Eurasian Development Bank

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Financing energy efficiency projects

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The main barriers to the implementation of energy efficiency projects

59%

Financial

- Luck of own financial resources
- The complexity of the evaluation of the economic effect
- High interest rates
- The difficulty of obtaining long-term loans
- Significant associated costs

27%

Administrative

- The bureaucracy of government bodies
- Outdated legislation and regulations
- Lack of government support
- The complex process of internal reconciliation project
- Lack of qualified staff

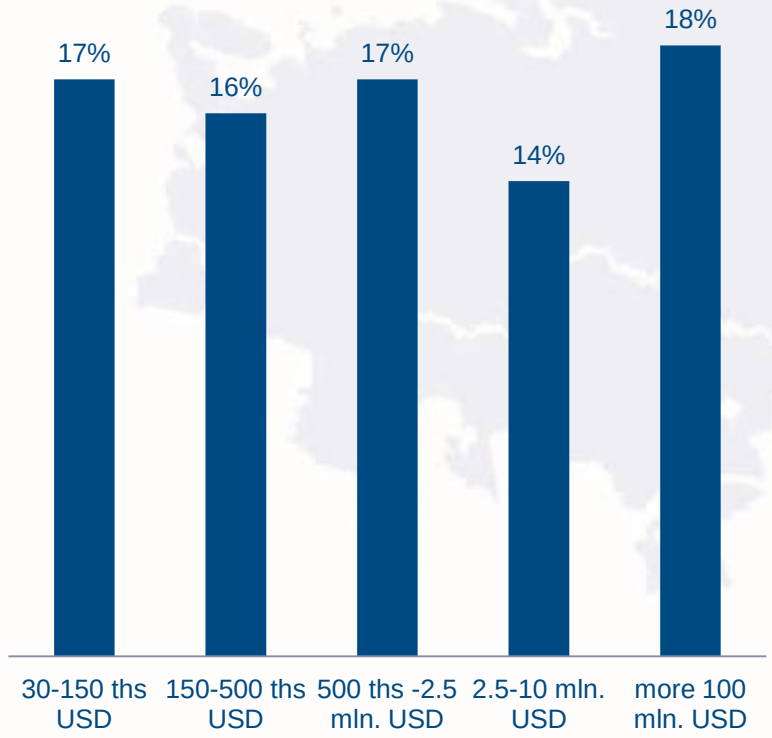
14%

Technical

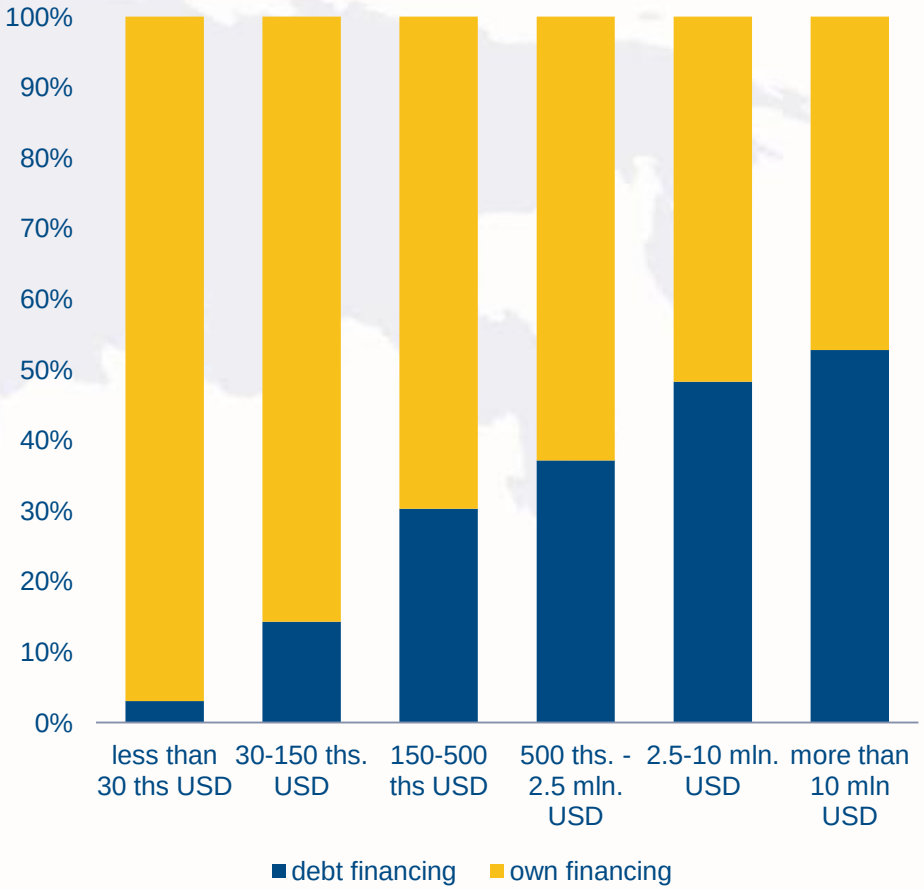
- Lack of practical experience in the implementation of projects
- The need to develop unique technology solutions
- The lack of competent project organizations

Financing energy efficiency

Energy efficiency projects on the cost of their implementation (according to EDB survey)



Sources of financing of projects, depending on the budget of the project (according to EDB survey)



What projects can be funded?

Reduction of energy consumption

- measures aimed energy savings
- replacement or modernization of production equipment
- implementation of systems for monitoring energy consumption

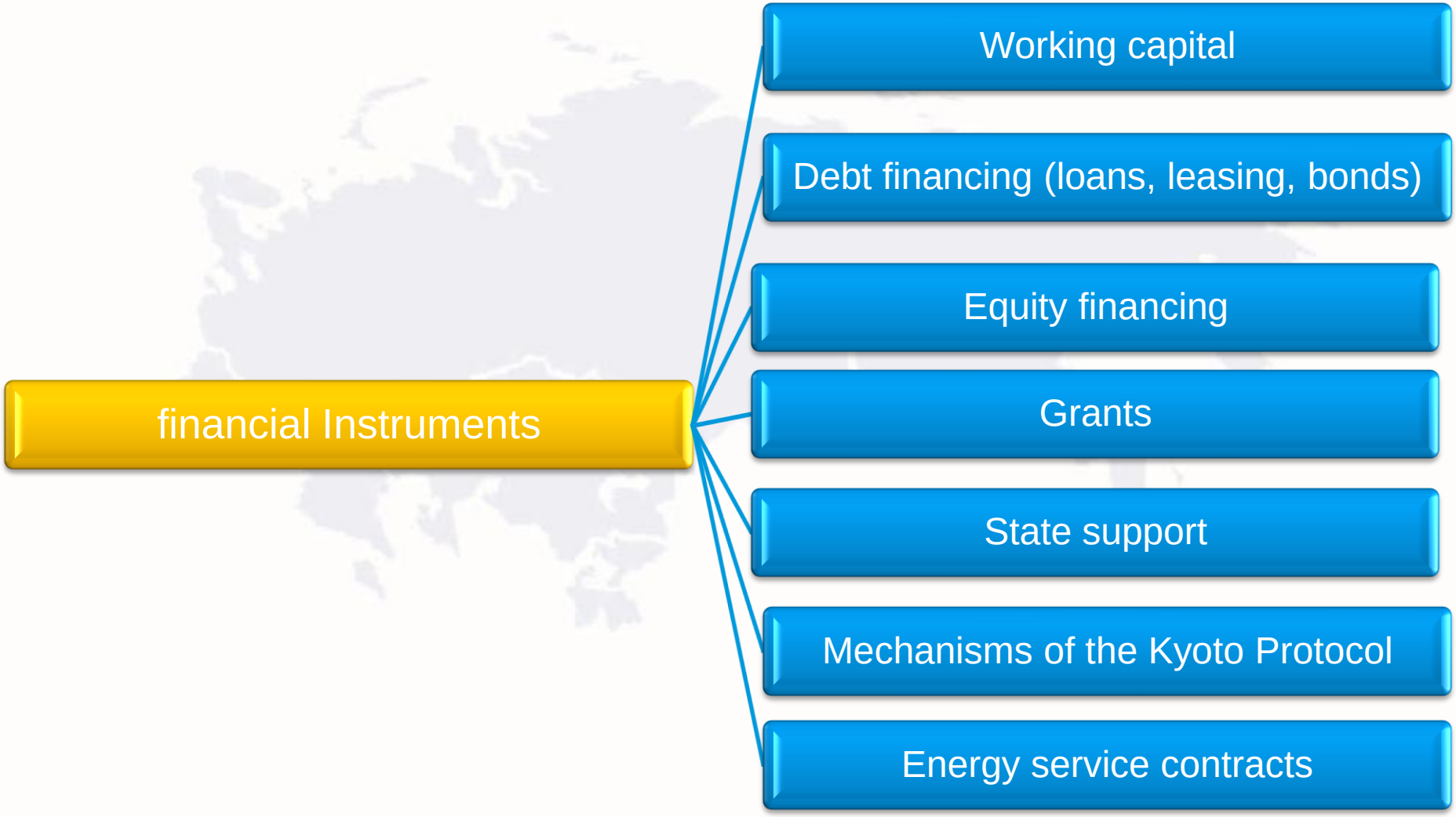
The use of renewable energy sources

- installation of new equipment
- use of organic waste

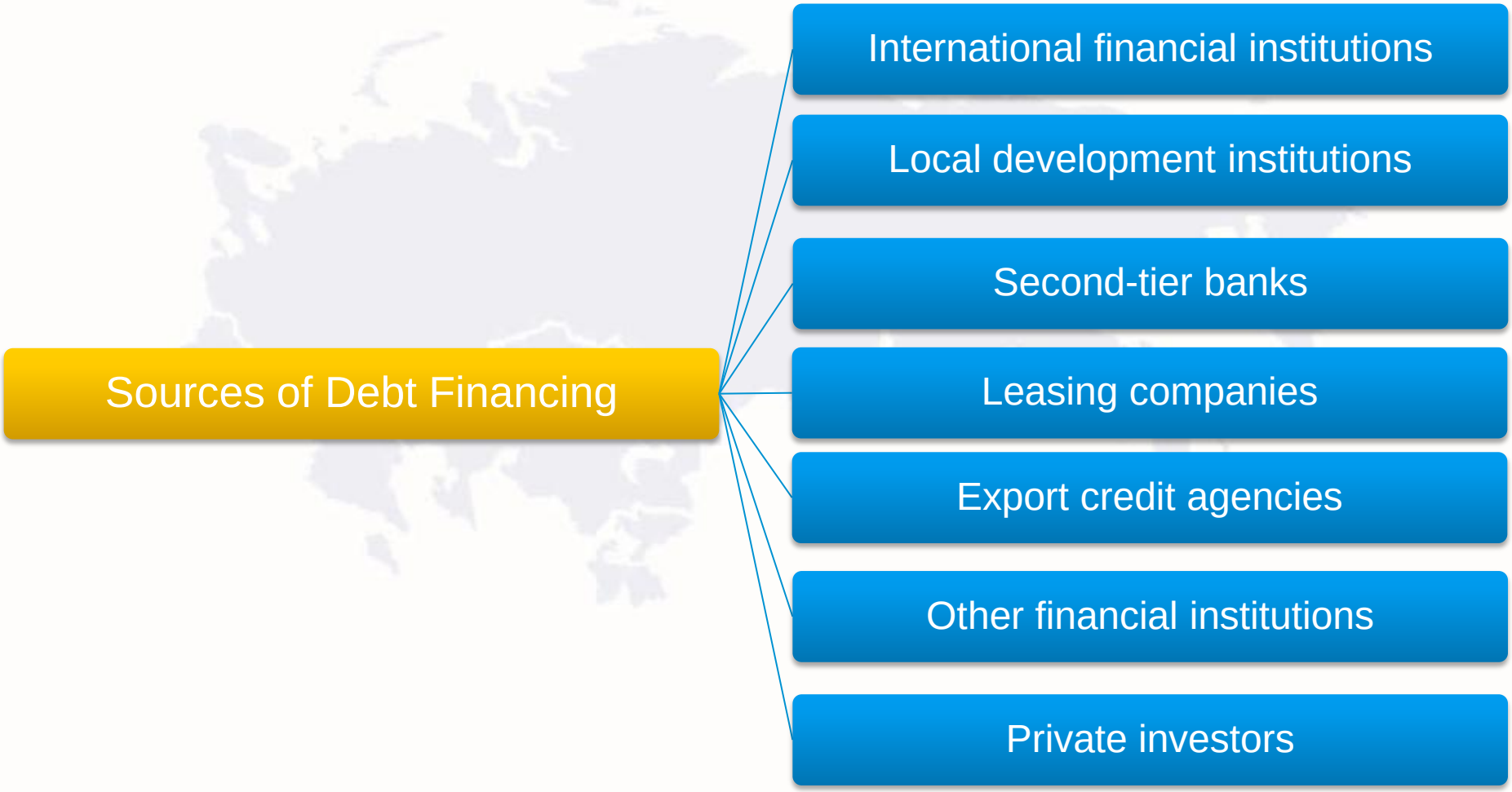
Resource Efficiency

- replacement or upgrading of equipment
- renewal of the vehicle fleet
- adoption of information technology systems

Financial Instruments



Sources of Debt Financing



Financing through development institutions

IFIs, development banks

Direct funding of projects:
- Large-scale projects;
- Low rates of financing;
- Long life;
- Detailed study of the project;
- Special attention to social and environmental responsibility;
- Reputation of the Borrower;
- Terms of procurement

Funding through partner banks:
- Small projects;
- A small payback.

- Expert support

Bond issue

Highlights:

- obtain "cheap money", without collateral property, without losing control over the enterprise
- quite large amounts of funding
- associated costs at least 15 ths. USD + 2-3% of the issue
- PR and IR support
- profitability over the previous few years
- the investment program for the implementation of which the funds are attracted

EDB projects

Construction of 45MW wind power plant in the region of Yereimentau.

Bank's funding – approximately **$ 94.6 mln.**

Expected outcomes:

✓Reduction of the share of traditional energy resources in the fuel and energy balance of Kazakhstan;

✓Reduction of energy intensity of GDP;

✓Reduction of annual electricity consumption by 370 000 kW;

✓Reduction of greenhouse gas emissions by 72 000 tons.

Utilization of associated gas at Kenlyk oilfield in Kazakhstan

Bank's funding - **$ 25 million**.

Expected outcomes:

✓Reduction of greenhouse gas emissions;

✓Production of liquefied gas propane-butane and stable gasoline;

✓Improvement of the efficient consumption of natural resources;

✓20% of purified gas will be used by the company itself;

✓17.3% of purified gas will be used for electricity generation.

EDB projects

Building the car repair and washing-steaming stations in Kazakhstan

Bank's funding - **$56 million**.

Expected outcomes:

✓Reduction of heat losses;

✓Reduction of ventilation-caused losses;

✓10-15% savings on heating costs;

✓25% production cost reduction;

✓8% cost reduction on gas fuel;

✓10-15% productivity increase.

Production of electric locomotives in Kazakhstan

Bank's funding - **$66.4 million**.

Expected outcome:

✓3-5% reduction of energy consumption;

✓Increase of railways transit capacity;

✓Labor cost reduction;

✓Reduction of accidents;

✓Reduction of costs on service and repair of locomotives.

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