



**KAZAKHEXPORT**

# **RECOMMENDATIONS OF "EXPORT CREDIT AGENCY OF KAZAKHSTAN" JSC FOR EXPORTERS ON IMPROVING ENERGY EFFICIENCY**

**PRACTICAL STEPS WITHOUT OBLIGATIONS OR EXCESSIVE COSTS**

## WHY ENERGY EFFICIENCY IS NEEDED:

### **Improving energy efficiency helps exporters to:**

- **reduce production costs** by saving electricity and fuel;
- **reduce greenhouse gas emissions**, which is increasingly considered by foreign partners;
- **increase competitiveness** in foreign markets;
- **facilitate cooperation with banks, investors, and export credit agencies;**
- be better prepared for ESG and climate metric inquiries from foreign counterparties.

*Many foreign partners are already paying attention to how efficiently a company uses energy, even if there are no formal requirements yet.*



### Quick Measures (Without Significant Investment)

- Replacing incandescent and fluorescent lamps with **LED lighting**.
- Switching off lighting and equipment during non-working hours.
- Installing **motion sensors and timers** in warehouses, corridors, and utility rooms.
- Regular cleaning and maintenance of electric motors, ventilation systems, and compressors.

### Medium-Term Measures

- Replacing obsolete equipment with **energy-efficient equivalents (Class A and above)**.
- Optimizing equipment operation schedules (reducing peak loads).
- Installing **electricity metering by workshop/section**, rather than solely for the entire facility.

### Sector Examples:

- Manufacturing Industry: energy-efficient electric motors and compressors.
- Food Industry: optimization of refrigeration equipment.
- Construction Materials: energy consumption control for kilns and drying units.

### When Planning Modernization:

- replace obsolete equipment with energy-efficient models (Class A and above);
- optimize equipment operation schedules to lower peak loads;
- install electricity metering for specific workshops or sections.



## **Quick and Low-Cost Measures**

- Regular maintenance of boilers, generators, furnaces, and vehicles.
- Control of heat and fuel leaks.
- Route optimization for service and cargo vehicles.
- Use of economical equipment operating modes.

## **More Comprehensive Measures**

- Transition to more efficient boilers, burners, and furnaces.
- Improving thermal insulation of buildings, pipelines, and production facilities.
- Installation of automatic temperature and pressure control systems.

## **Sector Examples:**

- Metallurgy: reduction of heat loss in furnaces.
- Food Industry: optimization of baking, boiling, and pasteurization processes.
- Light Industry: energy-efficient steam generators.



## **Key Savings Area for Industry**

- Analyze which production stages consume the most energy.
- Combine energy-intensive operations into a single cycle whenever possible.
- Utilize heat recovery (reuse of waste heat).
- Reduce defect rates and rework — this directly lowers energy costs.



## **Especially Important for Exporters**

Optimization of delivery and shipment routes.

Prioritizing consolidated loads (fuller shipments) over frequent small deliveries.

Transitioning to more fuel-efficient vehicles when upgrading the fleet.

Combining deliveries with return logistics (backhauling).

## **Additionally:**

Planning shipments with batch consolidation in mind.

Partnering with logistics operators that offer more energy-efficient solutions.



## RENEWABLE ENERGY SOURCES (IF FEASIBLE)

- Use of solar panels for offices, warehouses, and utility rooms.
- Purchasing electricity from renewable sources (if available from the provider).
- Using on-site generation to reduce peak loads.
- Even partial use of RES is positively perceived by foreign partners.



Цель декарбонизации к 2060 году

**It is recommended to:**

- Appoint a responsible person for energy consumption.
- Record **monthly consumption** of electricity, fuel, and heat.
- Compare figures month-over-month and year-over-year.
- Retain bills and documentation — they will be useful for cost management and ESG reporting.



*"Export Credit Agency of Kazakhstan" JSC does not require the mandatory implementation of these measures.  
All recommendations are voluntary in nature.  
Even minor steps towards energy efficiency are viewed positively in the context of long-term cooperation.  
The absence of such measures does not affect the terms of support.*



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ЭКСПОРТНО-КРЕДИТНОЕ АГЕНТСТВО КАЗАХСТАНА

**THANKS FOR YOUR ATTENTION!**

