  | | | | | | | | | |
| **Project Preparation Price (TL)** | | | | (d) |  | | | | | | |
| **On-Site Pre-Examination Price (TL)** | | | | (m) |  | | | | | | |
|  |  |  | | | | | | | | | |
| **TOTALS** | | | **Project Price (PB)**  **(TL)** | | | **Project Energy Gain (PEK) (kWh)** | | **Project Financial Savings (PMT) (TL)** | | **Project Payback Period (PGÖS) (Year)** | |
| (e)=(a)+(d)+(m) | | | (f)=(b) | | (g)=(c) | | (h)=(e)/(g) | |

|  |  |
| --- | --- |
| **PROJECT COMPONENTS SUMMARY TABLE PREPARATION GUIDE** | |
| **General Description** | Each project is prepared on only one application. The project can consist of multiple components. In this case, the components must be in the same application.  Example: Independent application subjects such as electric motor, waste heat recovery, insulation, lighting cannot be presented within the scope of a single project.)  The "Project Components Summary Table" appropriate to the project subject is filled. |
| **Equipment** | It refers to devices that use heat energy through fuel, electrical energy or fluid, such as electric motors, boilers, furnaces, coolers, air conditioners, pumps, fans, compressors, elevators, belt conveyors, lighting appliances and other process or manufacturing equipment.  "Project Components Summary Table (Equipment)" table is filled for the components consisting of equipment.  Devices that are changed one-to-one on a piece-by-piece basis should be considered as equipment, others as systems.  Example: The replacement of 10 inefficient electric motors with 10 efficient electric motors should be considered as equipment, and the replacement of 10 inefficient lighting fixtures with 5 efficient lighting fixtures should be considered as a system. |
| **System** | It refers to energy distribution or control applications in hot water, steam, refrigerant or compressed air transports, fluid-carrying pipe and canal systems, and the improvements to be made on the equipment that provide and control this transportation and the applications other than the one-to-one equipment replacement.  Example 1: Replacing 3 inefficient compressors with 1 efficient compressor  Example 2: Insulation of pipes and valves in the steam distribution line, such as steam trap replacement |
| **Component Code** | Component short name / xx  A different code should be determined for each component. |
| **Efficiency Component Price (TL)** | It refers to the sum of the purchase and labor prices of the equipment / system / cogeneration system / waste heat electricity generation system to be made within the scope of the project. These prices are shown separately in unit price and quantity in the invoice. |
| **Pre-Application Nominal Power / Installed Capacity (kW)** | Refers to the power value in kW specified on the label of the equipment in the current state. |
| **Post-Application Nominal Power / Installed Capacity (kW)** | It refers to the power value in kW specified in the catalog of the equipment envisaged to be applied. |
| **Power Measured Before Application**  **(kW)** | It refers to the power value of the equipment / system in kW, measured in the current state under regime. |
| **Projected Power After Application**  **(kW)** | It expresses the predicted power value of the equipment / system in kW in case of regime after application. |
| **Component Annual Operation Period**  **(h)** | It refers to the operating time of the equipment / system / cogeneration system / waste heat electricity generation system, which is not more than the annual working hours of the enterprise. |
| **Component Annual Energy Gain**  **(kWh)** | Refers to the calculated energy gain value as indicated in the equipment / system project component summary tables. |
| **Component Financial Savings (TL)** | The component expresses the value found by multiplying the annual energy gain by the energy unit prices (excluding VAT) specified in the application file. |
| **Cogeneration:** | The "Cogeneration Facility Efficiency Certificate" issued by the Ministry within the scope of the Unlicensed Electricity Generation Regulation refers to the system in which heat and electricity are produced together.  In the on-site inspections of cogeneration facilities, the compliance of the primary energy source annual savings value presented in the project component summary table is sought, provided that the total efficiency, power / heat ratio and primary energy resource savings are provided in the efficiency certificate. Support is not applied if the savings value presented in the table after the implementation is below 90%. |
| **Installed Capacity (kW)** | Refers to the installed electrical power of the cogeneration facility. |
| **Total Yield (%)** | It refers to the calculated value as stated in the Communiqué on Procedures and Principles for Calculating the Efficiency of Cogeneration and Micro-cogeneration Plants. |
| **Primary Energy Source Saving (kW)** | It refers to the calculated value as stated in the Communiqué on Procedures and Principles for Calculating the Efficiency of Cogeneration and Micro-cogeneration Plants. |
| **Primary Energy Source Annual Savings (kWh)** | It refers to the value obtained by multiplying the primary energy resource savings (kW) value by the component annual operating time (h). |
| **Cogeneration Component Financial Savings (TL)** | Cogeneration Component Financial Savings (TL) = Heat Financial Savings + Electricity Financial Savings- Facility's Fuel Consumption Cost  Heat Financial Savings = It refers to the value obtained by multiplying the value obtained from the useful heat generated in the facility by the fuel unit price (excluding VAT). (Boiler Yield should be taken into account in heat financial savings calculations.)  Electricity Financial Savings = It refers to the value obtained by multiplying the net annual electricity energy (kWh) produced at the facility by the unit price of electricity purchased (excluding VAT). (The net electricity generation value in the Yield Certificate is taken into account.)  Facility's Fuel Consumption Price = Refers to the value obtained by multiplying the amount of fuel consumed by the fuel unit price (excluding VAT).  In calculations, lower calorific values specified in the appendix of the regulation should be taken into account.  Example: 8.250 kCal / m3 for natural gas |
| **Electricity Generation from Waste Heat** | It refers to the electricity generation system from waste heat for which the Yield Certificate issued by the Ministry within the scope of the Unlicensed Electricity Generation Regulation has been obtained. |
| **Net Electric Maximum Output Power (kW)** | The electricity obtained after subtracting the internal consumption values refers to the maximum output power. (The net electricity maximum output power value in the Yield Certificate is taken into account.) |
| **Annual Electricity Generation (kWh)** | It refers to the value obtained by multiplying the net electricity maximum output power (kW) by the component annual operating time (h). |
| **Electricity Generation from Waste Heat Component Financial Savings (TL / Year)** | It refers to the value obtained by multiplying the annual electricity generation (kWh) value by the unit price of electricity (excluding VAT). |
| **Project Preparation Fee (TL)** | Refers to the service fee provided to the Company in order to realize the project. |
| **On-Site Pre-Examination Price (TL)** | It refers to the service fee for the preliminary inspection at the project site before the implementation made by the real or legal persons appointed by the Ministry. The real or legal persons who will carry out on-site examinations and the on-site preliminary examination fee are announced on the Ministry website. |
| **Project Price (PB) (TL)** | It refers to the sum of the cost of equipment / system / cogeneration system / electricity generation system from waste heat plus the cost of project preparation and on-site preliminary examination. |
| **Project Energy Gain (kWh)** | This refers to the sum of the Equipment / System / waste heat power generation system annual energy gain / cogeneration system primary energy resource savings. |
| **Project Financial Savings (TL)** | This refers to the sum of Equipment / system / cogeneration system / waste heat power generation system component financial savings. |
| **Project Payback Period (Yıl)** | It expresses the ratio of the cost of project components to the project financial savings. |