



INVESTPROJECTS

THERMOMODERNIZATION SOCIAL FACILITIES MUNICIPAL PROPERTY

Type of project	Regional Development Project, a social project.
Location	Kyiv region.
Objectives of the project	Reducing the costs and energy consumption primarily natural gas.Reducing the budget for the payment of costs of energy.
Project properties	In the Kyiv region there are 735 pre-school institutions with total area of 617 square meters, comprehensive of 725 square meters. Of these, it requires insulation 224 and 282 establishments respectively. 1031 health care facility also operates a total area of 125.9 thousand square meters of them need modernization of 945 institutions. Today the rate of warming of pre-school education establishments is 69.5%, secondary ucherezhdeny - 61.0%, health-zucherezhdeny 8.9%. The project includes the modernization of 224 ucherezhdeny pre-school education, 282 secondary ucherezhdeny and 945 health institutions. This will provide a level of factor modernization sphere of social institutions in the amount of 100%. Ultimately, this will save budgetary funds.
Expected results	<ul style="list-style-type: none">• Provision of budget savings to pay for consumed energy budget institutions through the introduction - to 20% from the base year;• Ensuring the optimal temperature in rooms, and improve the aesthetic appearance of the building.
Key objectives of the project	Insulation of exterior designs.
Project implementation period	5-9 years
The total project cost	20 mln USD
Potential participants in the project:	By implementing private companies can be involved in the project, the investment funds of international design organizations on the rights of public-private partnership or concession.



INVESTPROJECTS

ROAD/STREET LIGHT FACILITIES UPGRADING

Type of Project	Regional Development Project / Social Project
Location	Kyiv Region
Project Target	The Energy Costs Reducing by Providing LED-Technology.
Project properties	<p>Kyiv region is covered by 114.8 thousand Road/Street Light Facilities with only 57.5 thousand supported by LED-Technology.</p> <p>Average power of one Road/Street Light Facility is near 357.9 kW/h.</p> <p>As a result 57.3 thousand Road/Street Light Facilities are absolutely worn out and need to be changed by new one with modern technology light transmission and lack of negative impact on human health. The Project would result 100% covering of Kyiv Region by latter-day technology Road/Street Light Facilities. From 2 to 8 time power saving is expected.</p>
Expected results	<ul style="list-style-type: none">• 2 to 8 time power saving• No stroboscopic effect• No negative impact on human health• Automatic regulation of illumination depending on the natural lighting• Budget funds saving
Key Target	Installation of energy-saving Light Facilities
Implementation Period	5-9 years
Total Funding	10 mln \$
Key Participants/Investors:	private companies, international investment funds, design organizations may be involved in the project implementation on the rights of the public-private partnership or concession



INVESTPROJECTS

DISPOSAL AND RECYCLING OF MUNICIPAL SOLID WASTE

Type of project	Regional Development Project, a social project.
Location	Kyiv region.
Objectives of the project	Implementation of this project will make it possible to provide sanitary cleaning and reduce waste and improve the environmental situation in the Kyiv region.
Project properties	In the Kyiv region is located 338 landfills and landfills that accept 744 tons of solid waste per year .. The total number of processed and sorted MSW is 36 thousand tons, accounting for 4.8% of total waste. In the Kyiv region operates 101 processing line, the number of which is not enough. You must implement a global project for the recovery and recycling of solid waste.
Expected results	Improvement of ecological situation in the region, creating new jobs and thus filling local budgets.
Key objectives of the project	Construction of factories for the processing of municipal solid waste; Scrap wholesale and retail trade; Industrial waste; Petrochemical waste; Medical waste;
Project implementation period	2-5 years
The total project cost	180-250 million USD
Key potential participants in the project:	By implementing the project may be involved in private companies, investment funds international design organizations on the rights of public-private partnership or concession.



INVESTPROJECTS

PROJECT the petroleum products market expansion in the Kiev region on 30%

Total quantity of the filling station in Kyiv region 506 units.

Total quantity of the registered cars in the region – 500,000 units.

Accordingly: 1 filling station serves 1000 cars (without transit).

Planned: 1 filling station A3K can serve 770 cars (without transit)..

- 150 (The average fuel volume a day – 400,000 liters.
- The average cash flow a day – UAH 8,000,000.
- The average year turnover – UAH 2,880,000,000.
- The average year cash flow – UAH 576,000,000 (on conditions that the average year cash flow of one station equal to 20% of turnover)

Official expenses on construction and land acquisition:

- Construction cost of one station – UAH 8,000,000.
- Investment payment to Kyiv region budget – UAH 1,000,000.

Project cost formula:

$$\rho = \alpha \times (\gamma - \varepsilon) - \varphi$$

Where:

ρ - land market-value for construction of 150 filling station

α - the average year cash flow

γ - payback period (5 years)

ε - project prepare period (land acquisition, construction filling station – 1.5 years)

φ – official expenses on construction and land acquisition

$$\rho = \text{UAH } 576,000,000 \text{ грн.} \times (5 \text{ years} - 1 \text{ year}) - \text{UAH } 1,350,000,000$$

$$\rho = \text{UAH } 954,000,000 \text{ or } \underline{\$38,160,000} (\text{rate of exchange} - \$ 1 = \text{UAH } 25).$$

$$\text{IRR} = 43.3\%$$

(for investor without land rent)

* Investment for Kyiv region will be UAH 1,200,000,000, Kyiv region budget will get UAH 150,000,000, the district budgets will get monthly profit from land rent.



INVESTPROJECTS

PROJECT

Creation of the industrial parks and industrial areas

Is planned to created:

- Total quantity of industrial parks in Kyiv region – 5 units.
- Total quantity of industrial aresa in Kyiv region – 25 units.

Investments:

- The average size of the industrial area – 10 hectares.
- The average size of the industrial park – 50 hectares.
- Investment for business initiating - \$ 2,000,000/hectare.

Official expenses on land acquisition:

- Land acquisition cost - UAH5,000/hectare

Formula for 1 hectare cost calculation:

Formula for Project cost calculation:

$$\rho_1 = \left(\frac{5 \times \alpha}{100} \right) \rho_2 = \left(\frac{5 \times \alpha}{100} \right) \times \varphi$$

Where:

- ρ – land market-value for industrial park/business creation
- α – investment in hectare
- φ – total quantity of hectares

Then:

$\rho_1 = 5\%$ of investment a one hectare: \$ 100,000

or:

$\rho_2 = 5\%$ or total project cost: \$ 50,000,000

IRR = 33.1%

(for investor, on conditions that year cash flow equal \$ 12,000,000)

* Investment for Kyiv region will be \$ 1,000,000,000 or UAH 25,000,000,000 (rate of exchange - \$ 1 = UAH 25). 15,000 work positions will be created, Kyiv region budget will get UAH 150,00,00, the district budgets will get monthly profit from land rent and taxes.



INVESTPROJECTS

PROJECT The retail area increasing in Kievregion on 15%

Total quantity of markets in Kyiv region – 2060; kiosks – 240.

Total quantity of outlets in all markets – 26 000 units.

Accordingly: 250 outlets are situated on 1 market.

Isplanned:

Планируется: retail chain in creasing on 15% – 15 markets (3750 outlets, each – 4m²); 200 shops (on average each 300m²); 100 kiosks.

Consumer product turnover in Kiev region:

- The average turnover a day– UAH 76,712,328.
- The average turnover a year– UAH 28,000,000,000.
- The average year cashflow– UAH 5,600,000,000 (on conditions that the average year cash flow equal to 20%).
- **The average year cashflow of 15% retail area – UAH 840,000,000.**

Official expenses on additional 15%-retail area creation:

- **Construction cost of one station – UAH 8,000,000.**
- **Investment payment to Kyiv region budget – UAH 1,000,000.**

The official cost of creating an additional 15% of retail space:

- Land cost– UAH 18,750,000 (UAH 25,000/hundredth parts).
- Cost of outlets creation (UAH 2,000 / 1m²) – UAH 30,000,000.
- Construction cost of 200 shops (UAH 10,000 / 1m²) – UAH 600,000,000.

Project cost formula:

$$\rho = \alpha \times (\gamma - \varepsilon) - \varphi$$

Где:

ρ – market value of services for retail area creation

α – the average year cash flow

γ – payback period (3 years)

ε – project prepare period (land acquisition, retail area creation/construction – 1 year)

φ – official expenses on construction and land acquisition

Then:

$$\rho = \text{UAH } 840,000,000 \times (3 \text{ years} - 1 \text{ year}) - \text{UAH } 648,760,000^*$$

And:

$$\rho = \text{UAH } 1,031,240,000 \text{ or } \underline{\$41,249,600} \text{ (rate of exchange - } \$1 = \text{UAH } 25).$$

IRR = 95.6%

(for investor without lend rent)

* Investment for Kyiv region will be UAH 648,760,000). 4,000 work positions will be created, the district budgets will get monthly profit from land rent and taxes.



INVESTPROJECTS

PROJECT Network of the thermoelectric power plants on alternative fuel

Total quantity of markets in Kyiv region – 2060; kiosks – 240.

The structure of the generating capacity in Ukraine in 2011:

- Thermal power station and thermal heat and power station – 47.5%
- Nuclear power plant – 43.6% (term of operation of nuclear power is 30-40 years).
- Hydroelectric power plant and hydroelectric pumped storage power plant – 9,4%
- Solar-power-plant – 0.3%
- Wind-power-station – 0.2%

The planned number of industrial parks is 25:

- The average electricity consumption by 1 park - 5 MW.
- The average electricity power consumption of 25 parks - 125 MW.

The average power of the bio-power-station – 3MW.

The required quantity of the bio-power-stations – 40 units.

Fare for feed-in tariff:

- Solar – 505.09 kopecks/kW-h
- Biomass – 134.46 kopecks/kW-h
- Wind-power-station - 122.77 kopecks/kW-h
- Small hydroelectric power plant – 84.18 kopecks/kW-h

Official expenses on construction and land acquisition:

- Construction cost of one object – \$1,000,000/1MBt.
- Land acquisition cost - UAH50,000/hectare

Project cost formula:

$$\rho = \alpha \times (\gamma - \varepsilon) - \varphi$$

Where:

ρ – land market-value for power plant construction

α – the average year cash flow (addition calculations are needed)

γ – payback period (5 years)

ε – project prepare period (land acquisition, construction – 2 years)

φ – official expenses on construction and land acquisition

$$\text{IRR} = 30\%$$

(for investor without land rent)

* Investment for Kyiv region will be \$125,000,000, the district budgets will get monthly profit from land rent and taxes.