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**MUNICIPAL HEATING
REFORM IN UKRAINE**

MUNICIPAL HEATING REFORM PROJECT (MHR)

**Review of Funding Sources for Investment Projects
in the Heating Sector and the Opportunities for
Their Application within the "Municipal Heating
Reform" Project**

Report Based on Survey Conclusions

2009

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TABLE OF CONTENTS

ABBREVIATIONS.....	4
INTRODUCTION.....	6
1. OWN FUNDS OF CENTRALIZED HEATING ENTERPRISES.....	7
1.1 DEPRECIATION.....	7
1.2 NET PROFIT.....	11
2. BUDGETARY FUNDING.....	15
2.1 FUNDING FROM THE STATE BUDGET OF UKRAINE.....	15
2.2 FUNDING FROM LOCAL BUDGETS	21
3. LOAN RESOURCES	26
3.1 BORROWINGS OF LOCAL BUDGETS	26
3.1.1 <i>Specific features of placement (issuance) of local loan bonds</i>	28
3.1.2 <i>Specific features of involving credit resources</i>	29
3.2 BORROWINGS OF ENTERPRISES.....	39
3.2.1 <i>Credits of enterprises</i>	39
3.2.2 <i>Bonds</i>	46
3.3 LOANS OF CONDOMINIUMS	50
3.4 INVOLVEMENT OF FUNDS OF INTERNATIONAL FINANCIAL AGENCIES.....	53
3.4.1 <i>Programs of the International Bank for Reconstruction and Development (IBRD)</i>	54
3.4.2 <i>EBRD programs</i>	57
3.4.3 <i>Programs of the International Finance Corporation (IFC)</i>	59
3.4.4 <i>Programs of the German State Bank for Development (KfW)</i>	64
3.4.5 <i>Programs of the Nordic Investment Bank</i>	66
3.4.6 <i>"Dutch International Guarantees for Housing" (DIGH) Fund</i>	68
3.4.7 <i>Programs of the Nordic Environment Finance Corporation NEFCO</i>	69
4. FUNDING BY INTERNATIONAL DONORS (GRANTS).....	75
4.1 PROGRAMS AND INITIATIVES OF THE US AGENCY FOR INTERNATIONAL DEVELOPMENT	75
4.1.1 <i>"Municipal Heating Reform" Project</i>	76
4.1.2 <i>"Local Investments and National Competitiveness" Project</i>	76
4.1.3 <i>"Developing the Municipal Energy Efficiency Market in Ukraine" Project</i>	77
4.1.4 <i>Cooperation in Research and Education in Science and Technology at the support of the Center for Energy Efficiency</i>	77
4.1.5 <i>"Global Development Alliance" (GDA) Mechanism</i>	78
4.2 PROGRAMS OF THE US TRADE DEVELOPMENT AGENCY (USTDA).....	80
4.3 PROGRAMS OF EAST EUROPE FOUNDATION.....	82
4.4 PROGRAM OF THE GERMAN TECHNICAL COOPERATION (GTZ)	85
4.5 PROGRAMS OF THE BRITISH COUNCIL.....	86
4.6 SWEDISH INTERNATIONAL DEVELOPMENT AGENCY (SIDA)	86
4.7 CANADIAN AGENCY FOR INTERNATIONAL DEVELOPMENT (CIDA).....	87
5. FUNDING FROM ENVIRONMENTAL AND OTHER FOUNDATIONS	88
5.1 CLEAN TECHNOLOGIES FUND	88
5.2 KYOTO PROTOCOL MECHANISMS	89
5.2.1 <i>Joint Implementation Mechanism</i>	91
5.2.2 <i>"Green" Investments Scheme</i>	95
6. PRIVATE INVESTMENTS	99
6.1 MECHANISM OF ENERGY PERFORMANCE CONTRACTS.....	99
6.2 PUBLIC-PRIVATE PARTNERSHIP.....	107
6.2.1 <i>Lease</i>	107
6.2.2 <i>Concession</i>	109
6.3 INCORPORATION OF COMMUNAL ENTERPRISES	112
6.4 FINANCIAL LEASING	115
7. TARGETED CONTRIBUTIONS OF CONDOMINIUM MEMBERS	118
ANNEX 1	122
ANNEX 2	126

Abbreviations

USAID	US Agency for International Development
BCU	Budgetary Code of Ukraine
MDB	Multilateral development banks
ECU	Economic Code of Ukraine
DFEC	Donbas Fuel and Energy Company
PPP	Public-Private Partnership
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EU	European Union
HCE	Housing and communal economy
EE	Energy efficiency
MDI	Municipal Development Institute
IUD	Industrial Union of Donbas
IHP	Individual heating point
CMU	Cabinet of Ministers of Ukraine
CE	Communal Enterprise
IBRD	International Bank for Reconstruction and Development
SME	Small and medium enterprises
IFC	International Finance Corporation
LSGB	Local self-government body
NBU	National Bank of Ukraine
NIB	Nordic Investment Bank
UN FCCC	United Nations Framework Convention on Climate Change
MHR	"Municipal Heating Reform" Project
ToR	Terms of Reference
FI	Financial Intermediary
EEF	East Europe Foundation
CTF	Clean Technologies Fund
CCU	Civil Code of Ukraine
IPC	Integral property complex
CHP	Central Heating Point
CIDA	Canadian International Development Agency
DIGH	"Dutch International Guarantees for Housing" Foundation

GDA	Global Development Alliance (social and economic projects' co-funding mechanism)
GTZ	German Technical Partnership
KfW	German State Bank for Development
NEFCO	Nordic Environment Finance Corporation
SIDA	Swedish International Development Agency
US TDA	US Trade Development Agency

Introduction

This report was prepared based on conclusions of the study of potentially accessible sources of funding investment projects in the field of centralized heating in Ukraine conducted by experts of the Municipal Development Institute within implementation of the "Municipal Heating Reform" Project (IRG/USAID).

Structurally, this report consists of seven sections, each of them focused on review of a specific group of possible investment projects' funding sources. In particular, the report comprehensively covers the essence and offers a brief description of the following sources of funds that can be applied for funding of investment activity in the heating sector:

1. Own funds of centralized heating enterprises (depreciation, net profit).
2. Fund of the state and local budgets.
3. Loan resources (borrowings into local budgets, borrowings of enterprises, credits of condominiums, funds of international financial agencies).
4. Funding by international donors (grants).
5. Funding from ecological and other funds (Clean Technologies Fund, mechanisms of Kyoto Protocol).
6. Involvement of private investments (the energy efficiency subcontracts mechanism, public-private partnership, financial leasing, funds involved as a result of incorporation of communal enterprises).
7. Targeted contributions of condominiums' members.

Based on available information for each potential source, its essence, terms and specific features of use for implementation of capital investments projects, as well as the experience (practice) of application in the sphere of heating in Ukraine were defined.

Review of each of the sources is completed with analysis of their key advantages (application opportunities) and key drawbacks (application limitations) in the quality of funding sources for investment projects in Ukraine.

On the basis of the information represented in this report, as well as based on result of further studies, MDI experts will prepare a generalized report on the *most feasible* and *reliable* sources of funding for investment activity in the field of heating of pilot cities selected for participation in the project "Municipal Heating Reform" (IRG/USAID). It is anticipated that this report will be ready by the end of January, 2010.

1. Own Funds of Centralized Heating Enterprises

In accordance with the current Procedure of Setting Tariffs on Heating Energy and Centralized Heating and Hot Water Supply Services ratified with Resolution of the Cabinet of Ministers of Ukraine No. 955 of July, 10, 2006 "On Approval of the Procedure of Setting Tariffs on Production, Transporting, Supply of Heating Energy and Hot Water Supply Services" (hereinafter – the Tariffs Setting Procedure), *depreciation and the planned profit* can be planned by centralized heating enterprises as own sources of capital investments' funding.

Below, legislative aspects of formation and practical opportunities of application of depreciation and profit for funding capital investments by centralized heating enterprises are indicated.

1.1 Depreciation

Legislative aspects

In accordance with the Tariffs Setting Procedure, tariffs calculation includes depreciation of fixed production assets, other irreversible tangible and intangible assets: those of production destination; general production destination; administrative destination; those related to selling heating energy and centralized heating and hot water supply services.

Pursuant to points 14, 44, 67 of the Tariffs Setting Procedure, calculation of depreciation of fixed assets, other irreversible tangible and intangible assets of enterprises for its inclusion into tariffs is carried out in accordance with the Law of Ukraine "On Taxation of Profits of Enterprises" No.334/94-VR of 28.12.1994.

In particular, points 16, 17, 47, 69, 70 of the Tariffs Setting Procedure contain references to article 8 "Depreciation" of the abovementioned law. In accordance with this article, depreciation is calculated quarterly by application of depreciation rates to the book value of groups of fixed assets as of the beginning of the calculation quarter.

Table 1.1 indicates groups of fixed assets and the proper depreciation rates applied to them, in accordance with the Law of Ukraine "On Taxation of Profits of Enterprises".

Table 1.1
Groups of fixed assets and depreciation rates in accordance with provisions of the tax legislation of Ukraine

Fixed assets groups	Depreciation rates calculated per taxation quarter	
	Fixed assets procured (produced) after 01.01.2004	Fixed assets procured (produced) before 01.01.2004
Group 1 – buildings, constructions, their structural components and transmission devices, including inhabited houses and their parts (apartments and places of common use), cost of capital land improvement	2%	1.25%
Group 2 – motor transport and units (spare parts) to it; furniture; domestic electronic, optical, electro mechanic devices and instruments, other office equipment, instrumentation and outfit for them	10%	6.25%

Fixed assets groups	Depreciation rates calculated per taxation quarter	
	Fixed assets procured (produced) after 01.01.2004	Fixed assets procured (produced) before 01.01.2004
Group 3 – any other fixed assets not included into groups 1, 2 i 4	6%	3.75%
Group 4 – Electronic computing machines, other machines for automatic processing of information, data scanning and printing devices linked to them, other information systems, computer software, telephones (including cell phones), microphones and portable radio transmitters the cost of which exceeds the cost of low-value commodities (objects)	15%	15%

Source: art. 8 of the Law of Ukraine "On Taxation of Profits of Enterprises" No. 334/94-VR of 28.12.1994

At the same time, formation of depreciation of fixed assets, other irreversible tangible assets and intangible assets *in the bookkeeping accounting* is carried out by centralized heating enterprises in accordance with the Decree of the Ministry of Finance of Ukraine No.92 of April, 27, 2000 "On Ratification of the Regulation (Standard) of Bookkeeping Accounting 7 "Fixed Assets"" (hereinafter – R(S)BA 7). In accordance with point 26 of R(S)BA 7, depreciation can be calculated with application of the following methods: linear, reduction of the remaining cost, accelerated reduction of the remaining cost, cumulative, production ones. In accordance with point 26 of R(S)BA 7, an enterprise can apply rates and methods of charging depreciation on fixed assets stipulated by tax legislation.

Thus, requirements of the Tariffs Setting Procedure limit centralized heating enterprises in their choice of the method of charging depreciation for its inclusion into tariffs. If for charging in bookkeeping accounting an enterprise can choose any of the 6 methods (including the one stipulated by tax legislation), charging of depreciation for its including into tariffs is only possible with application of rates and methods of tax legislation.

Since for inclusion into tariffs charging of depreciation is carried out in accordance with tax legislation, the fixed assets that are transferred by local self-government bodies to heating enterprises in numerous cases on *the free-of-charge basis* are not subject to depreciation. It is the requirement of point 4.2.15 of the Law of Ukraine "On Taxation of Profits of Enterprises".

Thus, calculation of depreciation for inclusion into tariffs with application of rates and methods of tax legislation results in that centralized heating enterprises:

- 1) encounter a discrepancy between the sums of depreciation charged in the bookkeeping accounting and for taxation purposes, and, respectively, the ones included into tariffs;
- 2) the sum of depreciation in tariffs does not include the sum of depreciation charged on objects transferred on the free-of-charge basis. Accordingly, such fixed assets are left without the source of funding for their restoration
- 3) in the case of exceeding of the sum of depreciation based on data of the bookkeeping accounting over the sum of tax depreciation, there arise profit tax costs on the sum of such exceeding.

Confirmation for that may be, for example, data of the communal heating enterprise "AlchevskTeploKomunEnergo" (CHE "ATKE").¹ Based on data of the balance sheet of the enterprise for 2008, the book value of its fixed assets made up 47610 thousand UAH, while the book value of fixed funds, which was used for calculation of depreciation for including it into tariffs, as of the beginning of 2009 made up 17207 thousand UAH. Thus, such difference of the book value of fixed assets results in a difference in the size of depreciation in the bookkeeping and tax accounting. Based on data of bookkeeping accounting, depreciation of fixed assets of CHE "ATKE" for 2008 made up 2032 thousand UAH. At the same time, the planned depreciation indicator, which is subject to inclusion into tariffs in 2009, makes up 1097 thousand UAH, or twice less than that based on bookkeeping accounting data.

Without regard to the mandatory nature of including depreciation into tariffs, the experience of the Municipal Development Institute's (MDI) working with heating enterprises testifies to *insufficiency* of depreciation as a source of funding capital investments as a result of its insignificant amount. It is preconditioned by specific features of planning depreciation for its inclusion into tariffs and non-profitability of heating enterprises as a result of their activity.

In particular, the planned sum of depreciation in tariffs is understated compared with its economically substantiated indicator because of the legislative requirement of calculation in accordance with tax legislation (as mentioned above), as well as because of the disparity of book value of fixed assets and their fair value. The latter is preconditioned by the considerable wearing out of fixed assets, as well as by impossibility of taking into account results of their revaluation based on provisions of bookkeeping legislation (points 16 - 21 of R(S)BA 7) in the tax one.

Table 1.2 offers data on sums of depreciation deductions included into set tariffs of separate heating enterprises of Ukraine, as well as actual indicators of depreciation in accordance with bookkeeping and tax accounting.

Table 1.2
Data on depreciation deductions of centralized heating enterprises

Centralized heating enterprises of the cities:	Planned depreciation indicator in the set tariffs		Actual depreciation indicator for 2008, thousand UAH	
	thousand UAH	%*	based on bookkeeping accounting	based on tax accounting
Korosten	395	1.2	1258	489
Bilgorod-Dnistrovsky	355	1.6	674	689
Lozova	463	1.0	1144	677
Uman	729	1.7	1110	725
Odesa	9076	2.0	13874	9909

* Share of depreciation in the costs included into the set tariffs

Source: MDI

As shown by the data in Table 1.2:

- the share of depreciation in the structure of heating production and heating services provision costs is very insignificant (does not exceed 2%);
- for the overwhelming majority of represented enterprises, the actual depreciation is charged for the purposes of tax accounting, and the depreciation included into the

¹ The data were received within implementation of the project "Accessible Heating and Energy Efficiency in the Housing Sector of the city of Alchevsk" funded by USAID and implemented by the Municipal Development Institute.

calculation of tariffs is substantially lower than the actual depreciation based on bookkeeping data.

Thus, it is evident that application of tax legislation for calculation of depreciation for inclusion into tariffs considerably limits the amount of this source of investments already at the stage of planning.

For centralized heating enterprises, it is a typical situation when *actual revenues from provision of heating services* are lower than profits calculated. Accordingly, amounts of the funds that at the stage of planning were regarded as receipts due to planned depreciation are smaller. The key reasons for this are:

- actual depreciation as a result of activity is higher (based on tax legislation provisions) than planned because of not taking into account at calculation of the planned depreciation indicator of launching into operation of fixed assets in the planned period;
- imperfection of the rules and procedures of forming and setting tariffs (ill-timed revision of tariffs, procedure of setting tariffs prolonged in time, application of actual prices at absence of a really working correction mechanism, etc.);
- failure to perform plans of heating services realization in full;
- incomplete collection of funds from consumers in relation to charges, etc.

Thus, the amount of funds from planned depreciation that actually reaches the enterprise and can be spent on funding capital investments is very small, as centralized heating enterprises have to spend part of these funds on coverage of operative activity costs.

Key advantages (opportunities) of application as an investment projects funding resource

- Inclusion of depreciation into tariffs calculation as the cost item that is mandatory for compensation creates the background for recognizing depreciation as one of key and feasible capital investments funding resources (see p. 1.2 of the Tariffs Setting Procedure). The right to its compensation in tariffs creates certain guarantees for obtaining funds to provide for capital investments.
- Enterprises have legal grounds for including depreciation into tariffs, which is calculated based on the cost of fixed assets, that is indexed, i.e. they can take advantage of the right offered by point 8.3.3 of the Law of Ukraine "On Taxation of Profits of Enterprises" on annual indexation of the book value of fixed assets groups and intangible assets.
- Enterprises have the opportunity to reduce the risks of a failure to obtain income because of non-performance of the services realization plan by implementation of double-rate tariffs. In the case of their implementation, depreciation is a part of the conditionally fixed component of the tariff, and, thus, it will not be reduced in the case of services realization volumes' reduction. It is envisaged by the Rules of Calculation of the Double-Rate Tariff on Heating Energy and Hot Water ratified with the Order of the State Committee for Construction, Architecture and Housing Policy of Ukraine No.191 of September, 8, 2000.

Key drawbacks (limitations) of application as an investment projects funding resource

- Insufficiency of the planned sum of depreciation deductions that can be included into the tariffs for implementation of the necessary investment activities (as a rule, the share of depreciation deductions in the overall structure of costs does not exceed 2%)

- The actual amount of depreciation deductions, as a rule, is smaller than planned and is mostly used for funding not investment needs, but of operational activity of enterprises.

1.2 Net profit

Legislative aspects

In accordance with the Tariffs Setting Procedure, economically feasible tariffs on heating energy and centralized heating and hot water supply services are defined as the sum of the full planned prime cost *and the planned profit*, which is used for realization of investment activity of the enterprise, which is defined per unit of services realized.

Heating enterprises can plan their profit in tariffs composition for:

- realization of capital investments;
- creation of special investment funds;
- providing for profitability of invested capital;
- creation of the reserve capital used for capital investments.

The tariffs setting procedure sets a limitation for the amount of the planned profit and requirements for its substantiation for inclusion into tariffs:

- the profitability level of an enterprise is formed taking into account the need of paying the profit tax for enterprises and using part of the profits obtained for technical reequipping of the enterprise and *must not exceed in total for the enterprise 12%, and for the categories of consumers-budgetary facilities and other consumers – it must not exceed 15% and 50%, respectively* (point 24 of the Tariffs Setting Procedure);
- the costs of realization of capital investments, creation of special investment funds, providing for profitability of invested capital are included into tariffs for the term no less than five years (in the amount that does not exceed 20 percent of the total amount of costs) pursuant to *the program of developing the system of heating, centralized heating and hot water-supply ratified in accordance with the set procedure*.

Table 1.3 represents information on the size of planned profit included into set tariffs for specific heating enterprises of Ukraine.

Table 1.3
Data on the profit of centralized heating enterprises

Centralized heating enterprises of the cities:	Planned profit indicator in the set tariffs	
	thousand UAH	%*
Korosten	1600.0	4.2
Bilgorod-Dnistrovsky	1883.5	6.7
Lozova	3440.0	5.25
Uman	3322.6	10

* Planned profitability (the ratio of the size of the planned profit in view of the necessity of paying the profit tax to the planned costs)

Source: MDI

As data of table 1.3 demonstrate, planned profitability in tariffs of heating enterprises is set at the level that is substantially lower than it is allowed by the Tariffs Setting Procedure (12% on the average per enterprise).

The Tariffs Setting Procedure does not specify the procedure of approving development programs, but outlines their content, namely: the list of activities that can be included into development programs, requirements for confirmation of efficiency of the activities planned.

In particular, in accordance with points 25, 26, 54, 77 of the Tariffs Setting Procedure, programs for development of the systems of heating, centralized heating and hot water-supply envisage realization of activities related to improvement of the technology, reconstruction of the objects, automation and centralized traffic control, saving resources, enhancement of ecological safety and reliability of systems' operation, and the funds needed (with allocation of the part that is funded from the profit). To the abovementioned programs, it is necessary to add technical and economic calculations or business plans confirming efficiency of the planned investments and sources of investment resources and projects implementation term.

Even though, as a rule, tariffs on centralized heating enterprises include profit, this source of funding capital investments is *insufficient*. Based on actual activity results, the majority of centralized heating enterprises are unprofitable, which means incomplete compensation with incomes from provision of heating services for the costs of their production and realization, and is motivated by the following factors:

- Prices on key resources are increased more frequently than tariffs are reconsidered.
- The Tariffs Setting Procedure is imperfect, as the set mechanism of automatic correction of tariffs in the case of a change of prices on key resources does not operate in actual fact.
- The necessity of passing through the mandatory procedures of setting tariffs (receiving a conclusion of the prices control inspection, decision-making on setting the tariffs by the authorized bodies, sticking with the procedures stipulated in the Law of Ukraine "On the Principles of Public Regulatory Policy in the Field of Economic Activity"), which are prolonged in time.
- Centralized heating enterprises and local self-government bodies not readily make decisions on transition to double-rate tariffs. In their turn, one-rate tariffs on centralized heating services do not provide for complete compensation of conditionally fixed costs and the profit, which results in exceeding of the actual prime cost of heating energy and services over incomes from realization of services.

The combined action of these factors results in unprofitable activity of enterprises and absence of own funds for capital investments into the heating system.

Table 1.4 contains data on the level of compensation with tariffs of actual costs of production and provision of services of heating enterprises of separate regional centers of Ukraine as on 01.10.2009. Out of the 11 enterprises represented, only at 3 enterprises tariffs for population and only in 8 enterprises tariffs for other groups of consumers fully compensate for actual costs of production and provision of the services.

Since for the absolute majority of centralized heating enterprises population is the key consumer of the services, the profit planned in tariffs for budgetary facilities and other consumers is used by enterprises not for funding capital investments, but for coverage of the losses that arise as a result of incomplete compensation with tariffs for population of the costs of production and provision of services for this group of consumers.

Table 1.4
The level of compensation with tariffs of actual costs of production and provision of heating services as on 01.10.2009

##	Regional center	The level of compensation with set heating energy tariffs of its actual prime cost, %	
		for population	for commercial consumers
1	Simferopol	100.0	105.0
2	Dnipropetrovsk	96.0	131.2
3	Donetsk	81.0	138.3
4	Uzhgorod	37.4	87.3
5	Kirovograd	81.8	152.2
6	Poltava	94.5	129.4
7	Rivne	100.0	109.9
8	Kherson	100.0	123.7
9	Chernigiv	67.6	151.1
10	Kyiv	48.9	125.6
11	Sevastool	27.6	87.7

Source: <http://www.minjkg.gov.ua>

Key advantages (opportunities) of application as an investment projects funding resource

The Tariffs Setting Procedure envisages the opportunity of including the profit into tariffs in the amount not exceeding 12% from the planned costs and on the basis of programs for development of systems of centralized heating, centralized heating and hot water supply ratified in accordance with the set procedure.

The experience of MDI's work with centralized heating enterprises shows that the majority of local self-government bodies approve the tariffs that *envisage* the profit within the limits set by the legislation. Thus, provided realization of a set of activities at the local level, profit can be a feasible source for funding investments. It is necessary for this purpose to:

- timely review tariffs;
- include into tariffs profitability within the limits set by the legislation;
- optimize production and services provision costs;
- implement the double-rate tariff system.

Key drawbacks (limitations) of application as an investment projects funding resource

- Tariffs on heating services not always envisage profit, which is especially true for tariffs for population. In contrast to depreciation, which is a mandatory cost item in composition of tariffs, the issue of including profit into tariffs for a certain category of consumers is settled by the local self-government body authorized to regulate tariffs' setting.
- There is no tax incentive for investments into the heating system, as the profit planned for their realization is subject to taxation at the rate of 25%.
- Based on actual results of activity, the majority of centralized heating enterprises are either unprofitable or have profitability far lower than 12% (i.e., maximally possible for inclusion into tariffs). Thus, in fact the profit is not a source for funding investment activity.

Examples of application in Ukraine

As it was mentioned above, both depreciation and profit can be sources for funding capital investments into centralized heating systems, but as a result of certain factors' impact, their application is limited.

In table 1.5, comparative data in relation to the sum of planned depreciation and planned profit in set tariffs of specific heating enterprises of Ukraine with the size of the actual funding of capital investments at the expense of these sources are shown.

Statistical data prove that none of the four centralized heating enterprises represented in table 1.5 was able to fully use the planned size of depreciation and profit for funding capital investments into heating systems. In particular:

- only one enterprise was able to use approximately 80% from the planned sum;
- two enterprises used approximately 30% of the planned size of own funds (depreciation and profit);
- and one enterprise was able to use 1% of the planned size of own funds only (depreciation and profit).

Table 1.5
Planned sources and actual volumes of funding of capital investments at the expense of profit and depreciation

Centralized heating enterprises of the cities:	Sum of the planned depreciation and planned profit in actual tariffs in total for the enterprise, thousand UAH	Actually funded capital investments at the expense of own funds for the tariffs' validity period	
		thousand UAH	%*
Korosten	1995.0	1638.0	82.1
Bilgorod-Dnistrovsky	2238.5	635.8	28.4
Lozova	3903.0	33.5	0.9
Uman	4051.6	1271.2	31.4

* Ratio of the sum of planned depreciation and planned profit in the set tariffs to the size of actual funding of capital investments into heating systems due to own funds

Source: *centralized heating enterprises*

Such situation, sure, proves that there are problems limiting opportunities of full-fledged use of depreciation and profit as sources of funding capital investments into centralized heating systems.

2. Budgetary Funding

2.1 Funding from the State Budget of Ukraine

Legislative framework

The possibilities of funding from the State Budget of Ukraine for investment needs, including in the field of heating, are stipulated by articles 30 and 87 of the Budgetary Code of Ukraine.

In accordance with article 30 of the Budgetary Code of Ukraine, expenditures of the State Budget of Ukraine include budgetary allocations set by the Law on the State Budget of Ukraine for specific purposes *related to implementation of national programs*, the list of which is included into article 87 of the Budgetary Code.

Out of the fields of expenditures envisaged by abovementioned article 87, the following ones meet the needs of investing into the sector of heating:

- allocations for national programs of supporting regional development and priority sectors of economy;
- allocations for national investment projects;
- other programs exclusively of the national significance.

It should be mentioned at once that there is no legislative definition of the term "national investment project". Thus, in fact funding from the State Budget of Ukraine of the projects that can be considered investment ones is carried out in the context of funding expenditures within national targeted programs².

We should also note that in this Report subventions from the state budget to local budgets for implementation of investment projects not included into national programs are not considered as funding from the State Budget.

Thus, based on the general rule, funding of investment activities from the State Budget of Ukraine can be carried out within the framework of the expenditures envisaged by the respective national targeted programs.

The current legislation stipulates the following key national targeted programs, funds for which can be used for funding investment projects in the field of heating:

1. The national program of reforming and development of the housing and communal economy for 2009-2014 in compliance with the Law of Ukraine "On the National Program of Reforming and Development of the Housing and Communal Economy for 2009-2014" (in the reading of Law No.1511-VI of 11.06.2009 (hereinafter – Law No.1511));
2. Complex National Energy Efficiency Program of Ukraine ratified with Resolution of the Cabinet of Ministers of Ukraine of February, 5, 1997 No.148;
3. Program "Providing Credits for Implementation of Innovative and Investment Projects in Sectors of Economy, Most Importantly, for Implementation of Leading Energy Efficiency Technologies and Technologies of Alternative Fuel Sources Production" planned by the

² However, there are examples when funding of separate investment activities was stipulated by the Law on the State Budget for the respective year even without the proper national targeted program. Funding from the State Budget of Ukraine of construction of the motor transport highway across the Dnipro river in the city of Zaporizhyya can be one of the examples – thus, the respective subvention to the city budget of Zaporizhyya is also planned in the Law of Ukraine "On the State Budget of Ukraine for 2009".

State Investments Committee in the State Budget;

4. Program of funding of local budgets from the State Budget for development stimulation for the period till 2015 and the State Regional Development Strategy for the period till 2015 ratified with Resolution of CMU of February, 21, 2006 No.1001;
5. National Targeted Economic Program for Modernization of the Communal Heating Energy Sector for 2010-2014 ratified with Resolution of CMU of November, 4, 2009 No.1216.
6. Other national targeted (sector) programs.

Although national targeted programs, such as the National Program of Reforming and Development of the Housing and Communal Economy for 2009-2014 immediately envisage the volumes of budgetary funding (annual) for activities planned within them, in fact their provisions are only a foundation for inclusion of the proper expenditures into the Law on the State Budget of Ukraine for the respective year³.

The concrete procedure of use of the funds for activities envisaged by national targeted programs is stipulated by the Cabinet of Ministers of Ukraine in accordance with the law on the state budget for the proper year.

It is also necessary to pay attention to the fact that the Laws of Ukraine "On Priority Activities for Prevention of Negative Consequences of the Financial Crisis and On Amending Certain Legislative Acts of Ukraine", "On the State Budget of Ukraine for 2009" stipulate forming of the Stabilization Fund in the composition of the State Budget of Ukraine.

The activities for which funds of the abovementioned fund are used partly duplicate the activities set by the current national targeted programs, in particular – by the National Program for Reforming and Development of the Housing and Communal Economy for 2009-2014. Thus, in 2009, it is planned to use funds of the Stabilization Fund for implementation, *inter alia*, of investment and innovative energy efficiency projects in the housing and communal economy.

The procedures of using funds of the Stabilization Fund under the respective directions are set by the Cabinet of Ministers of Ukraine. Thus, the Procedure of Use in 2009 of the Fund Allocated in the State Budget for Compensation of the Interest Rate on Loans Aimed at Implementation of Energy Efficiency Projects in the Housing and Communal Economy" was ratified (Resolution of the CMU of May, 13, 2009 No.514).

Funding of activities of the National Program for Reforming and Development of the Housing and Communal Economy for 2009-2014

In the period of 2004-2009, in the housing and communal economy (including the heating sphere) activities were implemented aimed at realization of the National Program for Reforming and Development of the Housing and Communal Economy for 2004-2010 (in accordance with Law of Ukraine No.1869-IV of 24.06.2004). Accordingly, the following procedures of use of the funds for the activities' implementation from the State Budget of Ukraine were adopted by the Cabinet of Ministers of Ukraine, including in the field of heating:

1. The Procedure of use in 2007 of the funds allocated in the state budget for implementation of the National Program for Reforming and Development of the Housing and Communal Economy ratified with the Resolution of the CMU of February, 14, 2007 No. 232.

³ Unfortunately, in practice not always volumes of funding envisaged by national targeted programs are reflected in expenditures of the State Budget of Ukraine.

2. The Procedure of use in 2008 of the funds allocated in the state budget for implementation of the National Program for Reforming and Development of the Housing and Communal Economy, including for reduction of the cost of loans involved for this purpose, ratified with the Resolution of the CMU of March, 19, 2008 No.225.
3. The Procedure of use in 2009 of funds intended in the state budget for compensation of the interest rate for loans aimed at implementation of energy efficiency projects in the housing and communal economy ratified with the Resolution of the CMU of 13.05.2009 No.514. (The point is that in 2009 the Law on the State Budget did not directly allocate funding for the Program's activities. However, indirectly such funding was allocated by article 76 of the Law of Ukraine "On the State Budget of Ukraine for 2009" as funds for implementation of investment and innovative energy efficiency projects in the housing and communal economy).

In 2009, the abovementioned Program was passed in the new reading. Thus, the National Program for Reforming and Development of the Housing and Communal Economy for 2009-2014 in the reading of the Law No. 1511-VI of 11.06.2009 (hereinafter – the Program / or Law No.1511) is one of priority programs of development and investment in the sub-sector of the housing and communal economy, including heating.

Section 7 of Law No.1511 "Financial Provision for Implementation of the Program's Goals" envisages that funding of the National Program for Reforming and Development of the Housing and Communal Economy for 2009-2014 shall be carried out due to funds of the state budget, local budgets, funds of enterprises and other sources not forbidden by legislation, as well as due to introduction of a special value-added tax regime for housing and communal services and / or heating energy supply services.

It is stipulated that funds of the state budget under the Program shall be used for funding activities for realization of investment projects in the spheres of:

- a) reconstruction and capital repair of systems of centralized heating, water-supply and sewage, equipping and objects of the housing and communal economy aimed at technical reequipping;
- b) implementation of pilot projects in the field of the housing and communal economy aimed at reduction of specific indicators of using power and material resources, including in relation to implementation of alternative energy and types of fuel sources use.

In accordance with the Program, funding of the abovementioned investment projects is carried out by:

- budgetary targeted funding of projects selected on the competitive basis;
- partial or complete compensation of interest rates on credits for projects' implementation;
- full compensation of interest rates on credits or partial redemption of the principal of credits provided for small and medium businesses, condominiums for realization of investment projects in the field of energy efficiency in residential houses.

Funds from the state budget are transferred to local budgets as targeted subvention⁴. Thus, the decision on allocation of funds for the abovementioned investment projects is made in the

⁴ In compliance with the Budgetary Code of Ukraine, the subvention is an inter-budgetary transfer to be used for a certain objective according to the procedure set by the body that made the decision on providing the

case if funding of these projects from local budgets and other sources is confirmed, as a certain ratio in line with provisions of Law No.1511-VI.

It is envisaged that in 2010-2011 the part of co-funding due to funds of local budgets will make up:

- in the cities of Kyiv, Sevastopol, Simferopol and regional centers – no less than 70 percent of the sum of funds allocated from the state budget;
- in cities of the republican and regional significance of the Autonomous Republic Crimea – no less than 40 percent of the sum of funds allocated from the state budget;
- in other settlements – no less than 10 percent of the sum of funds allocated from the state budget.

In 2012-2014, the amount of co-funding due to funds of local budgets depending on the status of cities will be considerably increased (respectively, to 100%, 70% and 20% from the sum of funds allocated from the state budget.).

The procedure of competitive selection of projects for technical re-equipment of HCE objects, those aimed at reduction of specific indicators of use of power and material resources during production (provision) of housing and communal services, reconstruction and capital repairs funded due to funds of the state budget is set by the central executive body for HCE issues.

On the whole, for implementation of activities of the National Program for Reforming and Development of the Housing and Communal Economy during 2009-2014, it is planned to allocate from the state budget of Ukraine funds in the amount of 23 billion 365 thousand UAH (out of them, the major part, namely 23 billion 324 thousand UAH, must be aimed at implementation of the tasks of technical re-equipment of HCE objects, reduction of specific indicators of use of power and material resources during production (provision) of housing and communal services).

Speaking about activities of the Program in the part of the technical re-equipment of *heating systems and the housing stock*, for their implementation during 2010-2014 it is planned to allocate from the state budget funds in the amount of approximately 18 billion UAH (table 2.1).

Table 2.1

Forecasted volume of financial provision for implementation of tasks of the National Program for Reforming and Development of the Housing and Communal Economy for 2009-2014 due to funds of the State Budget of Ukraine (in part of technical re-equipment of heating systems and housing stock), million UAH

Name of activity	Total	Including, by years				
		2010	2011	2012	2013	2014
Stimulation of realization of investment projects for:						
• Reconstruction and capital repairs of residential houses with application of energy efficient technologies	1758.0	227.2	383.1	339.5	420.0	388.2
• Energy efficiency, development and reconstruction of heating systems	2850.8	686.3	1182	458.7	283.8	240.0

subvention. Inter-budgetary transfers are funds that are free-of-change and non-repayable and transferred from one budget to another.

Name of activity	Total	Including, by years				
		2010	2011	2012	2013	2014
Providing for equipping of the available housing stock with house metering devices for accounting and managing consumption of water and heating energy	1042.2	179.7	262.7	444.1	115.7	40.0
Assistance to development and realization of pilot innovative projects in the HCE aimed at improvement of the housing stock management system, reduction of technological losses and consumption of resources, introduction of progressive technologies	808.3	149.5	285.8	132.9	122.0	118.1
Provision of state support for realization of investment projects for technical reequipping and capital repairs of residential houses in which new condominiums are created or condominiums already function	10 580.5 <i>(10 380.5)*</i>	685.4	2060.8	3373.9	3060.2	1200.2
Partial repayment of the principal of credits, loan interest, leasing payments	1000 <i>(975)*</i>	100	225	225	225	200
Total	18039.8 <i>(17814.8)*</i>	2028.1	4399.4	4974.1	4226.7	2186.5

* Note: In the text of the Program, a technical error was discovered, namely the amount of funds indicated in column "Total" does not meet the sum of the money by years. Thus, in brackets in italics we indicate the forecasted volume of funding defined as the sum of funds allocated by the program for specific years (2010-2014)

Funds of the Stabilization Fund

The Stabilization Fund was created in 2008 in accordance with the Law of Ukraine "On Priority Activities for Prevention of Negative Consequences of the Financial Crisis and On Amending Certain Legislative Acts of Ukraine" of October, 31, 2008 No.639-VI.

Funds of this fund are formed due to the State Budget and are used in compliance with provisions of the current legislation. In particular, in 2009 article 76 of the State Budget of Ukraine for 2009 defined the directions of using funds of the Stabilization Fund. Among them, there is realization of investment and innovative projects for energy efficiency in housing and communal economy (with the funding amount of 500 million UAH) and realization of investment projects for socio-economic development of regions (in the amount of 1 500 million UAH).

The Resolution of the CMU "On Ratification of the Procedure of Using in 2009 Funds of the Stabilization Fund for Implementation of Investment and Innovative projects for Energy Efficiency in Housing and Communal Economy" of 02.04.2009 No.327, with amendments, introduces the mechanism of using budgetary funds from the Stabilization Fund for the objectives indicated.

Key advantages (opportunities) of application as an investment projects funding resource

- This is a source of free-of-charge and non-repayable funding for investment projects.

- The enterprise that is a recipient of state budgetary funds with targeted destination for implementation of an investment project under the national targeted program recognizes such funds as "targeted funding and targeted revenues" and uses them exclusively in compliance with the plan of using budgetary funds. The targeted funding funds obtained are not included into determination of the profit for taxation and are not subject to taxation with the value-added tax.
- Funding of investment projects from the state budget creates conditions for involvement of private domestic and foreign investments.
- Receipt of public funding motivates the LSGB to develop regional programs of socio-economic development and joint funding of investment projects (due to funds of the state and local budgets).

Key drawbacks (limitations) of application as an investment projects funding resource

- Significant dependence on the socio-political situation in the country. As a result, terms and mechanisms of state funding of investment (energy efficiency) projects ("rules of the game") change almost annually.
- Receipt of budgetary funding is a long-lasting and rather bureaucratic process. There is postponement of definition of subjects for funding, violation of the principle of justice and rights of enterprises at distribution of funds, ill-timed receipt of the funds (at the end of December of the current budgetary year), which results in a failure to use the budgetary funds and their repayment into the budget as those unused for the targeted objectives. As a result, budgetary capital transfers are used inefficiently.
- A significant amount of ratified national targeted programs and considerable dispersing of the limited funds, which prevents from efficient implementation of energy efficiency activities and realization of large-scales investment projects, absence of the strategy for comprehensive allocation of budgetary funds for realization of national targeted programs (possibly, it would be expedient to realize an inventory of NTPs with their subsequent enlargement, etc.).
- Limited financial opportunities of the state budget
- Absence of guarantees of annual funding of activities envisaged by national targeted programs.
- Limited access to the sources of public funding for enterprises of the private sector.

Funding of investment projects due to funds of the state budget in 2009

The Law of Ukraine "On the State Budget of Ukraine for 2009" envisages the following expenditures for implementation of investment projects in the field of the housing and communal economy:

1. Part of funds of the Stabilization Fund allocated for implementation of investment projects for socio-economic development of regions.

With the Decree of the Government of 13.05.09 No.544-r, from the total volume of 723.4 million UAH, for objects of heating and water-supply 87.4 million UAH are allocated, for reconstruction and construction of boilers for educational and medical facilities – 33.9 million UAH.

As of 28.09.2009, 312 million UAH, or 43.1% of the annual volume of funding were allocated in accordance with the mentioned Decree of the Government.

2. Expenditures for compensation of the interest rate on credits aimed at implementation of projects for energy efficiency in the housing and communal economy in the amount of 25 million UAH.

As on September, 29, 2009 allocations for the objectives mentioned were not realized, as performers of projects for energy efficiency in the housing and communal economy had not submitted requests for participation in the competition.

3. Funds of the Stabilization Fund for realization of investment and innovation projects for energy efficiency in the housing and communal economy in the amount of 500 million UAH.

As on October, 2, 2009, only 13.6 out of 500 million UAH (2.7%) were allocated from the Stabilization Fund for realization of investment and innovative projects for energy efficiency in the HCE.

In contrast to the previous year, in 2009 the Law on the State Budget does not provide for:

- implementation of activities of the National Program of Reforming the housing and communal economy, including reduction of the cost of credits for these programs' implementation;
- implementation of energy efficiency activities, including installation on engineering inputs of apartment residential houses of measuring devices for water and heating energy consumption, repair and reconstruction of heating networks and boilers, construction of gas pipelines and gasification of settlements.

Diminishing of the volumes of support for the housing and communal sphere and not taking into account in budgetary expenditures the increase of prices on natural gas became one of factors of growing non-profitability of communal enterprises and resulted in a lack of resources of local budgets for realization of settlements for energy carriers consumed by budgetary institutions.

2.2 Funding from local budgets

The Budgetary Code of Ukraine provides for the possibility of funding municipal targeted programs from local budgets.

Pursuant to point 4 of article 91 of the Budgetary Code of Ukraine, in local budgets expenditures in accordance with local programs for reformation and development of the housing and communal economy, maintenance of objects of the housing and communal economy and equipping settlements shall be allocated. Such expenditures include budgetary destinations defined with the resolution on the local budget on concrete purposes related to implementation of these programs.

Funding of investment projects is carried out due to expenditures *of the development budget*, which is a component part of the special fund of local budgets.

The development budget represents revenues and expenditures of the local budget created and used for realization of socio-economic development programs, strengthening of the material and financial base. Article 71 of BCU determines concrete sources of forming the development budget (e.g., see Box 1) and the directions for which its funds can be spent.

Box 1. Sources of forming the development budget of the city of Lviv in 2008

The special fund of the budget of Lviv in 2008 made up 401.8 million UAH (or 23% of the total volume of the city budget).

The city development budget as a constituent of the special fund of the budget made up 186.3 million UAH in 2008 (46% of the special fund of the municipal budget or 11% of the total volume of the city budget).

Lviv development budget in 2008 was formed due to the following sources:

	thousand UAH	% of the total
Revenues from communal property alienation	86425.8	46
Fund transferred from the general fund	34492.0	19
Subventions from the state budget	32387.0	17
Revenues from selling land	31625.0	17
Subvention for investment projects implementation	1341.8	1
Interest from loans provided by HCC	2.7	0
Interest from loans for young family for buying housing	2.7	0
Total for the development budget	186277.0	100

Thus, the largest amount in the composition of the city development budget (46%) is occupied by revenues from property alienation, 19% are made by the funds transferred from the general fund of the budget, 17% are subventions from the state budget and revenues from land sales. Approximately 1% is made up by subventions from other budgets for implementation of investment projects.

Source: <http://www.city-adm.lviv.ua/authorities-the-city/structure-lmr/budget>

A component part of the development budget are subventions from other budgets (in particular, from the State Budget) for implementation of investment projects. Subventions from the State Budget for implementation of investment projects are provided for the regional budget with their further distribution for local self-government budgets. The right to receive subventions from one local budget to another local budget for implementation of investment projects is provided only if there is a joint agreement between the respective local authorities (art. 107 of the BCU).

The local self-government body is independent in its decision-making on the directions of using funds of the development budget. Funds from local budgets (development budget) can, following the decision of the respective council, be allocated for programs of socio-economic development of the administrative territorial unit and needs of communal enterprises, including heating ones.

Capital investments are the key direction of application of the development budget⁵.

As statistics demonstrate, the share of capital expenditures (% to the total expenditures of local budgets) in 2005-2008 fluctuated in Ukraine within the range of 15-18% (table 2.2), however, in the first half of 2009 this indicator fell to 5.2%. If in 2008 the absolute amount of capital expenditures due to funds of local budgets made up 21.5 billion UAH, in the first half of 2009 this indicator was fixed at the level of only 2.2 billion UAH.

Table 2.2
Share of capital expenditures and expenditures for HCE in the structure of local budgets of Ukraine (% of the total expenditures of local budgets)

Year	Capital expenditures	HCE expenditures
2005	15.5	7.3

⁵ Apart from capital investments, expenditures of the development budget of local budgets include: (1) repayment of the principal of the debt of the Autonomous Republic Crimea and local self-government bodies respectively (except for the debt created based on conditions set by article 73 of the Budgetary Code); (2) contributions of authorities of the Autonomous Republic Crimea and local self-government bodies into statutory funds of subjects of entrepreneurial activity.

Year	Capital expenditures	HCE expenditures
2006	16.7	10.8
2007	18.3	5.1
2008	16.0	6.3
January-June 2009	5.2	4.7

Source: Statistical Yearbook of Ukraine for 2007. – Kyiv, Konsultant. – 2008. – pp. 54-56.; Budget and Economics // Electronic resource. – Access: <http://www.ibser.org.ua/news/472/>.

In the situation of the economic crisis, municipal budgets are approved with a deficit, including in the part of the deficit of development budgets (funds from which must be used for funding of investment needs). A significant sum of expenditures is used for funding of social and cultural objectives, above all, payment of salary for employees of budgetary institutions. In Ukraine, the key cost item of local budgets is still the item "Payment of salary with bonuses" – its part, based on data for 2008, made up 40.4%⁶.

Consequently, local authorities have very limited financial opportunities of performing the functions of funding investment projects.

Today, there is a considerable dependence of local budgets on national transfers and inability of the sources of forming local budgets defined by the Budgetary Code to provide for the needs of the territorial community in own budgetary funds. As a result of applying the current framework of inter-budgetary transfers, the situation is created when local self-government bodies are deprived of the opportunity to independently settle their own problems: some because of dependence on subsidies, others because extra funds are withdrawn.

Data on volumes of capital investments by sources of funding in all spheres of economic activity (based on data of the State Statistics Committee of Ukraine) are shown in table 2.3.

Table 2.3
Capital investments by the sources of funding in all spheres of economic activity (based on data of the State Statistics Committee of Ukraine)

Funding sources	Capital investments used	
	2008 % of the total amount	9 months 2009 % of the total amount
Total	100.0	100.0
<i>incl. due to</i>		
funds of the State Budget	5.7	4.3
funds of local budgets	4.6	2.6
own funds of enterprises and organizations	59.3	67.0
funds of foreign investors	3.0	3.9
funds of investment funds	2.1	1.7
funds of population for construction of their apartments	3.5	2.9
funds of population for individual housing construction	4.2	3.0
bank loans and other loans	15.8	13.0
other funding sources	1.8	1.6

Source: <http://www.ukrstat.gov.ua>

⁶ http://www.ibser.org.ua/UserFiles/File/Budget-Econ/2008/buget&economy_Q4_2008_ukr.pdf

Based on the data shown in table 2.3, it is easy to see that volumes of investments funding due to funds of local budgets in all spheres of economic activity in Ukraine are insignificant: their part in the total volume of capital investments used was 4.6% in 2008 and 2.6% in the 9 months of 2009.

Aggregated data of the SSC of Ukraine on volumes of capital investments used due to funds of local budgets in the field of *heating* is not available.

Key advantages (opportunities) of application as an investment projects funding resource

- Funding due to funds of local budget is a source of free-of-charge and non-repayable funding.
- There are no legislative limitations of amounts and directions of distribution of funds from the development budget, every city council independently makes its decision (for example, in accordance with city development programs) on which exactly investment projects shall be funded and in what volumes.
- Funds transferred from development budgets with an objective specified are not included into the composition of gross revenues of the recipient (for example, of a communal heating enterprise). It means that these funds are not subject to taxation and are fully used for realization of the investment project.

Key drawbacks (limitations) of application as an investment projects funding resource

- Limited financial opportunities of local budgets. This, in its turn, does not make it possible to fund large-scale projects and results in deceleration of communal infrastructure improvement.
- Considerable dependence of local budgets on national transfers.

Examples of application

As proved by results of analyzing applications submitted by cities of Ukraine for participation in the "Municipal Heating Reform" Project (USAID/IRG)⁷, the part of expenditures from the development budget for investment needs in 2008 fluctuated from 0.2% (Chernivtsi) to 15.1% (Chuguiv) from the total volume of the city budget.

At the same time, practically in a half of the cities that provided the respective information volumes of capital investments funding from the local budget made up less than 5% (table 2.4).

Table 2.4
Grouping of the cities that submitted Applications for participation in the "Municipal Heating Reform" Project, by the share of expenditures for capital investments, 2008

Expenditures for capital investments, % of the total volume of the city budget	Percentage of the cities (% of the total number of cities that submitted the respective data)	Cities that submitted Applications for participation in the "Municipal Heating Reform" Project
Up to 5%	50	Chernivtsi, Borispil, Antratsit, Voznesensk, Kaniv, Kostopil, Krivy Rig, Dnipropetrovsk, Novograd-Volinsky, Kupyansk, Rovenky,

⁷ In total, 92 Applications were submitted. The respective information was represented in Applications of the 46 cities.

		Shostka, Poltava, Dniprodzerzhinsk, Slavuta, Kovel, Pavlograd, Ivano-Frankivsk
5-10%	26	Khmelnysky, Slavutyich, Lutsk, Rivne, Nizhyn, Komsomolsk, Nikopol, Berdychiv, Alchevsk, Romny, Primorsk, etc.
10-15%	24	Kherson, Evpatoria, Vinnytsya, Novovolynsk, Chernigiv, Tsyurupinsk, Chervonograd, Gaysyn, Mirgorod, Chuguiv, etc.

Source: MDI calculations based on the data indicated by the cities in the Application for participation in the "Municipal Housing Reform" Project (September, 2008).

Only a quarter of the cities (24%) indicated that the part of expenditures for capital investments made up in 2008 from 10% to 15% of the total volume of the city budget (table 2.4).

Analysis of the volumes of capital investments funding from local budgets per resident in 2008 shows that in a large part of the cities (approximately 40%) this indicator does not exceed 50 UAH per capita (table 2.5).

Table 2.5
Grouping of the cities that submitted Applications for participation in the "Municipal Heating Reform" Project by the per capita indicator of capital expenditures from the local budget, 2008

Expenditures for capital investments from the local budget, UAH per capita	Percentage of the cities (% of the total number of cities that submitted the respective data)	Cities that submitted Applications for participation in the "Municipal Heating Reform" Project
до 20	14	Dnipropetrovsk, Khmelnytsky, Chervonograd, Myrgorod, Kostopil, Chernivtsi, Boryspil, Kaniv, Anratsit, Voznesensk, Rubizhne, etc.
20-50	6	Ivano-Frankivsk, Pavlograd, Novograd-Volynsky, Tsyurupynsk, Kupyagsk, Primorsk
50-100	9	Poltava, Kryvy Rig, Nizhyn, Shostka, Slavuta, Kovel, Dolyna, etc.
100-150	8	Lutsk, Evpatoria, Dniprodzerzhinsk, Chuguiv, Yuzhnoukrainsk, Prmny, Slavutyich
150-200	6	Komsomolsk, Nikopol, Rivne, Novovolynsk, Alchevsk, Berdychiv
200-250	3	Chernigiv, Vinnytsya, Kherson

Source: MDI calculations based on the data indicated by the cities in the Application for participation in the "Municipal Housing Reform" Project (September, 2008).

Only in three cities (Chernigiv, Vinnytsya, Kherson) expenditures for capital investments from the city budget in 2008 made up approximately 240 UAH per one resident of the city (table 2.5).

3. Loan Resources

3.1 Borrowings of local budgets

In the conditions of the budgetary deficit, local self-government bodies of Ukraine can involve loan resources into development budgets for funding municipal investment projects. The borrowings can be both internal and external.

Legislative aspects

Pursuant to article 6 of the Budgetary Code of Ukraine, it is only Verhovna Rada of the Autonomous Republic Crimea and city councils that have the right to realize internal borrowings (except for the cases envisaged in article 73 of the Code). External borrowings can be carried out only by city councils of cities with the number of population exceeding eight hundred thousand inhabitants based on official statistics data.

Pursuant to part 6 of article 74 of the Budgetary Code of Ukraine, the procedure of realization of borrowings into local budgets is set by the Cabinet of Ministers of Ukraine. This Procedure is ratified with Resolution of the CMU of 24.02.2003 No.207 (hereinafter – the Procedure of Borrowing into Local Budgets).

In accordance with the Procedure of Borrowing into Local Budgets, borrowings of local self-government bodies can be realized in the following forms:

1. issuance of local loans bonds;
2. conclusion of agreements for receiving loans, credit, credit lines from financial institutions.

Realization of any borrowings is possible only based on the decision of local councils.

Pursuant to article 74 of the Budgetary Code of Ukraine, borrowings into local budgets are carried out for a defined objective and are subject to mandatory repayment. Borrowings into the respective budgets can be carried out only into the development budget, except for the case set in article 73 of the Code (i.e. for coverage of temporary cash gaps arising during performance of the general fund of the local budget).

Expenditures for servicing the debt of local budgets annually cannot exceed 10 percent of expenditures from the general fund of the proper local budget during any budgetary period when debt servicing is planned. If in the process of repayment of the principal of the debt and its servicing fees (conditioned by the agreement between the creditor and the borrower) there happens a breach of the repayment schedule because of the borrower's fault, the respective council does not have the right to realize new borrowings during the next five years in any form.

Starting from July, 2009, cities of Ukraine obtained the opportunity to considerably extend their access to credits resources. This became possible due to collaboration of the Project "Municipal Finance Strengthening Initiative" (MFSI/USAID) implemented by the Institute of Budget and Socio-Economic Research, and the Project "Access to Credit" (USAID)⁸.

Thus, the Resolution of the Cabinet of Ministers of Ukraine of 17.07.2009 No.865 introduced conceptual amendments into the Procedure of Borrowings into Local Budgets (ratified with the CMU Resolution of 24.02.2003 No.207), among which, in particular, the following:

- 1) the mandatory nature of attribution of a credit rating for the borrower (local self-government body) in the case of realization of borrowing in the form of signing

⁸ Improved Access of Ukrainian Cities to Credit Resources // <http://www.ibser.org.ua/news/412/129283>

agreements for receiving loans, credits, credit lines from financial institutions is withdrawn;

- 2) clear terms of issuance of the conclusion of the Ministry of Finance on the draft decision conflicting with requirements set by the budgetary legislation are defined;
- 3) it is set that local borrowings can be carried out without verification by the Ministry of Finance in accordance with the draft Resolution of Verhovna Rada of the Autonomous Republic Crimea or city council in the cases when:
 - the amount of borrowing into the local budget does not exceed 25 percent of the average annual sum of revenues of the development budget for the recent three years preceding the year of making the decision, without taking into account funds involved by means of borrowing;
 - the total sum of the local budget's debt as on the date of borrowing set with the draft resolution does not exceed 75 percent of the average annual sum of revenues of the development budget for the recent three years preceding the year of making the decision, without taking into account funds involved by means of borrowing;
 - the volume of expenditures for servicing of the local budget's debt as on the date of borrowing does not exceed 5 percent of the total sum of expenditures of the local budget in the year preceding the year of making the decision on the borrowing or restructuring of debt obligations or conducting of another transaction.

Besides, the right of local self-government bodies to realize primary placement of local loan bonds at a price lower than the nominal one is stipulated in the case of public listing in the stock exchange.

Thus, currently local budgets can involve loans *without approval* of the Ministry of Finance that do not exceed 25% of average annual revenues into the budget during the recent three years provided that the total sum of the debt of the local budget is less than 75% of such average annual revenues and the amount of costs of servicing the debt is less than 5% of the total sum of expenditures of the local budget.

At the same time, the government preserved the right of the Ministry of Finance to submit a substantiated objection, which results in a longer consideration process.

The Ministry of Finance can prohibit to a local authority to realize a borrowing if costs of servicing of the local debt exceed 10% of the amount of expenditures of the general fund of the local budget for the previous year or if the sum of payments under repayment of the local debt in any year exceeds the average annual amount of revenues into the development budget for the recent three years.

Specific features of external borrowings. In accordance with article 16 of the Budgetary Code of Ukraine, for the purposes of investing external borrowings can be carried out only by city councils of cities the number of population in which is over eight hundred thousand inhabitants (based on official data of state statistics as of the time of decision-making on realization of the borrowings).

Pursuant to article 74 of the Budgetary Code of Ukraine, other requirements related to realization of external borrowings into local budgets are the same as those set for borrowings in the internal capital market.

The procedure of realization of external and internal borrowings into local budgets is also identical.

3.1.1 Specific features of placement (issuance) of local loan bonds

Pursuant to article 3 of the Law of Ukraine "On Securities and the Capital Market" 3480-IV of 23.02.2006 (hereinafter – the Law on Securities), one of types of securities that can be issued in Ukraine are local loan bonds.

The local loan bond is a security that certifies investment of money by its owner, defines loan relations between the bond owner and the issuer, confirms the issuer's obligation to repay to the bond owner its nominal cost in the term set by bond placement conditions and to pay the income on the bond, unless stipulated otherwise in placement terms.

Article 9 of the Law on Securities sets that local loan bonds include *internal* and *external* ones⁹.

The decision on placement of local loan bonds is made by Verhovna Rada of the Autonomous Republic Crimea or the city council in accordance with requirements set by the budgetary legislation.

For the purpose of intensifying control over issuance of internal local loan bonds in Ukraine, the State Commission for Securities and the Stock Market ratified the Provision on the Procedure of Issuance of Internal Local Loan Bonds¹⁰. This Provision sets the procedure of realization of issuance, circulation of internal local loan bonds (bonds), registration of issuance of internal local loan bonds in the State Commission for Securities and the Stock Market, the procedure of registration of the report on bonds placement results, the report on results of repayment and withdrawal of registration of these bonds' issuance.

Jurisdiction of this Provision covers issuance of internal local loan bonds carried out by Verhovna Rada of the Autonomous Republic Crimea or the city council, and does not cover the cases of issuance, placement and circulation of *external* local loan bonds.

The procedure of issuance of internal local loan bonds must meet both requirements of the Procedure of Borrowings into Local Budgets and the Provision on the Procedure of Issuance of Internal Local Loan Bonds.

The decision on borrowing in the form of placement (issuance) of bonds is made by the respective council authorized for that in accordance with requirements of the Budgetary Code of Ukraine.

The copy of the decision on realization of borrowing in the form of issuance of bonds is sent to the Ministry of Finance of Ukraine within *ten days* after its approval. But in the case of its contradicting to requirements set by the budgetary legislation, the Ministry of Finance can appeal to the court for the purpose of deeming such decision illegal.

The total amount of borrowing into the local budget in the form of placement (issuance) of bonds cannot exceed the amount of the deficit of the development budget of the local budget for the respective year. Funds from placement of bonds are only involved for funding of the development budget of the respective local budget.

⁹ The law mentioned does not offer the definition either for the former, or for the later, but based on the analogy to the definitions given to state bonds, internal local loan bonds should include those that are placed exclusively in the internal stock market, while to external local loan bonds – those that are placed in international stock markets.

¹⁰ Provision on the Procedure of Issuance of Internal Local Loan Bonds, ratified with the resolution of the State Commission for Securities and the Stock Market No.414 of 7.10.2003.

In the case of realizing borrowings in the form of issuance of local loan bonds, the local self-government body must provide the Ministry of Finance with information about rating evaluation of the securities¹¹.

The legislation of Ukraine does not include the requirement on mandatory securing of bonds. Bonds can be secured *additionally*:

- with the bail agreement with a guarantor to provide for performance of the obligation of repaying the principal of the debt and / or payment of the income on bonds;
- with a guarantee (of a bank, another financial institution) for bonds owners to provide for performance of the obligation of repaying the principal of the debt and / or payment of the income on bonds;
- with an insurance agreement on the risks of non-repayment of the principal of the debt and / or payment of the income on bonds.

According to article 9 of the Law on Securities, registration of issuance of local loan bonds is carried out by the State Commission for Securities and the Stock Market according to the procedure that it sets.

Issuance of bonds entails considerable costs that the issuer of bonds has to incur. Thus, for example, when issuing bonds for the amount of 50 million UAH for 3 years, costs of the bonds issuer may make up tentatively around 500.0 thousand UAH (without the costs of interest payment)¹².

Today, only one rating company functions in Ukraine that has the proper authorization of the World Bank - „Kredit Rating”. Tariffs of this company for services provided are high enough and not fixed legislatively, thus only large cities, as a rule, can afford paying them.

3.1.2 Specific features of involving credit resources

Pursuant to the Law of Ukraine „On Local Self-Government in Ukraine” (of May, 21, 1997 No.280/97-VR, with amendments and supplements), local self-government bodies can receive credits from bank institutions (article 70, p.1).

The Budgetary Code does not set any specific limitations in relation to such credits, except for the limitations mentioned above related to the volumes of expenditures for servicing the debt of local budgets (article 74, p.4 BC) and sanctions for breaching the schedule of debt repayment due to a fault of the borrower (article 74, p.5 BC).

The procedure of realization of borrowings ratified with the resolution of the CMU of 24.02.2003 No.207 also covers borrowing into local budgets in the form of credits. Compared with borrowings in the form of local loan bonds, in the case of receiving credits, the local self-government body does not have to submit data on rating evaluation of the borrower, which facilitates the procedure of borrowings.

¹¹ No such requirement applies in the case of receiving credits.

¹² This sum includes: (1) Receiving of a credit rating (if issuing bonds with the face value from 10 to 50 million UAH, the cost of services of RA „Kredit Rating” can make up 36 thousand UAH plus 0.12% from the nominal cost of the extract plus the fee for annual monitoring of the rating in the size of 70% from the initial payment); (2) payment of the duty for registration of the securities issuance prospectus (0.1% of the nominal cost of the extract, but no more than 5 minimum wages); (3) costs of the audit (2-10 thousand UAH); (4) costs of the underwriter (commission – from 0.2 to 1% of the nominal cost of the extract, but no more than 5 minimum wages); (5) publication (10-15 thousand UAH); (6) payment of the depositary services (10-15 thousand UAH). Costs of interest payment – 9-30% per annum.

Requirements to credits provision are set at discretion of concrete banks and envisage availability of a collateral for performance of obligations under the credits. In accordance with the legislation, forms of obligations performance are forfeit, bail, guarantee, pledge, holding and advance payment (CCU article 546). As a rule, mortgage of real estate appears as the collateral under credits of local self-government bodies.

Sure, the procedure of preparing for borrowing in the form of a credit is simpler than that in the form of issuance of bonds, as it does not require observance of conditions set for actors in the securities market.

Today, we observe an unstable situation in the banking system of Ukraine. In October, 2008 the NBU ratified regulatory requirements for reduction of crediting rates and prohibition of early withdrawal of funds from saving accounts of clients. Such requirements actually „froze” the crediting market and entailed reduction of the level of confidence to the banking system. The commercial banks that continued carrying out crediting transactions revised interest rates to increase them (up to 35-40% in the national currency).

Thus, the legislation of Ukraine allows local self-government bodies to use different forms of borrowings into the local budget. However, we should pay attention to the following key differences that exist between credits and local loan bonds from the point of view of the specific features of their use by local self-government bodies:

Indicator	Local loan bonds	Credits, loans
Rating evaluation and credit rating	Mandatory	Not required
Collateral	Not required, however, bonds may have additional collateral	Mandatory

Key advantages (opportunities) of application as an investment projects funding resource

A. Internal borrowings

- Possibility to involve funds into the development budget for investment needs (in the conditions of budgetary deficit).
- For realization of internal borrowings in the form of crediting, there is no limitation regarding the quantity of population of a city.
- There is no mandatory requirement to receive the credit rating during realization of borrowings in the form of loans, credits and credit lines from financial institutions.
- There is no requirement in relation to mandatory securing of bonds. Bonds can be secured additionally (but not necessarily).

B. External borrowings

- Allow involving considerable volumes of capital under low interest and for the relatively long term.
- Are accessible only for cities with the number of population over 800 thousand (Kyiv, Odesa, Dnipropetrovsk, Donetsk, Kharkiv).
- Are profitable only for cities with a high credit rating.

Key drawbacks (limitations) of application as an investment projects funding resource

A. Internal borrowings

- Limitation of the amount of the debt (costs of servicing the debt of local budgets cannot exceed 10% of expenditures from the general fund of the respective local budget annually)
- High interest rates on credits in the national currency (35-40%)
- Mandatory securing. LSGBs' not having liquid assets to secure credit obligations to banks (which predetermines the need of mortgaging communal property).
- LSGBs do not have sufficient experience of selecting the most efficient investment projects, drafting technical and economic evaluations to substantiate the need for borrowings and estimation of the expected effect of investments' realization.
- Risk of a failure to perform financial obligations (the state does not undertake responsibility under borrowings into local budgets)
- Preparation of issuance of bonds requires long and serious preparatory work.
- In the case of realizing borrowing in the form of issuing bonds, it is mandatory to have a rating evaluation of the securities, which results in increasing costs that the bonds issuer has to incur.
- Access of small cities to issuance of bonds is rather limited because of the rather high cost of payments that must be carried out.

B. External borrowings

- External borrowings are not accessible for cities with the number of population less than 800 thousand.
- It is necessary to realize long and costly work preparing external borrowings.
- The terms of funding depend on the rating of the borrower and / or the promissory instrument, thus, low rating has a negative impact on the cost of borrowings.
- In the case of significant volumes of debt in a foreign currency and instability of the macroeconomic situation, there is the risk of the borrower's failure to perform financial obligations because of exchange rate gaps.
- In the conditions of the financial and economic crisis, a negative impact of LSGBs' external borrowings on macroeconomic indicators is possible, as a result the Ministry of Finance might set procedural limitations

Examples of application

A. International experience of municipal borrowings

Participation of local authorities in credit relations is widespread in the majority of foreign countries (Box 2).

Box 2. Experience of local authorities of other countries in involvement of loan resources

In some countries (Denmark, Finland, Germany, Italy, Netherlands, Portugal, Sweden, Switzerland) access of local self-government bodies to the loan capital market is free and unlimited by the state. In other countries, this access is possible provided granting permissions of the state (Austria, Belgium, the UK, Greece, Ireland, Norway, Spain). In the legislation of virtually all foreign countries, there is the requirement of using the financial resources obtained only for investments. Due to loans, they form in European countries, as a rule, 10-15% of incomes of local budgets. The highest indicator is observed in San-Marino – 69%, in Netherlands – 19%, in Belgium – 13%,

Cyprus – 12%, Czech Republic – 11%, in Spain, France – 10% of municipal incomes. [Source: *Municipal investments and credits*. <http://users.iptelecom.net.ua/~zddm/RUSSIAN/INVBOOK/>].

In Russia, the most development programs of municipal promissory borrowings in the capital market are found in Moscow and Saint Petersburg. In Moscow, the Concept of Municipal Debt Management and Use of Loan Funds in the City Budget is the foundation for such programs. This strategy was implemented in the form of an integral investment and loaning system, within the framework of which all transactions related to involvement, servicing and repayment of debt obligations of the city are carried out by the single borrower. Its function of forming and controlling financial flows are performed by the specialized executive body – the Committee of Public Borrowings of Moscow. For organization and providing for effective functioning of the infrastructure of the investment and loaning system, as well as resolution of technical tasks within the framework of public debt management of the city, a specialized state unitary enterprise “MosFinAgenstvo” was created, which does not have its own interests in the market and the legal form of which makes it possible for the Government of Moscow to carry out total control over its activity.

In Russia, municipal borrowings are carried out for realization of different projects: housing construction, installation of telephones in the city, infrastructure projects, construction of commercial real estate, crediting for local businessmen, etc.. [Source: *Municipal investments and credits*. <http://users.iptelecom.net.ua/~zddm/RUSSIAN/INVBOOK/>].

B. Experience of internal borrowings by local self-government bodies of Ukraine

Information about loans of commercial banks in regional centers of Ukraine during 1996-2003 is shown in table 3.1. This information was generalized by the Municipal Development Institute within the framework of drafting the analytical review "Need for Investments and Sources of Funding Them" upon a request of the World Bank.

Table 3.1
Loans of commercial banks in regional centers of Ukraine, 1996-2003

Year	City	Short-term credits, annual % rate	Long-term credits	
			annual % rate	maturity
1996				
1997	Cherkasy	no %		
	Ivano-Frankivsk	60%		
1998 -1999	Ivano-Frankivsk		75%	3
2000	Mykolaiv	30%		
	Donetsk	35%		
	Zaporizhya	36-35%	Libor +1%*	15
	Lviv	28%		
2001	Mykolaiv	27%		
	Donetsk	24-30%		
	Ivano-Frankivsk		33%	1.5
	Kherson		18%	2
2002	Khmelnysky	29 - 20%		
	Zaporizhya	36 – 7%	Libor +1%	15
	Lviv	30%		
	Mykolaiv	18%	18%	3
	Donetsk	20-25%		
2003	Ivano-Frankivsk		28%	3
	Khmelnysky	20-18%		
	Lviv	28 -20%		
	Zaporizhya	36 – 7%	Libor +1%	15
	Mykolaiv		17%	5

Year	City	Short-term credits, annual % rate	Long-term credits	
			annual % rate	maturity
(September)				
	Chernivtsi		23%	3
	Zaporizhya	14.6 - 11%	Libor +1%	15

Source: Report "Need for Investments and Sources of Their Funding" prepared by MDI for the World Bank. Kyiv, 2004. The table is formed on the basis of the following data: the State Committee for Housing and Communal Economy of Ukraine, indicators of regional state administrations for regional centers of Ukraine obtained as a result of non-permanent questioning (December, 2003 – January, 2004).* The interest rate for Zaporizhya reveals the terms of the long-term credit in foreign currency under the EBRD credit for municipal water-supply and sewage modernization project.

Specific examples of involving internal credits by local self-government bodies in 2004-2008 are shown in Box 3.

Box 3. Experience of internal loans by local self-government bodies in the credit form based on data of the Ministry of Finance (no data on objectives of the crediting available)			
Borrower	Date of MoF's conclusion issuance	Amount of the borrowing for which the conclusion was issued	Amount and terms of actually realized borrowings
Anratsyt city council	18.08.2004	1.3 million UAH	1.29 million UAH, Maturity – 3 years, 15% per annum rate. Repaid.
Odesa city council	14.12.2004	48 million UAH	46 million UAH, Maturity – 3 years, 18% per annum rate. Repaid.
Nova Kahovka city council	25.02.2005	2 million UAH	200 thousand UAH, Maturity – 1 year, 16% per annum rate. Repaid in 2005.
Mykolaiv city council	04.10.2006	13 million UAH	Plan 13 million UAH, Maturity – 5 years, 16% per annum rate.
Illichivsk city council	15.04.2008	5.5 million UAH	Plan 5.5 million UAH Maturity – 18 months, 18% per annum rate.

Source: www.minfin.gov.ua

Consequently, it is possible to state that currently Ukraine has positive experience of collaboration between local self-government bodies and local banks. However, as data on the purposes of crediting is not published, there is no opportunity to generalize internal borrowings of LSGBs in the form of credits exactly for *investment* needs (including in the heating sector).

Experience of borrowing by local self-government bodies of Ukraine in the form of issuance of internal local loan bonds (based of data of the MoF) is represented in Box 4.

Box 4. Experience of borrowing by local self-government bodies in the form of issuance of internal local loan bonds based of data of the MoF (no data on purposes of the issuances is available)			
Borrower	Date of MoF's conclusion issuance	Amount of the borrowing for which the conclusion was	Amount and terms of actually realized borrowings

		issued	
Kyiv city council	25.06.2003	100 000 thousand UAH	100 000 thousand UAH Maturity – 5 years, no less than 10% and no more than 14% per annum.
Zaporizhya city council	19.04.2004	25 million UAH	25 million UAH, Maturity – 2 years, 15.35% per annum. Repaid in December, 2006.
Zaporizhya city council	11.05.2005	75 million UAH	75 million UAH, Maturity – 5 years, 10.5% -12% per annum.
Donetsk city council	13.07.2004	20 million UAH	20 million UAH, Maturity – 3 years, 14% per annum. Repaid in August 2007.
Donetsk city council	10.05.2005	45 million UAH	45 million UAH, Maturity – 5 years, 11.75% per annum.
Kharkiv city council	22.04.2005	100 million UAH	100 million UAH, Maturity – 3 years, 10.75% per annum.
Odesa city council	21.10.2005	150 million UAH	125 million UAH in three tranches, Maturity – 5 years, 12%-14% per annum.
Cherkasy city council	14.12.2005	5 million UAH	5 million UAH Maturity – 5 years, 12% per annum.
Ivano-Frankivsk city council	26.12.2005.	5.5 million UAH	5.5 million UAH Maturity – 5 years, no more than 14% per annum.
Donetsk city council	06.07.2006	50 million UAH	50 million UAH Maturity – 5 years, 12% per annum.
Vinnytsya city council	06.05.2006	20 million UAH	20 million UAH Maturity – 3 years, 12% per annum.
Vinnytsya city council	17.04.2008	10 million UAH	Plan 10 million UAH Maturity – 3 years 5 months, no more than 14% per annum.
Komsomolsk city council	06.07.2006	8 million UAH	8 million UAH Maturity – 3 years, no more than 12% per annum.
Lutsk city council	11.05.2007	10 million UAH	10 million UAH Maturity – 3 years, no more than 14% per annum.
Lviv city council	31.05.2007	92 million UAH	50 million UAH Maturity – 5 years, 9.5% per annum.
Lviv city council	15.04.2007	200 million UAH	200 million UAH Maturity – 5 years, no more than 12% per annum.
Lugansk city council	26.07.2007	29.3 million UAH	29.3 million UAH Maturity – 5 years, no more than 16% per annum.

Source: www.minfin.gov.ua

Based on data of the rating agency "Kredit Rating", in 2008 internal borrowings of local self-government bodies of Ukraine made up¹³:

- credits – 54.6 million UAH,
- bonds – 943.3 million UAH

¹³ http://www.ibser.org.ua/UserFiles/File/Roundtables/2009/Materials_16_04_2009

The unfavorable situation in the financial market did not make it possible in 2008 to take advantage of municipal borrowings in full for filling in development budgets. Deterioration of the situation with borrowings into local budgets resulted in deceleration of the rates of realization of development budget statements and in growth of local budgets' accounts payable.

C. Experience of external municipal borrowings in Ukraine

To consider involvement of external borrowings at foreign financial institutions and by issue of external loan bonds, it is possible to take as an example the experience of the cities of Kyiv and Odesa (table 3.2).

Currently, there is no generalization of external borrowings experience by local self-government bodies of Ukraine. At the same time, attractiveness of involving borrowings from external sources for cities is still in place, and for this reason some cities plan to apply this practice. Thus, for example, the city of Kharkiv intended to carry out external borrowings in 2008, but because of the financial crisis it had to give up this idea

D. Conclusion

The market of municipal borrowings for investment needs is still insufficiently developed in Ukraine.

One of reasons of that is imperfection of the budgetary legislation related to the mechanisms of local authorities' involvement of additional financial resources from bank institutions and other partners. In particular, provisions of the Budgetary Code of Ukraine related to the local debt and local borrowings set a number of specific limitations as follows:

- the absolute right of Verhovna Rada of the Autonomous Republic Crimea and city councils to carry out internal borrowings (art. 16 of the BCU);
- the rights to carry out external borrowings only for cities with the number of population exceeding eight hundred thousand (art. 16 of the BCU);
- limitation of expenditures for servicing the debt by 10% from the amount of the general fund (art. 74 of the BCU).

Among other reasons of the relatively low prevalence of municipal borrowings in Ukraine – high risks of their realization. The most widespread are the risks of non-payment, macroeconomic and legal risks. The risk of *non-payment* at realization of municipal borrowing arises in the case of the costs of servicing the debt exceeding the budgetary capacity of the local authority or in the case of strengthening of inflationary processes, when depreciation of resources borrowed makes timely and high-quality performance of the planned investment projects impossible.

Table 3.2
Information about external borrowings of specific local self-government bodies of Ukraine

City	Form of borrowing	Foundation	Key terms	Objective of borrowing
Odesa	Credit from a financial institution	Resolution of the city council "On realization of external borrowing into the budget of Odesa in 2007" No.1119-V 05.04.2007	Size – up to 335 million UAH in foreign currency. Interest rate – no more than 9.5% per annum. Repayment of the principal – no later than 2012. The interest is paid every half-a-year or annually subject to the conditions set by the respective agreements.	Involving funds for funding the development budget of Odessa for the purpose of acquisition of fixed assets for communal enterprises providing for vital functions of the city, realization of projects of capital construction and reconstruction of city objects financed from the development budget of the city
Odesa	Credit from a financial institution	Resolution of the city council "On approval of the term credit agreement of December, 20, 2007 between Odessa city council and BNP Paribas Finance Plc, which acts as the primary creditor, organizer and agent, for the credit in the amount of 50 million Swiss francs" No.2469 of 05.04.2008	Size – 50 million Swiss francs. Lender - BNP Paribas Finance Plc The key terms of borrowing were: - Size of the borrowing – up to 335 million UAH in foreign currency of the first category based of the official NBU exchange rate; - Interest rate – no more than 9.5% per annum; - Repayment of the principal - no later than in 2012. ¹⁴ According to the agreement, the size of the borrowing (the principal) makes up 50 million Swiss francs received into the city budget in 2007	Repair and reconstruction of roads, design work and construction of "Poizny" railway, costs of resettling citizens, reconstruction of city children hospital No. 2, etc. ¹⁵
Odesa	Agreement on receiving credits from financial institutions.	Resolution of the city council "On realization of external borrowing into the budget of Odesa in 2009" No. 4109-V 09.04.2009	Size of the borrowing (the principal) – up to 250 million UAH in foreign currency of the first category. Interest rate – no more than 18.5 % per annum.	Involving funds for funding the development budget of Odessa for the purpose of realization of projects of capital construction and reconstruction of city objects financed from the

¹⁴ http://www.vdalo.od.ua/news/viplata_vidsotkiv_po_miskomu_pozici_2007/

¹⁵ http://www.vdalo.od.ua/news/viplata_vidsotkiv_po_miskomu_pozici_2007/

MUNICIPAL HEATING REFORM

City	Form of borrowing	Foundation	Key terms	Objective of borrowing
			Repayment of the principal – no later than on December, 31 2014. The interest is paid every half-a-year or annually within the terms according to the conditions set by the respective agreements.	development budget of the city
Kyiv	Credit funded by issue by a foreign creditor on behalf of the borrower of securities in international capital markets	Resolution of Kyiv council of 27.10.2005 No. 250/3711 "On approval of the credit agreement between Kyiv city council and the bank Credit Suisse First Boston International"	"Credit Suisse First Boston International" Sum of the borrowing: 250 million USD Coupon: 8% Periodicity of payments under the bonds: twice a year Type of bonds: Eurobonds-LPN Placement date: November, 8 2005 Repayment date: November, 6 2015 ¹⁶	The bonds are in circulation, payments under them are realized.
Kyiv	Credit funded by issue by a foreign creditor on behalf of the borrower of securities in international capital markets	Resolution of Kyiv council of 15.07.2004 No. 465/1875	BAYERISCHE HYPO-UND VEREINSBANK AG Sum of the borrowing: 200 million USD Coupon: 8.625% Periodicity of payments under the bonds: twice a year Type of bonds: Eurobonds-LPN Placement date: July, 15 2004 Repayment date: July, 15 2011 ¹⁷	The bonds are in circulation, payments under them are realized. 175 million USD from the 200 million credit Kyiv planned to spend on construction of Podil bridge passage, and 25 million – on introduction of the new line for sorting, processing and caking of garbage. ¹⁸
Kyiv	Credit funded by issue by a foreign creditor on behalf of the borrower of securities in international capital markets	Resolution of the Kyiv council "On approval of the credit agreement between Kyiv city council and the bank DRESDNER BANK AG" of July, 31 2003 No.5/860	Creditor – bank DRESDNER BANK AG Sum of the borrowing: 150 million USD Coupon: 8.75% Periodicity of payments under the bonds: twice a year Type of bonds: Eurobonds-LPN	The bonds are in circulation, payments under them are realized. For general city construction programs, for projects in the sphere of heating energy efficiency, substitution of communications and a number of other

¹⁶ <http://www.cbonds.info/eng/emissions/emission.phtml/params/id/5007>

¹⁷ <http://www.cbonds.info/eng/emissions/emission.phtml/params/id/2473>

¹⁸ <http://kmr.gov.ua/news.asp?IdType=3&Id=25496>

City	Form of borrowing	Foundation	Key terms	Objective of borrowing
	(Eurobonds)		Placement date: July, 29 2003 Repayment date: August, 08 2008 ¹⁹	projects. ²⁰
Kyiv	Credit funded by issue by a foreign creditor on behalf of the borrower of securities in international capital markets (Eurobonds)	Resolution of Kyiv council of 22.12.2007 No. 1256/4089 " On approval of the credit agreement between Kyiv city council and the bank Credit Suisse International"	Creditor - bank Credit Suisse International Sum of the borrowing: 250 million USD Coupon: 8.25% Periodicity of payments under the bonds: twice a year Type of bonds: Eurobonds-LPN Placement date: November, 20 2007 Repayment date: November, 26 2012 ²¹	The bonds are in circulation, payments under them are realized. Kyiv city administration paid 10.3125 million USD of the income on Eurobonds issued in 2007. ²² Funds from selling Eurobonds in 2007 Kyiv city administration planned to use for construction of Podil bridge and the Heart Center. ²³

¹⁹ <http://www.cbonds.info/eng/emissions/emission.phtml/params/id/2035>

²⁰ <http://www.kontrakty.com.ua/ukr/gc/nomer/2003/20/10.html>

²¹ <http://www.cbonds.info/eng/emissions/emission.phtml/params/id/8184>

²² <http://news.finance.ua/ua/~1/30/all/2009/11/26/179286>

²³ <http://day.kmv.gov.ua/news.asp?IdType=1&Id=85642>

3.2 Borrowings of enterprises

The enterprises that carry out activity in the field of heating can realize both internal and external borrowings in the following forms:

- involving credits;
- issuing bonds.

3.2.1 Credits of enterprises

Legislative aspects

Part two of article 66 of the Economic Code of Ukraine stipulates the general right of enterprises to involve bank credits. The legislation does not contain direct limitations of this right either based on the organization and legal form, or on the form of ownership of the enterprise.

Box 5. "Credit" term

The term "credit" is used in several legislative acts, and in different acts different meaning is attributed to this concepts. Types of credits are also defined in various ways.

Based on the content of article 1054 of the Civil Code of Ukraine, the credit should be interpreted as monetary funds that a bank or another financial institution (creditor) provides to the borrower subject to the condition that the borrower is obligated to repay these funds and to pay the interest for using them.

At the same time, article 1057 of the CCU contains an indication to the so-called "commercial credit" in the form of advance, preceding payment, postponement or installment of payment for commodities, works or services.

Article 1 of the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets" contains the definition of the "financial credit" that corresponds to understanding of the credit in article 1054 of the CCU.

Point 1.11 of article 1 of the Law of Ukraine "On Taxation of Profits of Enterprises" includes the definition of the "financial credit" that also practically corresponds to the understanding of the credit based on article 1054 of the CCU. The same point offers the definition of the "commodity credit", which is close to the concept of the "commercial credit" based on article 1057 of the CCU, however, not identical to it, as implies actual commodities, not funds, as the credit. It also contains the definition of the "credit guaranteed by securities", which in essence means funds involved by issuers of bonds or deposit certificates.

In accordance with article 4 of the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets", loaning funds subject to conditions of a financial credit is included into financial services. In accordance with article 5 of the same Law, the right to provision of financial services belongs to financial institutions; while only credit facilities have the right to provide financial credits **due to funds involved** on the basis of the respective license.

Financial institutions, according to the law, include banks, credit unions, pawnshops, leasing companies, trust societies, insurance companies, pension saving facilities, investment funds and companies and other legal entities the exclusive type of activity of which is provision of financial services. Credit facilities, in accordance with the current legislation, include banks and credit unions, however, among the financial institutions from which enterprises can involve credits, there are only banks (the list of entities to whom credit unions can provide credits is restricted by the Law of Ukraine "On Credit Unions").

In accordance with article 347 of the Economic Code of Ukraine, bank credits can have the following forms: bank, commercial, leasing, mortgage, etc. Types of credits are differentiated based on: the terms of using (short-term, medium-term and long-term ones); the methods of securing; the risk level;

the method of provision; terms of repayment; other conditions of provision, use or repayment.

The legislation does not forbid involving credits from nonresidents (in particular, from foreign banks). In accordance with the "Regulation on the Procedure of Residents' Receiving of Credits, Loans in Foreign Currency from Nonresidents and Provision by Residents of Loans in Foreign Currency to Nonresidents" ratified with the NBU Resolution of 17.06.2004 No. 270, such credits involvement shall be carried out through authorized banks of Ukraine ("servicing banks"). The agreement on the basis of which crediting is carried out is subject to registration at the NBU.

External borrowings can be carried out by subjects of foreign economic activity defined in points 1, 2 of part two of article 55 of the Economic Code of Ukraine, namely:

1. economic organizations – legal entities incorporated in accordance with the Civil Code of Ukraine, public, communal and other enterprises incorporated in accordance with this Code, as well as other legal entities that carry out economic activity and are incorporated in accordance with the procedure set by the law;
2. citizens of Ukraine, foreigners and persons without citizenship who carry out economic activity and are registered in accordance with the law as entrepreneurs.

Subjects of economic activity are authorized to carry out external borrowings in the form of:

- credits from foreign financial institutions (article 388 of the ECU);
- bonds of enterprises (article 8 of the Law of Ukraine "On Securities and the Stock Exchange").

Subjects of foreign economic activity can obtain from foreign financial institutions foreign currency credits on contractual basis. Thus, provisions of the credit agreement cannot conflict with the legislation of Ukraine. Subjects of foreign economic activity in whose statutory fund there is a part of state property can enter into credit agreements with foreign financial institutions only upon the authorization by the State Property Fund of Ukraine.

In accordance with art. 346 of the ECU, in order to receive a bank credit, the borrower shall submit to the bank:

- petition (application), in which the nature of the credit agreement, the purpose of using the credit, the amount of the loan and the term of using it are indicated
- feasibility study of the credited activity and calculation of the economic effect of its realization
- other necessary documents.

The procedure of residents' receiving credits, loans in foreign currency, including repayable financial assistance, from nonresidents (including the procedure of registration of the respective agreements and issuance for residents of registration certificates on realization of foreign currency transactions under such agreements, as well as the procedure of residents' providing loans in foreign currency to nonresidents and issuance for residents of individual licenses of the National Bank for transferring outside Ukraine of foreign currency for the purpose of residents' providing loans in foreign currency for nonresidents) is set in the Regulation of the National Bank of Ukraine (ratified with the NBU Resolution "On Ratification of the Regulation on the Procedure of Residents' Receiving of Credits, Loans in Foreign Currency from Nonresidents and Provision by Residents of Loans in Foreign Currency to Nonresidents" No. 270 of 17.06.2004).

The agreements that envisage performance by resident borrowers of debt obligations in foreign currency to nonresidents under credits received from them are subject to mandatory

registration by the National Bank in accordance with the Decree of the President of Ukraine of 27.06.99 No. 734 "On Regulation of the Procedure of Residents' Receiving Credits, Loans in Foreign Currency from Nonresidents and Application of Penalties for Violation of Currency Legislation".

Resident borrowers other than banks receive registration certificates from territorial units of the National Bank (hereinafter – territorial units).

There is no need for registration at the National Bank of agreements on receipt by residents of commercial credits from nonresidents, as well as credits involved by the state or under state guarantees.

It should be noted that in the territory of Ukraine a new investment procedure is set. In accordance with the Law of Ukraine "On Amending Certain Laws of Ukraine for the Purpose of Overcoming Negative Consequences of the Financial Crisis" No. 1533-VI enacted starting from 24.11.2009, *all investments* in the monetary form in Ukraine must be carried out using investment accounts opened in authorized banks in Ukraine. For foreign investments, foreign currency that is considered by the National Bank of Ukraine as hard currency shall be transferred in foreign currency to investment accounts.

At the same time, for implementation of the provision of this law in accordance with which foreign investments in the monetary form in the territory of Ukraine shall be carried out *in the national currency of Ukraine* and according to the procedure set by the National Bank of Ukraine, investments received in foreign currency must be converted into UAH.

Foreign investments are subject *to mandatory registration* in accordance with the procedure, which has not yet been developed by the National Bank of Ukraine.

Moreover, in the period till 01.01.2011 early performance by residents that are individuals or legal entities of obligations to nonresident creditors under agreements on involvement of loans in a foreign currency by resident borrowers from nonresidents *is forbidden*.

Securing obligations under credits

It is necessary to specifically mention the issue of securing credit obligations. Most frequently a credit obligation is secured with mortgage of real estate (mortgage). Both property owned based on the right of economic management directly by an enterprise, and other property of a territorial community can be an object of mortgage following the decision of local self-government bodies. Besides, the collateral can be represented by titles belonging to the enterprise.

Centralized heating objects used by enterprises in the overwhelming majority of cases belong to communal (sometimes – state) property. Currently, there is a legislative ban on privatization of the abovementioned objects. Point "r" of part two of article 5 of the Law of Ukraine "On Privatization of State Property" stipulates that "objects of the engineering infrastructure and cities equipping, including networks, buildings, equipments related to supplying consumers with water, gas, heating, as well as sewage and purification of sewage water" are not subject to privatization (article 5 of the Law "On Privatization of State Property"). It means that such objects cannot – even at the consent of the respective local self-government body – be alienated for the benefit of legal entities and individuals, no seizure can apply to them, and *they cannot be used as a collateral (mortgage)*.

Thus, enterprises can offer as a collateral (mortgage) under their credits obligations only the property that does not belong to the objects mentioned above. I.e., those can be administrative buildings, motor-car technique, etc. Thus, if the enterprise belongs not to private but to communal or state property, offering even such property as a collateral is accompanied by

certain limitations. In accordance with articles 75 and 78 of the Economic Code of Ukraine, state and communal unitary enterprises can only provide property objects belonging to fixed assets as a collateral if there is a preliminary consent of the body to whose administration sphere they belong (respective local council, executive body).

The legislation (art. 583 of the CCU) stipulates that the mortgagor can be not only the debtor but also a third party. In the case of communal enterprises, the role of the mortgagor is sometimes performed by local self-government bodies, which offer as a collateral for credits received by communal enterprises buildings and constructions belonging to the territorial community.

The Ukrainian legislation (art. 576 of the CCU, art. 49 of the Law of Ukraine "On Collateral") allows providing "future payments" as a collateral – claims under obligations the term of performance of which has not yet come. A confirmation of availability and stability of such "asset" is, above all, a certain average monthly monetary flow entering the account of the enterprise that has the right to realization of centralized heating activity in the respective settlement in accordance with the statute or under an agreement with the local self-government body. Besides, the claiming right must be confirmed, the enterprise must have agreements with all of its consumers.

Unfortunately, such possible collateral as claiming rights are currently hardly used in Ukraine, as credits secured with such collateral are too expensive – which, in its turn, is conditioned by the regulatory policy of the National Bank of Ukraine.

Types of property that cannot be a form of collateral in the case of receiving a foreign currency credit from a foreign financial institution are defined by the law.

Provisions of regulatory and legal acts related to provision of guarantees by local self-government bodies under credits of enterprises

The Law of Ukraine „On Local Self-Government in Ukraine” of May, 21 1997 No. 280/97-VR, with amendments and supplements, authorizes local self-government bodies to act as guarantors of credits of enterprises, facilities and organizations belonging to communal property of the respective territorial communities (article 70, p.2).

Article 17 of the Budgetary Code of Ukraine sets requirements for guarantees of local self-government bodies in relation to performance of debt obligations by enterprises. City councils represented by heads of their executive bodies can provide guarantees in relation to performance of debt obligations to subjects exclusively within the authority set respectively by the Law on the State Budget of Ukraine or the resolution on the local budget.

Pursuant to article 17 of the Budgetary Code, payments from the local budget for performance of guaranteed obligations are payments under the debt, and the costs of servicing the debt of local budgets cannot exceed 10 percent of expenditures from the general fund of the respective local budget annually during any budgetary period when servicing of the debt is planned (article 74, p.4 of the BC).

Starting from 2003, annual laws of Ukraine on the state budget (articles 13-15) include the provisions that forbid the Council of Ministers of the Autonomous Republic Crimea and local self-government bodies to provide guarantees (except for guarantees under credits provided by international financial organizations or subject to the conditions of co-funding with international financial organizations).

Examples of application in Ukraine

Among heating enterprises, receiving credits for the following purposes is a popular practice:

- 1) Operative activity (for provision of timely settlements for used energy carriers in the heating season);
- 2) Investments (implementation of the development program (investment program) in the heating system).

At the same time, information about involvement of credit resources of Ukrainian banks for investment purposes is not available, no regular data collection is conducted by any department. Thus, the sector lacks statistical information about the volume of investments involved due to loan resources of commercial banks.

For this analytical review, we generalized available information on the experience of borrowings by heating enterprises, which is represented in table 3.3. From this table, it is evident that the heating enterprise of Odesa does have such experience.

Among pilots cities – participants of USAID/PADCO program “Tariff Reform and Communal Enterprise Restructuring in Ukraine”, out of the 29 heating, water-supply and sewage enterprises only one enterprise had the experience of receiving credits for capital investments (CE “Ivano-FrankivskTeploKomunEnergo”) and the majority of the enterprises have the experience of short-term borrowings for funding operational activity costs.

Several heating enterprises have the experience of external borrowings, which will be discussed in section 3.4 of this analytical review.

The practice of credits' repayment by enterprises is positive. Even under the condition of expiration of the payment deadline under credit agreements, installment of the payment takes place, and in the course of time the credit is repaid.

Table 3.3
Information about credits involvement by heating enterprises of some cities of Ukraine

Enterprise	Creditor	Credit terms	Collateral	Objective of borrowing
CE "Heating of the City of Odesa"	OJSC CB "Nadra"	Sum – 37.5 million UAH Term – through 11.02.09 17% per annum	Mortgage of real estate to secure performance of obligations for repayment of the credit and payment of the interest for its use. Resolution of Odesa city council No.4216-IV of 15.07.05	Payment for gas, electric and heating energy, for repayment of previously obtained credits
CE "Heating of the City of Odesa"	OJSC CB "Nadra"	Sum – 18.976 million UAH Term – through 30.09.2009 p. 18% per annum	Mortgage of real estate to secure performance of obligations for repayment of the credit and payment of the interest for its use. Resolution of Odesa city council No.318-I of 29.09.06. The municipal authorities approve opening of credit line No.05/10/2005/752-K/622 of 03.10.2005	Realization of settlements under agreements for opening and payment of the documentary letter of credit No.274 of 03.10.2005, No. 275 of 03.10.2005 and No.276 of 03.10.2005. Funding of other costs connected with restructuring of the heating system of the micro-district "Shkilny" of Odesa in accordance with Resolution of Odesa city council of September, 29 2005. No.4403-IV
CE "IllichivskTeploEnergo"	State Export Import Bank of Ukraine	Sum - 5 mln. UAH 20.5% per annum and the monthly commission for the credit line management at the rate of 0.015% from the debt limit	Non-residential real estate – "Rayduga" trade center, which is communal property of Illichivsk city council. Resolution of Illichivsk city council No.578/21.08.2009	Realization of timely settlements for natural gas during the heating period 2009-2010
CE "South-Western Heating Network" (Khmelnysky)	Not defined	Approval for receiving the credit for the sum of 4000	Pledge of communal property of 27.05.2009 of Khmelnysky city	Repayment of arrears for natural gas consumed.

MUNICIPAL HEATING REFORM

Enterprise	Creditor	Credit terms	Collateral	Objective of borrowing
		thousand UAH. Term – 3 years	council	
CE “Housing and Communal Economy Administration” (Slavutych)	Not defined	Approval for receiving the credit for the sum of up to 400 thousand UAH Term – up to 36 months	Mortgage of real estate of communal property of Slavutych territorial community: administrative building of the road-operating unit.	Repayment of arrears for natural gas consumed.
CE „Kharkiv Heating Networks”	Not defined	Approval for receiving the credit for the sum of 20.0 million UAH	Pledge (mortgage) of communal property of Kharkiv territorial community. Resolution of the 23 rd session of Kharkiv city council of the 4 th convocation of 08.07.2004 No. 119/04 „On Approval of Pledging (Mortgaging) Communal Property of Kharkiv Territorial Community” (with amendments and supplements)	Payment for natural gas.

Source: <http://www.odessa.ua/acts/council/12154/>; <http://dniprorada.gov.ua/en/rishennja/3539.html>;
http://ilyichevskrada.gov.ua/rish_rada.php?start_from=8&ucat=&archive=&subaction=&id=&; <http://www.khmelnytsky.com/dec21-v.html>;
<http://www.e-slavutich.gov.ua/documents/documents/970-V-2009-r.doc>

3.2.2 Bonds

Legislative aspects

Part 6 of article 66 of the Economic Code of Ukraine envisages the right of enterprises to issue, sell and acquire securities in accordance with the legislation of Ukraine. The special law that regulates relations arising during placement and circulation of securities is the Law of Ukraine "On Securities and the Stock Market".

In accordance with parts two and five of article 3 of the Law of Ukraine "On Securities and the Stock Market", bonds of enterprises are attributed to emission promissory securities. I.e., bonds of enterprises are securities that certify loan relations (between the issuing enterprise and owners of the bonds) and provide for the obligation of the issuing enterprise to pay within the set term the funds to bonds owners in accordance with the obligation. Thus, in contrast to some other types of securities (shares), bonds of enterprises do not give the rights to take part in management of the issuing enterprise, but only confirm obligations of the issuer under them.

Neither the Economic Code of Ukraine, nor the Law of Ukraine "On Securities and the Stock Market" contain direct limitations on issue of bonds by enterprises and do not define any dependence of such issue on the legal form or the form of ownership of enterprises. I.e., issue of bonds can be realized by both state and communal and private enterprises, both unitary and corporate (joint-stock companies, etc.) ones. At the same time, the law indicated sets a number of requirements to emission of bonds of enterprises.

First, bonds can be placed by enterprises only after complete payment of their statutory capital. In the case of economic societies it means that participants (founders, shareholders) must make their full contributions into the statutory capital of the society (pay for shares, if these are joint-stock companies). This requires, in the case of communal unitary and state unitary enterprises, above all, full availability of the statutory capital – for at lots of such enterprises constituent documents (statute, incorporation resolution) still do not define its amount. Therefore, if the statute of a communal or state unitary enterprise still does not define the amount of the statutory capital, it is necessary to make the respective amendments in the statute. After this, in the amount of the statutory capital, the respective communal or state property must be passed to the enterprise (if the property was already passed before, with the decision of the body the regulation sphere of which includes the enterprise, it is necessary to stipulate that this property was included into the statutory capital).

In this connection, it is prohibited to place bonds of enterprises for the sake of forming or supplementing the statutory capital of the issuing enterprise.

Placement of bonds of enterprises for coverage of losses of economic activity by including the income from sale of bonds as a result of the current economic activity is not allowed.

Secondly, the total sum for which bonds are placed must not exceed the triple size of the ownership capital of the enterprise or the size of the security provided for the enterprise for this purpose by third parties (such security can be a bail, guarantee, insurance, etc.). In this connection, for state and communal enterprises the burning issue is revaluation of the ownership capital for the purpose of defining its fair value and, accordingly, revision by the body that governs the enterprise of the size of their statutory capital.

Thirdly, the law requires realization of registration of bonds issue by enterprises by the State Commission for Securities and the Stock Market according to the procedure set by it. Only after such registration it becomes possible to place the bonds. The abovementioned procedure is defined in the Regulation on the Procedure of Issue of Bonds of Enterprises ratified with

Resolution of the State Commission for Securities and the Stock Market No. 322 of 17.07.2003. In accordance with the abovementioned Regulation, issuance of bonds of enterprises is carried out in a few steps and envisages submission by the issuing enterprise of a considerable volume of information on the enterprise and the planned issuance to the Commission.

For registration of information about issuance, it is necessary to pay a state duty in the size of 0.1% from the nominal value of bonds (in accordance with the Decree of the Cabinet of Ministers of Ukraine "On the State Duty").

In accordance with the Law of Ukraine "On Securities and the Stock Market", bonds of enterprises can be placed:

- in the documentary or non-documentary form
- holder-based or name-based
- as interest-bearing (necessitates interest payment), targeted (performance of obligations under them can be realized with commodities and / or services) or discount ones (are placed at a price lower than the nominal value)
- with the nominal value in the national or foreign currency.

The choice out of the options indicated above can be made by the issuing enterprise, and the legislation does not set limitations in this respect. However, without regard to that part six of article 7 of the abovementioned law allows the enterprise at its own discretion to define the nominal value of bonds in the national or foreign currency, part nine of the same article allows selling bonds for foreign currency only in the case this is stipulated by the legislation and terms of bonds placement.

Overall, the legislation of Ukraine does not envisage settlements in its territory realized in foreign currency, including in the case of bonds acquisition. In accordance with article 192 of the Civil Code of Ukraine, the "legal means of payment mandatory for acceptance at the nominal value all over the territory of Ukraine is the monetary unit of Ukraine – the hryvnya", and foreign currency can be used in Ukraine only in the cases and according to the procedure set by the law. Point 4 of article 5 of the Decree of the Cabinet of Ministers of Ukraine "On the Currency Regulation and Currency Control System" allows using foreign currency in the territory of Ukraine as a means of payment only in the case of receiving the individual license of the National Bank of Ukraine for that. The Regulation on the Procedure of Issuance by the National Bank of Ukraine of Individual Licenses for Using Foreign Currency in the Territory of Ukraine as a Means of payment ratified with Resolution of the NBU No. 483 of 14.10.2004 stipulates that such license is issued "exclusively under the condition of sufficient substantiation of the necessity to use foreign currency as a means of payment". Without receiving the license such settlements can be conducted only between a resident and nonresident and only via an authorized bank.

It is also possible to involve funds in foreign currency by placing bonds outside Ukraine, however, for this purpose the law requires a permit of the State Commission for Securities and the Stock Market. In accordance with article 37 of the Law of Ukraine "On Securities and the Stock Market", permission for placement outside Ukraine of securities (including bonds of enterprises) of Ukrainian issuers is given provided living up to the following requirements:

- realization of registration of securities' issuance
- listing of securities for exchanges auctions at one of Ukrainian stock exchanges

- correspondence of the number of securities that are placed outside of Ukraine to the norm set by the State Commission for Securities and the Stock Market.

It should be noted that in accordance with article 7 of the Decree of the Cabinet of Ministers of Ukraine "On the Currency Regulation and Currency Control System", acquisition of bonds of an enterprise by a nonresident with the national currency of Ukraine also requires receiving of an individual license of the NBU (except for the cases when such transaction is carried out by a registered representative office of the nonresident in Ukraine²⁴).

The decision on placement of bonds of enterprises is made by the respective managerial body of the issuer pursuant to the provisions of laws that regulate the procedure of creation, activity and termination of activity of legal entities of the respective organizational legal form.

In the case of open placement of bonds, the issuer is obliged to provide information about the level of rating evaluation of the respective issue of bonds set by one of authorized rating agencies or international rating agencies recognized by the State Commission for Securities and the Stock Market, the name of the rating agency and the date of rating evaluation or its latest updating.

Registration of issue of enterprises' bonds is carried out by the State Commission for Securities and the Stock Market according to the procedure that it sets.

In practice, it is possible to create a certain combination of the two mechanisms described above (financial credits and bonds of enterprises). It lies in that from time to time because of the complications related with issuing and placing bonds in Ukraine, enterprises contact foreign financial institutions (banks), which place the bonds outside Ukraine, on its own behalf and under the legislation of the respective foreign country. The funds obtained are provided by such institution to the resident enterprise in Ukraine as a credit.

Examples of application in Ukraine

During the whole period of development of the enterprises' bonds market, only one project in the field of water-supply, heating and sewage was funded by issuance of bonds. This was the issue in July, 2003 of the first series of interest-bearing (coupon) registered bonds by the communal enterprise "KhersonTeploEnergo" for the amount of 2.5 million UAH with the repayment term of 6 months at the rate of 14% per annum. The nominal value of the bonds made up one thousand UAH with one coupon period and the issue was carried out in the documentary form. The first issue of bonds of "A" series was acquired by the regional branch of the commercial bank "PetroCommerceBank". It was planned that the total nominal value of the bonds that would be offered for sale would make up 10 million UAH and three additional bonds series – "B", "C" and "D" were to be offered during 2003-2004 to large companies in the city. However, because of the unsatisfactory financial status of the enterprise and absence of guarantees to secure obligations under the issue, the enterprise was not able to place the next bonds issues, as there was no demand on them.

For issue of the bonds, "KhersonTeploEnergo" had to pass through a financial and technological audit, which would not be required provided receiving a loan from a commercial bank, plus it was necessary to pay money to the issue organizer and authorized security brokers. The legal financial company LLC "YurFinKom" became the issue organizer. Sale of the bonds took place through the authorized security brokers CJSC "Nafta-Invest" and LLC "Avuar".

²⁴ Point 1.4. of the Regulation on the Procedure of Issuance by the National Bank of Ukraine of Individual Licenses for Settlements among Residents and Nonresidents within the Trade Turnover in the Currency of Ukraine ratified with the NBU Resolution No. 484 of 14.10.2004.

The incentive for the issue of short-term bonds of the enterprise was absence in the legislation of the requirement of securing it, which is mandatory in the case of receiving credits. At the same time, top management of the enterprise considered as one of advantages of issuing securities the opportunity of their placement among large employers of the city, such as OJSC "HBK", employees of which are consumers of TeploKomunEnergo's services. In particular, OJSC "HBK" had significant arrears in payment of salary for its employees; thus, its employees could not pay for heating services. TeploKomunEnergo believed that placement of bonds exactly with this enterprise would allow resolving the problem of non-payments by workers for services by setting off for heating services via the bonds that would be bought by the employer. However, currently OJSC "HBK" is an insolvent enterprise and it was not able to buy the bonds that were offered to it.

That is, the experience of Kherson issuing enterprise bonds can hardly be currently regarded as positive. Although it can be used in order to avoid the problems that arose at the enterprise in the process of implementing the loan funding project. In particular, short-term funding of capital investments projects through issue of short-term bonds is *not recommended*, as short-term securities will not be in demand in the market of institutional investors, such as insurance companies or pension funds. Besides, the unsatisfactory financial situation of the enterprise observed at the moment of the initial sale of "A"²⁵ series bonds was a negative signal for potential buyers of securities and is perceived as too risky for crediting.

Key advantages of enterprises' borrowings for investment purposes

Internal borrowings

- Obtaining credits for the purpose of operational activity is the most popular form of involving financial resources by heating enterprises and, thus, clear for realization of borrowings for investment purposes.
- Speaking about involvement of credits and issue of bonds, legislation does not contain restrictions. Enterprises of any organizational legal form (unitary, corporate) and any form of ownership can carry it out (state, communal, private).
- The procedure of bonds issue by communal enterprises is the same as for local loans bonds. However, it is a bit simpler, as the enterprise does not need to obtain the approval of the Ministry of Finance. That is why one could hardly think of any serious obstacles for communal enterprises other than absence of the desire and experience, as well as placement of bonds after their registration.
- In the case of issuing bonds, no collateral is required as such, which attributes to bonds a certain advantage compared with credits.

External borrowings

- For solvent enterprises, external borrowings are a potentially accessible loan resource in a foreign currency.
- For international companies that create their enterprises in Ukraine for activity in the field of heating within the framework of public-private partnership (PPP), external borrowings are the most acceptable form of investments' realization.

²⁵ Based on results of the fiscal year, the losses made up 5.4 million UAH ("Visnyk Cinni Papery" No.138-139 of June, 20 2003)

Key drawbacks (limitations) of application as an investment projects funding resource

- Currently, the main drawback of involving credits is their high cost. The difficult financial situation of a considerable number of enterprises is the reason of their low solvency, and thus of high evaluations of the credit risk on the part of creditors. Interest rates today fluctuate from 20% to 30% per annum compared with 15-18% in 2008.
- For enterprises with the communal form of ownership the procedure of registration of obligations security is difficult, as it necessitates decision-making by the city council on pledging real estate that belongs to communal property of the territorial community. The requirements related to mandatory securing of borrowing obligations is problematic for enterprises in the case of their non-profitability and unwillingness of the creditor to accept as a collateral objects of communal property.
- Negative impact on spreading of the practice of internal borrowings in the form of credits (mainly, medium- and long-term ones) is also caused by the prohibition to the Council of Ministers of AR Crimea and local self-government bodies to offer guarantees to communal enterprises (except for guarantees under credits provided by international financial organizations or subject to co-funding together with international financial organizations).
- A lot of enterprises currently do not have feasibility studies of the credit activity or calculations of the economic effect of its realization²⁶
- When borrowing from foreign financial institutions, the procedure of registration of credit agreements (loan agreements) in foreign currency concluded between resident borrowers and nonresidents is rather complicated.
- In the case of issuing bonds, there are considerable costs related to preparation and issue of bonds, and in particular, of external loans.
- In the case of external borrowings, there are currency risks related to losses as a result of exchange rate gaps, which are not compensated by tariffs on services (there is a direct prohibition of compensating costs related to exchange rate gaps in the Tariffs Setting Procedure for heating energy and centralized heating and hot water supply services ratified by the Cabinet of Ministers of Ukraine with Resolution No. 955 of July, 10, 2006).

3.3 Loans of condominiums

It is generally recognized that the greatest energy efficiency potential is connected with realization of energy efficiency measures in the aspect of consumption of energy resources – and, in particular, in apartment houses. That is realization of energy efficiency measures in the apartment housing fund can offer the greatest return from the point of view of economizing energy resources.

In accordance with requirements of the legislation of Ukraine (art.319, 321 of the CCU), nobody except for joint owners of an apartment house is authorized to make the decision one realization of any work in such house. And, on the other hand, nobody except for joint owners is obliged to undertake responsibility for maintenance and repair of the property belonging to them (article 322 of the CCU). Both the decision-making and proper performance of the duties of the owner can be most efficiently realized by joint owners of an apartment house within the framework of an association of joint owners of an apartment house (condominium).

²⁶ Article 346 of the Civil Code.

If not to take into consideration the various irregular incomes of the condominium (incomes from renting utility premises, funds provided from the state or local budget, etc.), the key source from which all costs of the association are funded are contributions and payments of the joint owners.

Realization in the house of energy efficiency measures is related with a one-time need for a large amount of money. At the same time, contributions and payments of joint owners, as a rule, are comparatively small – though permanent. That is why for realization of the measures indicated joint owners do not have another way out but for attracting credit resources that have to be repaid to the creditor in some time.

Legislative aspects

The definitions of the credit under article 1054 of the CCU and the commercial credit under article 1057 of the CCU were already offered above (Box 5). Condominiums as legal entities have the right to involve the both types of credits indicated.

Article 4 of the Law of Ukraine "On the Association of Joint Owners of the Apartment House" stipulates that the association's property is formed with:

- property passed to it by the association members as property;
- incomes obtained;
- other property acquired on the grounds not forbidden by the law.

Thus, no legislative act contains a prohibition for condominiums to receive funds in the form of credits.

At the that time, the legislation defines certain *terms* for involving and using credit funds by condominiums. Thus, according to article 21 of the Law of Ukraine "On the Association of Joint Owners of the Apartment House" and point 6.2. of the condominium's Typical Statute ratified with order by the State Committee for Housing and Communal Economy No. 141 of 27.08.2003 use and management of funds is carried out "in accordance with the statute and the estimate approved".

Consequently, involvement of credit funds and their use and repayment must be envisaged by the estimate of the association. According to article 10 of the abovementioned Law, approval of the estimate is attributed to exclusive jurisdiction of the general meeting of the association. That is why the decision on involvement of a credit by a condominium must be made at the general meeting of the association, and simultaneously with such decision-making such meeting must decide on the respective amendment of the estimate (or approval of the new one). Besides, depending on the chosen mechanism of credit funds' repayment, it might be necessary to introduce the respective targeted fees for the joint owners.

Securing the condominium's credits

As obtaining of a credit is always associated with the borrower's provision of the collateral to the creditor (mortgage, etc.), it is necessary to pay attention to the fact that a condominium as a legal entity is not the owner of either the apartment house as a whole, or the joint property (elevators, garrets, basements, etc.) of such house. The so-called joint property of an apartment house in accordance with article 382 of the CCU and the Law of Ukraine "On the Association of Joint Owners of the Apartment House" is common property of proprietors of the apartments and non-residential premises in the house. Therefore, in most cases the only property that belongs to the condominium as a legal entity are funds on its bank accounts and liabilities / debts of joint owners to the condominium. It is also possible to refer to the payments that the condominium will receive in the future but the maturity term of which has

not yet come as the "asset" of the condominium. The Ukrainian legislation allows to offer as collateral property rights, including those that the pledgor will acquire in the future (art.4 and 49 of the Law of Ukraine "On Mortgage", art.576 of the CCU) – i.e., in our case it is possible to pledge the claiming right under obligations, including those the maturity term of which has not yet come.

It should be noted that among the joint property mentioned above in an apartment house there are also utility premises, which condominiums can now lease. Such premises are not detached from the general composition of the joint property of the house, for them there are no titles, they remain the joint property of all joint owners of the apartment house. The associations can lease them only because such right is directly given to condominiums by the Law of Ukraine "On the Association of Joint Owners of the Apartment House". And even though the condominium enters into contracts of tenancy for such premises on its own behalf, it is not the owner of such premises.

However, in our opinion, condominiums cannot offer the utility premises as a mortgage, above all for the reason that they are not their owners. Moreover, in order to be a pledge object the utility premises must be detached from the composition of joint property of the house. Since premises are detached from the composition of joint property of joint owners of an apartment house, they (not the condominium) will be joint owners of this premise²⁷. Theoretically, joint owners of premises can pledge them under credit obligations undertaken by the condominium, however, this will require achievement by them of 100% consent for this, which in practice is not always possible.

However, it should be noted that some condominiums have in their property apartments or non-residential premises and re-registered titles on them.

Thus, a condominium as a legal entity, as a rule, has no property that potential creditors would be ready to accept as a collateral. For the exception of those few condominiums that have apartments in their property, the only asset of the associations is the "monetary flow" of contributions and mandatory payments of joint owners. On the whole, the international practice shows that monetary obligations of third parties to the borrower ("future payments") as a pledge object are quite a widespread phenomenon, especially when the issue is apartment houses.

Organizational aspects of condominiums' borrowings

It should be taken into account that the majority of condominiums lack knowledge, experience and specialists for conducting negotiations for receiving the credit and conclusion of the necessary agreements. Receiving of a credit, apart from searching for, actually, a potential creditor who would offer optimum crediting terms, is also related with the necessity of developing the business plan and to prepare the batch of documents that may be requested by the creditor to offer the credit. Moreover, in the case of credit provision, the condominium would require skilled legal assistance at conclusion of the credit agreement and mortgage agreement. As experience shows, in Ukraine very few heads and board members of condominiums have the necessary education or training for this purpose. And even among condominium members it is not always possible to find the proper specialists who would provide such assistance. While involvement of external specialists results in additional costs for the condominium – and the quality of such specialists' services is not always guaranteed.

²⁷ As premises are objects of real estate and the property right on them is subject to state registration, all joint owners must also be indicated in the certificate on the property right to such apartment. Apart from other things, this also creates practical inconveniences.

As in Ukraine the credits that are secured with pledging claiming rights under monetary liabilities are too expensive (which is connected with the specific features of the banking services market regulation in Ukraine), in fact it is not profitable for a condominium to take a credit from a Ukrainian bank. Thus, the most advantageous option for a condominium is receiving a credit from a company that is a commercial credit contractor (art.1057 of the CCU) in the form of an installment of payment for work executed. This allows the condominium to avoid the necessity to independently conduct negotiations and to enter into contracts with creditors (for condominiums far not always have the opportunity to address for assistance experts in the field of law, finance, etc.).

Key advantages (opportunities) of using credits of condominiums for investment activity funding

- Borrowing in many cases is the only opportunity for a condominium to comparatively quickly obtain a significant sum of investment funds, for accumulation of which by gradual collection they would need a considerable amount of time.

Key drawbacks (limitations) of using credits of condominiums for investment activity funding

There are several key drawbacks (limitations) for condominiums' obtaining of credits:

- Lack of knowledge, experience and specialists for conducting negotiations for receiving a credit and conclusion of the necessary agreements.
- The condominium as a legal entity does not have the property that potential creditors would be ready to accept as mortgage;
- The status of a condominium as a non-profit organization, which for some banks is unacceptable for crediting in accordance with their internal regulations.

Examples of application in Ukraine

So far, there is no experience of involving credits (at least, more or less significant ones) by condominiums directly from financial institutions in Ukraine.

However, there is an example of provision for a condominium of a commercial credit in the form of an installment of payment for work performed in Nizhyn. The contractor company under the agreement with the condominium undertook work for heating modernization of houses, was appointed the performer of the centralized heating services and took a credit from a foreign financial institution under security of future payments by joint owners of the house²⁸. However, in this example no payment for the work as such is realized by the condominium – the company compensates the work costs due to the economy achieved as a result of realizing the heating modernization activities²⁹.

3.4 Involvement of funds of international financial agencies

Involvement of resources of international financial organizations takes place in accordance with the Procedure ratified by the Cabinet of Ministers of Ukraine with Resolution of 26.11.2008 No. 1027 „On the Procedure of Initiation, Preparation and Implementation of Projects for Economic and Social Development of Ukraine Supported by International Financial Organizations”. Within implementation of this Resolution of the Government, the Ministry of Economy passed the Order of December, 19, 2008 No. 889, which defined the *mechanism of decision-making* on the expedience of preparing investment projects for

²⁸ <http://www.minjkg.gov.ua/activity/jp/jp-kp/221-v-nizhini-prezentovano-pershij-v-ukrayini.html>

²⁹ This example is described in more detail in section 6.1 hereof.

realization of which involvement of resources of international financial organizations is envisaged.

3.4.1 Programs of the International Bank for Reconstruction and Development (IBRD)

List of programs, crediting terms

The list and brief description of projects for modernization of the municipal infrastructure implemented / being implemented in Ukraine with the World Bank funding are represented in table 3.4.

As of October, 2009, under the project "Urban Infrastructure Development" credit agreements with the following enterprises have been signed:

1) *closed component* – CE "Agency of Odesa Development Programs" (created to satisfy needs of Odesa territorial community by involvement of national and foreign investments into the city's economy); CE "ChernigivVodoKanal", CE "Ivano-FrankivskVodoEkoTechProm"

2) *open component* – currently, communal enterprises of the cities of Odesa, Chernigiv, Kalush, Kolomya, Cherkasy, Drogobych, Kharkiv, Slovyansk and Balta have received confirmations at all levels of the competitive selection and are included into the list of participants of the "open" component of the Project – "Energy Efficiency Investments".

With the funds of a grant of the Swedish International Development Agency (SIDA) within the Project "Urban Infrastructure Development", it is planned to fund services of consultants for realization of the energy inspection; and / or implementation of work for institutional development of the enterprises – the enterprise management systems, drafting and implementation of business plans, record-keeping and accounting, asset managements, strategies of collecting payment for services provided and HR management, etc., drafting of documents for new investment projects for sustainable development. The grant funding, in compliance with the Order of the Ministry of the Housing and Communal Economy of Ukraine of September, 14, 2009 No. 281 "On Approval of the Procedure of Organization of the Competition for Selection of Consultants for Provision of Services for Water-Supply and Sewage Communal Enterprises due to Funds of the Grant of the Swedish International Development Agency within the Project "Urban Infrastructure Development", takes place subject to the conditions of co-funding by the communal enterprise of the abovementioned activities at the rate of 50% of their total cost.

Table 3.4
List and brief description of the World Bank's Projects for the municipal infrastructure modernization in Ukraine

Name	Foundation	Loan terms
<p>Kyiv Heating Project (1999 – 2004) Purpose: improvement of productions capacities of centralized heating system of Kyiv, in particular – enhancing its reliability and technical level in order to better satisfy the current and future needs; reconstruction of the existing technologies and materials and introduction of the modern ones, increasing efficiency of the heating system, support of activities aimed at strengthening the organizational structure and commercialization of KyivEnergo and KyivZhytloTeploKomunEnergo for the purpose of achieving optimum indicators related to services in the sphere of centralized heating of Kyiv, assistance to the possible privatization of services in the sphere of centralized heating of Kyiv.</p>	<p>Bilateral Loan Agreement between Ukraine and the International Bank for Reconstruction and Development of 14.10.1998 (ratified on 23.03.99)</p>	<p>200 million USD LIBOR basic rate plus the general LIBOR margin One-time commission fee at the rate of three quarters of a percent (0.75 %) The interest is paid twice a year. Repayment till 2018.</p>
<p>"Kyiv Public and Administrative Buildings Energy Efficiency" Project Purpose: increasing the level of energy efficiency in the major communal property public buildings located in Kyiv, in particular – at schools, kindergartens, hospitals, culture facilities and administrative buildings by introduction of a set of technical improvements and the respective tariff policy.</p>	<p>Bilateral Loan Agreement ("Kyiv Public and Administrative Buildings Energy Efficiency" Project) between Ukraine and the International Bank for Reconstruction and Development of April, 25 2000 (ratification date: 06.07.2000)</p>	<p>18.29 million USD LIBOR basic rate plus the general LIBOR rate. One-time commission fee at the rate of three quarters of a percent (0.25 %) The interest is paid twice a year. Repayment till 2018.</p>
<p>Lviv Water and Wastewater Project (2003 –2006) Purpose: improvement of operation and management of water-supply and sewage systems of the city of Lviv.</p>	<p>Bilateral Loan Agreement between Ukraine and the International Bank for Reconstruction and Development of 27.08.2002 (ratification on 27.11.2002)</p>	<p>24.25 million USD LIBOR basic rate plus the total LIBOR spread. One-time commission fee at the rate of one percent (1 %) from the sum of the loan. The payment for the non-used art of the credit at the size of one quarter of a percent (0.25 %) from the total sum of free funds. The interest is paid twice a year. Repayment till 2021.</p>

Name	Foundation	Loan terms
<p>"Urban Infrastructure Development" (2009 - 2012) Project Purpose: to support communal enterprises in enhancing the quality and reliability of services provision and reduction of maintenance costs by introduction of a number of institutional improvements and rehabilitation of the water-supply, sewage and solid waste utilization systems.</p>		<p>61.88 million USD – <i>closed component</i> 78.12 million USD – <i>open component</i> LIBOR basic rate for the loan currency plus of changeable spread. One-time commission fee at the rate of one quarter of a percent (0.25%). The interest is paid twice a year. Repayment till 2027.</p>

At the same time, the International Bank for Reconstruction and Development (IBRD) does not currently have in Ukraine any *open* programs of funding in the field of *heating*.

However, the credit line for funding urban infrastructure energy efficiency projects is currently at the stage of development, which, by estimations of the World Bank experts, must be ready by mid-2010. The abovementioned credit line will function through the state export-import bank of Ukraine (JSC "UkrExImBank").

The terms of this credit line have not yet currently been defined, except for the following:

- Name: Energy Efficiency and Energy Saving Project
- Implementation term: 2009-2014
- Funding amount: 200 - 300 million USD
- Brief Project description: Credit line for implementation of an extensive range of energy efficiency projects in the public and private sectors.
- Goal of the Project: - to provide assistance to the Government of Ukraine in achievement of the medium-term objective of reduction of energy consumption by 15% before 2015.
- The institutional structure of project implementation:
 - Credit line through a financial intermediary;
 - ✓ Possible co-funding from the Clean Technologies Fund and under the Green Investments Scheme
 - ✓ Technical assistance in the sum of approximately 1 million UAH to support implementation of this project.
 - ✓ Public awareness campaign on expedience of implementing energy efficiency activities.

Key advantages (opportunities) of application as an investment projects funding resource

- Availability of the experience of crediting small projects of separate cities under the guarantee of the Government of Ukraine;
- Advantageous crediting terms compared with commercial credits in the national currency;
- The opportunity of repaying the credit during the term of effective operation of the object – up to 14 years;
- The possibility of receiving guarantees of the Council of Ministers of AR Crimea and local self-government bodies for borrowings of communal enterprises (as the guarantees can be given for credits provided by international financial organizations or subject to the condition of co-funding with international financial organizations).

Key drawbacks (limitations) of application as an investment projects funding resource

- Inaccessibility of funding in the case of absence of the respective program ratified at the level of the World Bank;
- Requirements of granting of sovereign guarantees and, accordingly, guarantees of local self-government bodies.

3.4.2 EBRD programs

List of programs, crediting terms

In Ukraine, EBRD implements a lot of projects of crediting the municipal infrastructure, including in the heating sphere (table 3.5).

The key *terms* of crediting provided by EBRD in Ukraine are:

- Term – up to 15 years;
- Minimum sum – 10 million euros;
- Pricing subject to market conditions;
- Municipal guarantees;
- Package of reforms;
- Procurements using EBRD Procurement Rules;
- Preparation and implementation of the projects at the support of Technical Cooperation grants;
- Expert consultations on the part of EBRD related to credits' structuring.

The key funding *directions* are:

- Heating;
- Water-supply and sewage;
- Public transport;
- Energy efficiency in budgetary and residential buildings;
- Transportation and processing of solid household waste.

Having the experience of concluding agreements with communal heating enterprises of the cities of Odesa, Cherkasy and Ivano-Frankivsk, EBRD initiated in the context of the EU / Swedish initiative support for investments into energy efficiency in Ukraine.

EBRD plans to implement approximately 15 projects with the total volume of funding of 350 million euros. The projects will be implemented in medium and large cities with the number of population from 60 thousand to 2 million persons (including such settlements as Energodar, Zhytomyr, Lutsk, Odesa, Dnipropetrovsk, Zaporizhyya, Boryspil, Yalta, Zakarpattia) and will envisage provision of credits and grants for enterprises of the communal form of ownership.

Other possible crediting structures can also be considered. The size of the investment project is expected to be from 5 to 50 million euros, at the same time, smaller or bigger projects can also be considered under certain circumstances.

This project will include funding of some of the following investment components:

- Transition from 4-pipe systems with Central Heating Points (CHP) to 2-pipe systems with Individual Heating Points (IHP);
- Transition to closed systems by IHP introduction;
- Networks replacement;
- Unification into a common cycle of separate network branches of heating networks;
- Modernization and energy efficiency measures of boiler plants;

- Introduction of co-generation systems, including installation of mini co-generation plants;
- Increasing of automation and SCADA and introduction of centralized Energy Efficiency Management Systems;
- Implementation of projects using biomass / waste;
- Development of solutions to manage demand in urban and residential houses, including modern methods of accounting and control, improvement of heat-insulation.

Key advantages (opportunities) of application as an investment projects funding resource

EBRD is the only international creditor that has credit agreements for implementation of projects in the field of heating in Ukraine.

Interest rates under the credits are set based on market conditions in international stock markets. Designing and implementation of the projects takes place at the support of technical collaboration grants.

Key drawbacks (limitations) of application as an investment projects funding resource

Limitation of the project value to the sum from 10 to 50 million euros. Thus, for small cities and some medium ones such projects will be inaccessible.

3.4.3 Programs of the International Finance Corporation (IFC)

IFC implements in Ukraine a number of projects aimed at energy efficiency enhancement both in the private and in the municipal sectors of economy.

Table 3.6 includes the list and brief description of projects for municipal energy efficiency enhancement. At the same time, they envisage crediting of enterprises belonging to the private sector of the economy.

Analysis of the information shown in table 3.6 proves that currently IFC does not carry out funding of actually investment projects in the field of heating or energy efficiency in the municipal sector. The projects implemented today are aimed at preparation and development of mechanisms of funding the sector, which will be implemented in the course of time.

Table 3.5
Projects of crediting the municipal infrastructure implemented in Ukraine at the support of EBRD

Project name	Funding amount	Brief description	Implementation mechanism	Recipient
Three projects in the heating sector: Cherkasy, Odesa, Ivano-Frankivsk (agreements signed in 2008-2009)	44.8 million euros	Credit funding of priority programs of capital investments aimed at renewal and modernization of the existing boiler plants, networks replacement, introduction of new heating points in residential houses equipped with metering devices, etc.	Approximately 1.5 million euros for technical assistance: <ul style="list-style-type: none"> • Feasibility studies (200-300 thousand euros) • Financial audit (50 thousand euros) • Project implementation support (500 thousand euros) • Corporate development program (350 thousand euros) • Projects for enhancement of the borrower's solvency (350 thousand euros) 	Heating enterprises of the cities
Eight heating projects in the pipeline (2009-2010)	285 million euros	Similar to the project described above	Similar to the project described above	Heating enterprises of the cities
Ukraine Public Buildings Energy Efficiency Enhancement (2008-2009)	200.000 euros (technical assistance)	EBRD plans to provide targeted funding and project support for Ukrainian cities in preparation and implementation of Energy Efficiency Subcontracts (Performance Contracts) for improvement of the state of public buildings for the purpose of increasing energy efficiency and the comfort level	Technical assistance project that includes: <ul style="list-style-type: none"> • Defining the volume and potential for providing ESCO-type services to enhance energy efficiency in the cities of Zaporizhya, Odesa, Dnipropetrovsk; • Discovering the obstacles to be removed; • Drafting the ESCO funding scheme to be best applicable for Ukraine under its budgetary and state procurements legislation. 	Dnipropetrovsk, Odesa, Zaporizhya And other large cities of Ukraine

Source: 1. Aggregated data on "Donors' activity in the energy efficiency sphere in Ukraine" updated by the World Bank
2. <http://www.eximb.com/ukr/corporate/loans/energo/>

Table 3.6
Programs of the International Finance Corporation for municipal energy efficiency enhancement in Ukraine

Project name	Funding amount	Brief description	Implementation mechanism	Recipient
OJSC "KyivOblEnergo" and OJSC "RivneOblEnergo" (signed on October, 28 2005)	45 million USD	The capital investment program (project) has four priority objectives: - reducing commercial and technical losses; - updating out-of-date network equipment; - increasing capacities in rapid growth areas; - improvement of governance efficiency by investing into communication and information technologies.	30 million USD IFC credit (KyivOblEnergo) and 15 million USD IFC credit (Rivne)	OJSC "KyivOblEnergo" and OJSC "RivneOblEnergo"
Credit line for energy efficiency activities by the ProCreditBank of Ukraine (signed in May, 2008)	20 million USD	Project for ProCreditBank Ukraine using IFC funds for funding of the bank's clients – individuals and small and medium enterprises (SME) for the purpose of introducing energy efficiency measures (EE). ProCreditBank is a long-term client bank of IFC with an extensive presence in Ukraine. The project is the first EE project of IFC using financial intermediaries (FI) in the country. It is aimed at stimulation of EE programs among other banks-partners of IFC, as well as creation of the EE financial market in Ukraine. The project is a part of more extensive collaboration between IFC and the German State Bank for Development (KfW), the objective of which is supporting development of EE finances at FIs of the Central and Eastern Europe. KfW allocated additional 20 million USD for ProCreditBank of Ukraine for the same purposes and subject to the same conditions.	IFC loan – 20 million USD	Individuals and SMEs – clients of ProCreditBank

Project name	Funding amount	Brief description	Implementation mechanism	Recipient
Ukraine Housing Energy Efficiency Survey (completed in summer 2009)	100.000 USD	The survey was conducted in the framework of preparation of the Energy Efficiency in the Housing Fund of Ukraine Project (see below)	Technical assistance project	Condominiums and housing management companies
Energy Efficiency in the Housing Fund of Ukraine Project (will be launched in 2010)	To be defined	<p>The project invests 50 million USD for realization of energy efficiency activities in apartment residential houses. It is expected that CO₂ emission will be reduced by minimum 50 000 tons per year as a result of creating an efficient legal and institutional platform to support condominiums and communal enterprises in obtaining targeted funding for activities for increasing EE of the housing fund of the country. The Project will use the programmatic approach and will be oriented towards the following priority objectives:</p> <ol style="list-style-type: none"> 1. Drafting the legislation that will make it possible for local condominiums and communal enterprises to involve funding to increase EE of apartment houses. 2. Work with 3-5 Ukrainian partner banks for the purpose of development and distribution of financially attractive financial services of housing EE increase oriented towards condominiums and communal enterprises. 3. Raising awareness about housing EE among the key market stakeholders. 	Technical assistance project	Condominiums, communal enterprises, residents of apartment houses
Ukraine Energy Efficiency Survey Project	To be defined	The primary objective of this project is to evaluate the modern market of EE funding in Ukraine and to raise awareness among local financial institutions, small and medium enterprises (SMEs)	Questioning local SMEs and FIs and drafting the respective report. Evaluation of legislation on energy efficiency issues.	SMEs, FIs

MUNICIPAL HEATING REFORM

Project name	Funding amount	Brief description	Implementation mechanism	Recipient
		and managers about the opportunities that exist in the field of funding energy efficiency measures in Ukraine.	<p>Holding of a series of seminars aimed at FIs on issues of funding EE measures.</p> <p>Holding a media-training for local journalists (on EE issues).</p> <p>Organization of a press-conference for stakeholders on results of the survey.</p> <p>Publication and distribution of the report on findings of the survey among stakeholders.</p>	
Ukraine Cleaner Production Program (launched in autumn 2009)	Funding amount being defined	<p>Objective: to stimulate involvement of investments into cleaner production activities (CP) in Ukraine by means of:</p> <ol style="list-style-type: none"> 1. Consultations at the companies level. 2. Raising awareness about CP opportunities among communal and private enterprises, state officials and local financial institutions. 3. Assistance to introduction of the necessary changes by working with the target market and improvement of the legislation. 	<p>The program will last for 3 years.</p> <p>It is expected that the following outputs will be achieved:</p> <ul style="list-style-type: none"> - More than 100 million USD of investments will be involved (by involving funds of IFC, IFC partner FIs, as well as due to own resources of companies); - Consultative and advisory support will be provided for at least 10 partner companies; - Awareness and explanatory activity will cover more than 1000 companies; - Harmful emissions into environment on the part of partner companies will be reduced, in particular CO₂ emissions 	Production enterprises, state enterprises and municipalities

3.4.4 Programs of the German State Bank for Development (KfW)

List of programs, crediting terms

The German State Bank for Development KfW in Ukraine offers to cities and enterprises collaboration in projects implementation in the following spheres:

- Drinking water supply
- Waste water purification
- Solid waste utilization
- Municipal transport (streetcars, buses)
- Centralized heating
- Energy efficiency
- Renewable power sources
- Projects in the sector of funding for small and medium enterprises.

The bank works with cities with the number of population over 200 thousand. KfW has experience of funding small projects based on the "package" principle (funding projects small in size and united within one crediting program) under governmental guarantees. At the same time, in Ukraine such funding mechanism is not developed.

Currently, KfW does not implement in Ukraine projects in the field of centralized heating. However, it has three projects in other spheres of the municipal sector – in Lviv, Chernivtsi, Kremenchug (table 3.7).

Key advantages (opportunities) of application as an investment projects funding resource

- Financial decisions are made in every case individually (to provide for needs of every country and customer).
- Credit rating “AAA” provides for beneficial positions in capital markets and makes it possible to offer crediting subject to advantageous conditions. Interest rate: Libor + margin (which depends on project risks, the borrower's financial status, etc.). The postponement term for paying the principal of the debt makes up 2 years.
- The opportunity of combining credits with grants funding of the Federal Government of Germany and other donors: for studies realization, subsidizing interest rates, granting technical assistance.
- Comprehensive approach to projects' funding: from defining the project to its evaluation.
- Credit maturity term – 10-12 years.
- Both a city and a communal enterprise that the city provides with the guarantee act as the borrower. Provided obtaining state guarantees, crediting terms are more profitable.
- For consideration of a project it is not necessary to have a business plan (information about a project can be submitted in any form).

Table 3.7
List and brief description of KfW projects in the municipal sector in Ukraine

Project No.1 Lviv: City transport traffic development	Project No.2 Chernivtsi: Water-supply system improvement	Project No.3 Kremenchug: Solid household waste utilization
<p>The Ministry of Environmental Protection of Germany provided a grant in the amount of 500 thousand euro for development of the transport traffic model in Lviv. Currently, the ToR of the project has been developed.</p> <p>The next step will be provision of a credit (it is planned that the credit will be provided to CE “Lviv-ElectroTrans” under the municipal guarantee).</p> <p>There is the opportunity of receiving grant funding from the Ministry of Environmental Protection of Germany for subsidizing the credit.</p> <p>Credit amount – up to 25 million euros.</p> <p>Term – 10-12 years with two bonus years.</p> <p>Planned activities: building the tram-car way to the future stadium.</p>	<p>Currently, the tender is being realized for conducting the study based on which the ToR will be developed (it is funded due to funds of the Ministry of Economic Cooperation and Development of Germany). It is expected that the ToR will be developed by the beginning of spring 2010.</p> <p>Then, it is planned to provide the credit for CE “ChernivtsiVodoKanal” under the municipal guarantee.</p> <p>Credit amount – 10-15 million euros.</p> <p>Term – 10-12 years with two bonus years.</p> <p>There is the opportunity of receiving grant funding from the Ministry of Economic Cooperation and Development of Germany for subsidizing the credit.</p> <p>Planned activities: reconstruction of water intake from Prut. Replacement of the network system.</p>	<p>The Ministry of Economic Cooperation and Development of Germany through KfW provided grant funding in the amount of 650 thousand euros for:</p> <ul style="list-style-type: none"> (a) analysis of gas emissions from the site; (b) study of the feasibility and expedience of building a plant for mechanic and biological processing of solid household waste (SHW). <p>The planned measures will be carried out by Haase Energietechnik AG Company, which was selected within the international tender.</p> <p>Study results are expected by January, 2010</p> <p>In accordance with the study results, it is planned to provide a credit for the following activities:</p> <ul style="list-style-type: none"> • 1st phase – site sanitation; • 2nd phase – building the plant for mechanic and biological processing of SHW. <p>It is planned to provide the credit directly for the communal enterprise for solid household waste utilization under the municipal guarantee.</p> <p>Credit amount – up to 30 million euros.</p> <p>Term – 10-12 years with two bonus years.</p> <p>Competitive interest rate. There is the opportunity of receiving grant funding from the Ministry of Economic Cooperation and Development of Germany for subsidizing the interest rate under the credit.</p> <p>Flexibility: possible suggestions related to funding in euros, USD or UAH, with the fixed or floating interest rate.</p>

Key drawbacks (limitations) of application as an investment projects funding resource

- The minimal sum of a credit per one project is 10 million euros, which limits the range of potential borrowers.
- The Bank is focused on cities with the number of population at least 200 thousand.
- Without regard to the possibility of funding small projects under the "package" principle under the Government's guarantees, currently there is no such joint program in Ukraine.

3.4.5 Programs of the Nordic Investment Bank***List of programs, crediting terms***

Nordic Investment Bank is an international financial facility the owners of which are eight countries of the Northern Europe: Denmark, Iceland, Latvia, Lithuania, Norway, Finland, Sweden and Estonia. The Bank funds projects in private and public sectors both in the participating countries and beyond. Nordic Investment Bank has the highest credit ratings (AAA/Aaa) from Standard & Poor's and Moody's agencies.

For creation of the legislative framework of cooperation between Ukraine and NIB, on December, 23 2005 the Framework Agreement was signed in Kyiv between Ukraine and Nordic Investment Bank. After completion of the local procedures on December, 14, 2006, the Framework Agreement came into effect.

The Nordic Investment Bank was created as an international financial organization. Principles of the Bank's functioning are similar to principles of activity of the International Bank for Reconstruction and Development (IBRD), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB).

In view of the positive experience of implementing projects in the field of heating jointly with the EBRD, NIB plans to fund a few projects in Ukraine independently, although the objects of funding are not yet defined.

Examples of projects' implementation at participation of NIB are shown in table 3.8.

Key advantages (opportunities) of application as an investment projects funding resource

NIB funding is available for cities that need investments for implementation of projects amount over 20 million euros. These are mainly cities of regional significance.

In contrast to terms of funding under IBRD projects, state guarantees for NIB funding, as a rule, are not required (these guarantees are required only in the period of the financial crisis).

Key drawbacks (limitations) of application as an investment projects funding resource

The main drawback of NIB projects funding for cities and enterprises in the field of heating is that funding conditions are similar to requirements of the International Bank for Reconstruction and Development (IBRD), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB). And it means that medium and small cities will not have access to credit resources of this bank, unless a "package" funding program of projects small in size is developed with the Government of Ukraine.

Moreover, subject to current conditions in financial markets, for projects' realization NIB requires guarantees from the Government of Ukraine.

Table 3.8
Projects implemented by the Nordic Investment Bank in the field of heating and energy efficiency in Ukraine

Project name	Funding amount	Brief description	Implementation mechanism	Recipient
Improvement and repair of the heating system of Odesa ¹	22 million euros	Credit for improvement and repairing of the heating system of Odesa Credit term – up to 13 years from signing the agreement. Interest rate – no more than 3-months Libor + margin (up to 4.75%) for foreign currency. Payment of the interest is carried out within the terms and pursuant to conditions defined by the respective agreements. Repayment of the principal and interest – due to revenues from activity of CE "Heating of the City of Odesa" Local guarantee in the case of guarantee case occurrence.	Feasibility studies were funded by SIDA in 2007. The project's implementation envisages cooperation with EBRD. Swedish consultants are engaged in providing the services of maintaining the project management office both for EBRD and NIB projects.	CE "Heating of the City of Odesa"
Silt processing for purification and utilization of waste water (Lviv)	28 million USD	Building a station for processing silt for purification and utilization of waste water. The biogas produced as a result of processing will be used for heating apartments in Shevchenkivsky district, as well as supplying electric power for water-purification constructions of the city.	Cooperation with Swedish environmental funds.	LMCE "LvivVodoKanal"
Heating of Rivne	21 million USD	Introduction of heat-pumps and modernization of the heating system.	No funding is carried out. The city submitted an application to NIB for using funds of the Swedish Trust Fund for drafting terms of reference for the project	CE "RivneTeploEnergo"

¹ Resolution of Odesa city council No.4413-V of 07.07.2009 On Issuing the Permission for the Communal Enterprise "Heating of the City of Odesa" for Receiving the Credit from "Nordic Investment Bank (NIB)" for Improvement and Repair of the Heating System of the City.

3.4.6 "Dutch International Guarantees for Housing" (DIGH) Fund

Essence of the mechanism, terms and specific features of funding

DIGH is a Dutch facility providing for funding of development of economically available housing (private and public) and housing reconstruction projects in countries with the transitional or developing economy. It was created by Dutch housing associations and the cities that wish to offer guarantees. Historically, it has the credit rating AAA. DIGH borrows funds from Dutch banks under attractive conditions on the basis of guarantees of housing associations and re-lends its resources to fund activity in other countries.

Experience of DIGH in Ukraine. The "Dutch International Guarantees for Housing" Fund provided a credit for LLC "Central Energy Servicing Company "ESCO-Center" for funding an energy efficiency and renovation project, including realization of power measuring for two multistoried residential buildings with the total number of flats being 294 in Nizhyn.

This project was implemented within the framework of the project „Sustainable Self-Governance of Apartment Houses” (June, 2005 – May, 2008), which was funded by the Social Transformations Program in the Central and Eastern Europe (MATRA) of the Ministry of Foreign Affairs of the Kingdom of Netherlands.

Conditions of the loan provided by DIGH for Energy Servicing Company "ESCO-Center" are the following:

- Total amount of the loan – 508 321 euros, including the commission for DIGH of 21 820 euros and the additional fee for data processing making up 5000 euros.
- Term of the agreement – 10 years. Loan repayment date – 26.02.2019.
- No grace period. Early repayment is possible.
- Interest rate under the loan – 6.03%.
- Payment of the interest and the principal – once a year.
- Crediting took place under the general procedures set by the legislation of Ukraine and in accordance with provisions of the National Bank of Ukraine.

Key advantages (opportunities) of application as an investment projects funding resource

- The first experience of crediting a condominium with introduction of the scheme of the non-financial intermediary between the creditor and the condominium, which is the optimum model for realization of energy efficiency measures in apartment houses;
- For users – the opportunity to enjoy today the advantages of implementing energy efficiency measures in the apartment house, while the loan repayment term ends in 2019;
- Securing the receipts in the form of incomes from users' payment for heating services consumption.
- Attractive crediting conditions.

Key drawbacks (limitations) of application as an investment projects funding resource

- Absence in the market of companies ready to work with condominiums subject to the conditions of payment postponement for over 1 year. LLC "Central Energy Servicing Company "ESCO-Center" is virtually the only exception from the rule;

- Long period of the process of coordinating of conditions of the project's implementation with the condominium and registration of the necessary resolutions and agreements;
- DIGH's having insignificant resources for crediting in Ukraine (up to 10 million euros, if necessary, evaluated as a few hundred million euros) and vagueness of the probability of their receiving by companies in Ukraine under conditions of the global financial crisis;
- Non-readiness of DIGH to continue working in Ukraine subject to conditions of funding small projects for one house (up to 200 thousand euros), which requires unification of several projects in one and their funding through a non-financial intermediary (disposer, ESCO company, etc.).

3.4.7 Programs of the Nordic Environment Finance Corporation NEFCO

*Nordic Environment Finance Corporation (NEFCO)*³⁰ is an international finance institution that was founded in 1990 by five northern countries: Denmark, Finland, Iceland, Norway and Sweden.

The objective of NEFCO's activity is assistance to economically efficient reduction environmental contamination caused by activity of neighboring countries with the Scandinavian region in partnership with investors of both the private and public sectors.

Currently, the Corporation funds a wide range of environmental projects in countries of the Central and Eastern Europe, including Russia, Belarus and Ukraine. Activity of NEFCO, which is governed by its head office in Helsinki, is aimed at projects improving the state of environment and, at the same time, efficient from the point of view of costs. Priorities for the Corporation are projects reducing emission of greenhouse gases into the atmosphere, improving the ecological condition of the Baltic Sea or reducing discharge of toxic contamination.

The Corporation's portfolio consists of approximately 350 small and medium-size projects covering different sectors, including: water purification, municipal services, waste processing, environmental protection management, etc.

For the purpose of performing the main function, which lies in funding projects, the Corporation works with a number of various financial sources. Among them, the most significant ones are the Investment Fund, the Nordic Environmental Development Fund, the Baltic Sea Region Carbon Fund, NEFCO Carbon Fund, Barents Hot Spots Environmental Projects Fund. NEFCO also manages funds on behalf of other organizations, which provide resources for environmental projects, including the European Commission and governments of the Nordic countries.

NEFCO projects are usually implemented in partnership with enterprises owning the projects. The emphasis in cooperation is put on direct investments, for example, public-private partnership and incorporated communal services. The structure of any project supported by NEFCO requires creation of a reasonable balance between the risk and benefit for all stakeholders. The objective is achievement of a fair and transparent balance between the structure of investments and their environmental effect. Via its network of partners, NEFCO complements financial sources of other stakeholders and financial organizations.

In Ukraine, NEFCO works since 2003. But only in September, 2009 NEFCO and the Government of Ukraine signed the Framework Agreement that confirms the status of NEFCO

³⁰ <http://www.nefco.org>

in Ukraine as an international finance organization. After ratification of this agreement by the Parliament of Ukraine, new opportunities will appear for implementation of energy efficiency projects. Till now, only private companies had the opportunity of taking part in cooperation with NEFCO.

List of programs, crediting terms

NEFCO manages resources of several funds and uses these funds to achieve various objectives.

The general crediting term are:

1. Projects funded by the Corporation are realized by joint efforts with the enterprises owning the projects. NEFCO funds up to 90 percent of the sum of investment costs (10 percent and more is the borrower's contribution).
2. The interest for usage is fixed during the loan term and makes up 6% per annum.
3. The collateral can have the form of property, a bank guarantee, bail, etc. and makes up 125% of the loan amount.
4. The loan can be paid in three tranches from NEFCO directly to the borrower's account in a bank local acceptable to NEFCO.
5. During the project implementation term a loan delay can be allowed for repayment of the principal. The interest is paid quarterly without postponement.
6. The payments are made to the bank account of NEFCO in Helsinki.
7. For procurement of equipment and work minimum three offers are necessary, and Nordic suppliers must have the opportunity to submit offers. Both Ukrainian and foreign companies can be suppliers within the project.

Currently, NEFCO is implementing two programs in Ukraine: "Cleaner production" and "Energy saving" (table 3.9).

In these programs, the companies that carry out their activity in the housing and communal sphere can take part. For the both programs the common feature is that the source of loan repayment must be funds from economy obtained due to reduction of energy, resources consumption and contamination.

The fund for cleaner production projects was created in 1997 to promote technological investments into industrial projects for the purpose of stopping emission of polluting matters into the environment. Adequate for funding can projects aimed at economizing energy and resources, improvement of the environment. The fund can provide resources amounting to from 50 000 to 350 000 euros (the loan can be provided in euros or in USD). After repayment of the first part of the loan principal, the borrower (a company in private or communal property) can apply for another loan to NEFCO. The maximal term of loan repayment must not exceed 4 years.

Applicable for the "Energy saving" program are municipal projects related to central heating or waste water purification (with the economy that can be obtained both by the heating company and by users of heating services), as well as industrial projects (disposal plants for primary purification of waste water of industrial enterprises). The borrower can be the water-supply or heating company, as well as private companies, if the issue is purification of waste water. The amount of borrowings can make up from 100 000 to 400 000 euro. The loan is issued in euros. The maximal term of loan repayment must not exceed 8 years.

How to receive funding under NEFCO programs? In order to receive the answer whether a project suggested is acceptable for NEFCO, it is necessary to prepare a short project offer for 2-3 pages based on the standard form³¹ (Annex X). The offer is submitted first in Ukrainian to NEFCO office in Kyiv, and after verification and coordination the borrower independently organizes translation of the project offer into English.

After receiving the confirmation from NEFCO about acceptability of the project, it is necessary to submit to NEFCO a complete business plan. The business plan must be drafted in accordance with the standard format developed by NEFCO (first in Ukrainian, and after coordination – in English). After receiving a business plan meeting all NEFCO requirements, the funding decision is made. The Loan Agreement will be developed by a NEFCO lawyer. In accordance with the current Ukrainian legislation, the agreement is subject to registration at the National Bank of Ukraine.

The experience of NEFCO's work in Ukraine proves that the consideration process of a project offer³² submitted by a private company having a satisfactory financial status and security necessary for the loan lasts approximately 6 months. Delays in most cases are caused by the Ukrainian partner.

Key advantages (opportunities) of application as an investment projects funding resource

- NEFCO funding is aimed at small and medium exclusively environmental projects. NEFCO funds the projects that, on the one hand, are rather risky for commercial banks, and on the other – too small for international finance organizations.
- Attractive funding terms: comparatively low interest rates (6% per annum); sufficiently high part of co-funding on the part of NEFCO (up to 90%); the opportunity of receiving a postponement of the principal's repayment.
- The source of repaying borrowed resources are revenues due to power resources economy.
- Against the background the economic slump and reduction of opportunities of commercial banks to credit projects of industrial production objects' modernization, NEFCO increases the fund for funding projects in the field of environmentally cleaner production in the Eastern Europe.

Key drawbacks (limitations) of application as an investment projects funding resource

- NEFCO does not fund construction of new objects, only modernization of existing objects.
- The mandatory condition of co-funding projects at the expense of the project owner.
- In Ukraine, NEFCO programs are currently accessible only for private companies, as the Framework Agreement between the Government of Ukraine and NEFCO, with which NEFCO is recognized as an international finance organization in Ukraine, has not yet been ratified by the Parliament of Ukraine. After ratification of this Agreement by the Parliament, enterprises in communal property and local self-government bodies will also be able to apply for funding.

Examples of application in Ukraine

The examples of investment projects' implementation in Ukraine at participation of NEFCO are shown in table 3.10.

³¹ The standard Project Offer form can be downloaded from NEFCO web site www.nefco.org/files/Project%20Proposal%20ukr.pdf

³² This process includes application submission, drafting the business plane, loan and security agreements

Table 3.9
NEFCO programs for Ukraine

Name	"Cleaner production" Program	"Energy saving" Program
Lender	Nordic Environmental Finance Corporation NEFCO – direct crediting without intermediaries	
Borrower	Private or communal company from Ukraine	Water-supply or heating company in Ukraine, as well as private companies (disposal plants)
Applicable projects	Saving of energy and resources, improvement of the environment.	Municipal projects related to central heating or waste water purification (with an economy both on the side of the heating company and for users of heating services). Industrial projects: disposal plants for primary purification of waste water of industrial enterprises
	NEFCO does not fund construction of new objects, only modernization of existing objects.	
Loan repayment sources	Revenues from the economy connected with reduction of power, resources consumption and pollution.	
Maximum loan amount	350 000 euros After repayment of the first part of the loan principal, the borrower can apply for another loan to NEFCO.	400 000 euros
Minimum loan amount	50 000 euros	100 000 euros
Parties' contributions	90% of the loan 10% of the borrower's contribution	
Maximum loan repayment term	No more than 4 years	No more than 8 years
Loan repayment schedule	In even quarterly payments in accordance with the set credit repayment plan. The payments are made to the bank account of NEFCO in Helsinki.	
Postponement period	The principal of the loan: during the period of project implementation for approximately 3 months. The interest is paid quarterly without postponement.	
Interest	6%, annual, fixed during the loan validity term	
Currency	euro, USD	euro
Security	125% of the loan amount. The collateral may be in the form of property, bank security, bail, etc.	
Procurement	For procurement of equipment and work minimum three (3) offers are necessary, and Nordic suppliers must have the opportunity to submit offers. Both Ukrainian and foreign companies can be suppliers within the project.	
Loan payment	The loan can be paid in three (3) tranches from NEFCO directly to the borrower's account in a bank local acceptable to NEFCO.	

MUNICIPAL HEATING REFORM

Name	"Cleaner production" Program	"Energy saving" Program
Project initiation phases	In order to receive the answer whether a project suggested is acceptable for NEFCO, it is necessary to prepare a short project offer for 2-3 based on the standard form. After receiving the confirmation from NEFCO about acceptability of the project, it is necessary to submit to NEFCO a complete business plan. After receiving a business plan meeting all NEFCO requirements, the funding decision is made.	
Business plan	The business plan must be drafted in accordance with the standard format developed by NEFCO.	
Loan Agreement	The Loan Agreement will be developed by a NEFCO lawyer. NEFCO will cover the costs related to drafting the Loan Agreement. The borrower must pay the costs related to registration of the collateral, insurance of collateral objects taking into account specific features of every individual project.	
Registration at the National Bank of Ukraine	It must be carried out by the Borrower in accordance with the current Ukrainian legislation (the legislation sets the official NBU response term of 7 days).	

Table 3.10
Examples of investment projects' implementation in Ukraine at participation of NEFCO³³

Project name	Total project cost, thousand euros	NEFCO funding, thousand euros	Annual economy, thousand euros	Pay-back period, years
Restoration of 5 boiler plants supplying heat for a hospital, polyclinic, kindergarten and school in the Eastern Ukraine via an energy servicing company.	558.0	350.0	242.0	2.31
Replacement of a bakery oven in the Central Ukraine	450.0	350.0	112.0	4.02
Introduction of the plant for production of biodiesel from rape seeds for internal needs of an enterprise in the Western Ukraine	285.0	175.0	73.0	3.90
Installation of an electro-casting furnace for production of lamps in the Western Ukraine (second project)	349.0	315.0	100.0	3.49
New boiler and drying tunnel for timber residues at a woodworking enterprise in the Western Ukraine.	349.0	300.0	140.0	2.49
Introduction of a co-generation plant on gas to provide for individual needs of the investor for electric power, as well as for sale of heat for the city pool in the Central Ukraine.	385.0	350.0	109.0 (2008)	3.53

Source: http://www.nefco.org/files/NEFCO_Energy_Efficiency_Crimea_UKR27102008.pdf

³³ Information about the company's name and the location of the project's implementation is confidential and not publicized

4. Funding by International Donors (grants)

A grant is targeted non-repayable financial support (non-repayable targeted funding), a charity contribution for resolution of a concrete social problem.

Usually, grants are provided for educational, research and enlightenment projects, but in the recent few years we have witnessed allocation of grants for resolution of problems related to environmental protection and effective use of energy resources. Nevertheless, allocation of grant funds for implementation of infrastructural projects remains limited. Small demonstration projects are mostly funded.

Grants are allocated by various donor organizations and charity funds, and, as a rule, organizations, most frequently non-government, noncommercial ones, act as recipients of grants.

In countries of the European Union, there are quite extensive opportunities for receiving grant funds for development of a sustainable energy policy, renewable energy sources, energy efficiency, power infrastructure³⁴.

Speaking about Ukraine, the range of donors ready to fund energy efficiency projects implementation is limited enough. Usually, grant funds for infrastructural projects' implementation can be provided for cities (enterprises) that are participants of the international technical assistance projects that have that as one of their tasks. The practice of receiving funds for energy efficiency projects' implementation submitted as an initiative or holding of an open competition of such projects is rather rare.

Thus, based on information available, the following international agencies, donor and charity organizations are ready today to issue grant funding for preparation and implementation of investment projects in Ukraine:

- US Agency for International Development (USAID)
- US Trade Development Agency (US TDA)
- East Europe Foundation
- German Technical Cooperation (GTZ)
- British Council
- Swedish International Development Agency (SIDA)
- Canadian International Development Agency (CIDA)

4.1 Programs and initiatives of the US Agency for International Development

USAID (USAID) is an independent agency of the federal government of the USA created in 1961 for the purpose of providing long-term assistance for economic and social development of other countries. For funding programs of this organization, approximately 1% of the federal budget of the USA is annually allocated. USAID has its representative offices in most countries of the world.

Currently, in Ukraine at financial support of USAID the following international technical assistance projects in the field of local economic development and heating are being implemented:

1. "Municipal Heating Reform" Project (February, 2009-2012).

³⁴ http://ec.europa.eu/energy/grants/index_en.htm

2. "Local Investments and National Competitiveness" Project (2009- 2012).
3. "Developing the Municipal Energy Efficiency Market in Ukraine" (2008-2010).
4. Cooperation in Research and Education in Science and Technology at the support of the Center for Energy Efficiency (2008-2011).

Moreover, starting from 2007, the new USAID initiative is being implemented in Ukraine – the mechanism of co-funding socio-economic projects within the "Global Development Alliance" (GDA).

4.1.1 "Municipal Heating Reform" Project

This project is aimed at creation in Ukrainian cities of the centralized heating system that would be financially stable, capable of sustainable development and able to provide for granting of high-quality services to citizens, public and social facilities and industrial enterprises.

Within the framework of the project, measures are planned for development of the regulatory and legislative, institutional framework of high-quality services provision, improvement of the regulatory basis and the method of tariffs setting, increase of the public awareness level among citizen and civil servants on these issues, strengthening the capacity of cities to plan, managements and development of centralized heating systems, as well as increasing energy efficiency of housing and public buildings.

The project's task is funding (in the grant form) demonstration projects of energy efficiency in heating systems of cities, however, funds for such projects' implementation can be accessible only for cities participating in the project. Use of the mechanism of co-funding (GDA) appears as an interesting option of funding investment projects for cities.

Key advantages (opportunities) of application as an investment projects funding resource

- an additional non-repayable source of funding energy efficiency projects in the municipal sector.

Key drawbacks (limitations) of application as an investment projects funding resource

- funds for implementation of such projects can only be accessible for cities participating in the project;
- 50% of the project cost can be funded due to the grant, the rest 50% - due to co-funding from other sources (city/enterprise/etc.).

4.1.2 "Local Investments and National Competitiveness" Project

"Local Investments and National Competitiveness" Project is the three-year program aimed at assisting to sustainable economy growth on an extensive public basis and assistance to European integration of Ukraine. In close cooperation with local self-government bodies and central authorities, enterprises and potential investors, the project aims at helping Ukraine to enhance its competitiveness in foreign markets. The project will also contribute into acceleration of national reforms, as well as developing partnership models at the local and regional levels, which will help to involve investments and will provide for effective servicing of business needs. Another task of the project is to help local and regional authorities of the AR Crimea to improve the climate for entrepreneurship and investments. This will promote increase of productivity of industries and enterprises of the Crimea, as well as diversification and re-orientation of goods and services towards more competitive markets.

Key advantages (opportunities) of application as an investment projects funding resource

- The project contributes into receiving of investments, including into the communal infrastructure, for those partner cities that define this as one of priority directions by providing the proper training on involvement of investments and by representing to potential investors the cities.

Key drawbacks (limitations) of application as an investment projects funding resource

- The project does not directly fund investment projects.

4.1.3 "Developing the Municipal Energy Efficiency Market in Ukraine" Project

The project's objective is providing for more effective and sustainable operation of the energy servicing sector in Ukraine taking into account experience of an operating energy servicing company in Rivne. The energy servicing sector must satisfy needs of the municipal market for increased energy efficiency.

Within the framework of the project, the necessary opportunities will develop on the basis of the energy servicing company in Rivne to satisfy the potential of the market of energy efficient technologies of the communal economy in Ukraine and the potential of energy servicing companies in implementation of projects for energy efficiency increase in the communal sector will be realized.

Key advantages (opportunities) of application as an investment projects funding resource

- The project contributes into investment projects' implementation in the municipal sector.

Key drawbacks (limitations) of application as an investment projects funding resource

- The project does not directly fund investment projects' implementation.

4.1.4 Cooperation in Research and Education in Science and Technology at the support of the Center for Energy Efficiency

The Center for Energy Efficiency will develop innovative approaches and will apply state-of-the-art technologies for resolution of energy efficiency and rational use of energy issues, as well as carry out training of young researches workers in this important sphere. The issues of use of alternative energy, energy efficiency in industry and the housing and communal economy, use of sustainable and renewable energy sources can be the possible directions of this project's activity.

Connecting research potential and potential of the high school, the Center will focus attention of students and teachers on development of modern practical approaches and technologies of energy efficiency and effective use of energy. It will also provide for information and educational services, thus spreading front-rank achievements in the field of energy use, which can be practically applied at the national scale and provide for sustainable results. These activities will be conducted in parallel with the efforts to reveal the existing but not used research potential of the high school, as well as with application of state-of-the-art approaches to research training of students and young researchers.

Key advantages (opportunities) of application as an investment projects funding resource

- The project contributes into selection and preparation of investment projects.

Key drawbacks (limitations) of application as an investment projects funding resource

- The project does not directly fund investment projects' implementation

4.1.5 "Global Development Alliance" (GDA) Mechanism

Essence and conditions of funding

The Global Development Alliance is a new model of public-private partnership, which aims at improving socio-economic conditions in new states and developing countries.

Pre-conditions of appearance. During the recent two decades, fundamental changes have taken place in funding of economic development programs. On the scene of international assistance, where public institutions ruled before, a lot of new actors have appeared. In the 1970s, the share of non-state resources in the total volume of economic assistance for developing countries was only 30%. Today, this indicator is 80%. A substantial part of these resources is provided by private businesses.

These new conditions induced USAID, as the largest donor, to reconsider the strategy of assistance for the purposes of development and creation of partnership relationships with private structures, which are often referred to as public-private partnerships. USAID attributed to them the term "Global Development Alliances" (GDAs).

Essence of the mechanism. Such model is built on unification of experience, skills and resources of USAID, private companies and other partners. It envisages general responsibility and readiness to provide resources for implementation of certain joint projects. Due to cooperation, the so-called "multiplication effect" is created, because joint projects offer a greater outcome than the one that could be achieved by separate efforts of each of the partners.

The Global Development Alliance is an agreement between two or more partners that envisages joint definition and resolution of a certain problem in the development field.

The purpose of creating an alliance consists in obtaining due to combination of strong aspects of each of the partners the best result at a problem's resolution. Its motive force is the recognition that each of participants can provide considerable resources (that the other partners do not have), and that together they are able to work more efficiently and effectively than alone.

Based on the current USAID requirements, the correlation of resources provided within the alliance must be at least 1:1.

Central and local authorities, as well as other international donors, are welcomed participants of alliances, but the experience, talent and know-how that the private business can contribute is the key guarantee of their maximally successful activity.

The following categories of participants can be included into an alliance:

- Private enterprises;
- Private funds;
- Private philanthropists, including representatives of the venture capital;
- NGOs and charity organizations;
- Regional and international organizations;
- Higher educational facilities;
- Civil society associations;
- Governments of other donor countries, public institutions providing international assistance;

- Human rights associations;
- Others.

The global development alliance is a catalyst for unification of ideas, efforts and resources of authorities, businesses and civil society for resolution of common problems.

Starting from 2001, over 600 partnerships in 102 countries of the world have been created (among them – 80 partnerships in the region of Europe and Eurasia). Over 1700 individual partners have been involved.

Key advantages (opportunities) of application as an investment projects funding resource

- Catalyst of unification of ideas, efforts and resources of authorities, businesses and civil society for resolution of common problems;
- Due to joining strong aspects of each of the Alliance's partners, there is the opportunity to obtain the most efficient problem solution (as a result of the so-called "multiplication effect");
- Assists to development of corporate social responsibility and activation of participation of *private* businesses in co-funding of infrastructural projects.

Key drawbacks (limitations) of application as an investment projects funding resource

- Projects submitted must meet the USAID annual program.

Examples of GDA application in Ukraine in the field of heating and socio-economic development of cities

A. Partnership for the future of Alchevsk

One of examples of cooperation between the private business, city authorities and USAID is *Partnership for the future of Alchevsk*, which started its activity in September, 2007.

The partnership was launched based on the Memorandum of Understanding concluded among USAID, the city of Alchevsk, corporation "Industrial Union of Donbas" (IUD) and Alchevsk Development Fund created by it.

The idea of assisting to development of the local community of Alchevsk arose after during a few years wide-scale failures of water-supply and heating systems took place in the town.

Today, success of this project is defined by the three key elements:

1. The desire to work in the spirit of corporate social responsibility and to help the city, which IUD corporation realizes through Alchevsk Development Fund;
2. Willingness of city authorities to focus their attention on issues of socio-economic development and local community's development;
3. Willingness of USAID to offer its experience and resources of its programs to contribute into these tasks' implementation.

Partnership for the future of Alchevsk is the only complex program that assists development of the local community and afterwards should become an example for other cities of Ukraine.

It includes five components:

1. development of the strategy of the city's economic development;
2. restructuring of the city budget;

3. organizational assistance to operation of civil society structures and providing them with the proper authority;
4. modernization of heating, water-supply and sewage systems;
5. organization of exchange programs with American cities.

USAID, the corporation "Industrial Union of Donbas" and Alchevsk city council joined their efforts within the framework of a unique private-public alliance, activity of which contributes into socio-economic development of the industrial city of Alchevsk.

This city, the population of which amounts to 116 thousand persons, is one of the largest industrial centers of Ukraine. To support different infrastructural and social programs via "Alchevsk Development Fund", over 10 million USD have been allocated.

In December, 2008, the US Agency for International Development (USAID), highly appreciating the efforts of the corporation "Industrial Union of Donbas" and the city council of Alchevsk for development of the local community and economy of the city within the program "Partnership for the future of Alchevsk", handed to their representatives the award "Global Development Alliance – 2008".

Provided realization of the proper preparatory work, it is possible to rely on receiving partial funding from the MHR project under the GDA scheme, for this purpose, allocation of up to 1 million USD for investment projects' funding is planned.

B. Partnership with Donbas Fuel and Energy Company

USAID and Donbas Fuel and Energy Company_(DFEC) in December, 2007 signed the agreement about creation of a long-term partnership. It envisaged development of strategic plans of economic development, which must contribute into creation of new workplaces and involvement of investments in total for seven towns in three regions of Ukraine³⁵.

Funds contributed by DFEC (150 thousand USD) made it possible to involve into this work experienced consultants for local economic development, which led the process of strategic planning. Currently, strategic development plans are developed in all the seven towns. They are coordinated with mayors and city councils, and for their implementation in the structure of the municipal authorities new units for economic development will be created.

One of towns of the partnership – Pavlograd – is a participant of USAID project "Municipal Heating Reform", which creates additional financial opportunities for co-funding of investment projects in the field of heating in this town.

4.2 Programs of the US Trade Development Agency (USTDA)

USTDA is an independent US governmental agency funded by the US Congress. USTDA carries out its activity in more than 100 countries.

Even though USTDA conducts activity in the most varied sectors of economy, special attention is paid to energy, transport, mining development, telecommunications, infrastructure and environmental protection.

Essence and terms of grant provision

³⁵ In the partnership, seven towns of Ukraine participate – Pavlograd, Shastya, Kurahovo, Zugres, Pershotravnevska, Ternivka, Kirovska from Dnipropetrovsk, Lugansk and Donetsk regions

USTDA offers grants directly to local sponsors of projects (grantees). The local project sponsor (hereinafter – the project sponsor, grantee) is a local organization³⁶ having the authority of decision-making and able to implement the project. The sponsor elects an American company for implementation of activity funded by USTDA³⁷.

In fact, the USTDA program is intended for facilitation of American experience involvement. At the same time, USTDA does not require from the beneficiary that it procured goods and services in the USA using its own funds. In other words, the grantee is not obliged to procure services and commodities in the USA using its own funds, but funds of the grant must be used for services' procurement in the USA.

One of the ways in which USTDA performs its program objectives is providing grants for preparation of projects and investment analysis. In particular, funding is allocated for:

- drafting of the Terms of Reference (ToR), which should include evaluation of technical, financial, ecological, legal and other important aspects of the infrastructure development project;
- organization of study visits of the grantee to the USA;
- holding of educational workshops and conferences;
- creation of a transparent system of procurements within international projects.

The mechanism of submitting a project for consideration of USTDA. If you develop any project or initiative that you would like to offer to USTDA for possible grant funding, you need to address the US Embassy, the employees responsible for trade or economic connections or a USTDA representative in Ukraine. In order to initiate official project consideration, the local project sponsor must send its request to USTDA. In the cases when as a partner or the priority supplier for the project suggested a concrete American company is already defined, this company should submit to USTDA a separate detailed request. No restrictive terms for projects submission for consideration apply.

The process of receiving a grant. In the case USTDA approves funding, it signs the Grant Agreement with the grantee. The grantee then signs a contract with the American company that it selects, usually on a competitive basis, for realization of studies that USTDA funds.

The Grant Agreement and the contract must contain all necessary terms and authorities.

Who pays to the American contractor? The Grant Agreement is signed between USTDA and the grantee. The American contractor works in accordance with provisions of the contract signed with the grantee and issues invoices for it. The invoices are approved by the grantee and sent to USTDA, which carries out payments directly to the contractor.

Whether USTDA grant funds have to be repaid? Funds provided by USTDA are grants, not loans. Grantees are not obliged to repay to USTDA grants obtained by them.

Amounts allocated. Annually, USTDA funds approximately 125 studies. The average size of a USTDA grant is 400 000 USD.

Key advantages (opportunities) of application as an investment projects funding resource

- Creates the opportunity for designing a project (drafting the ToR) using grant funds;

³⁶ A public organization of the national, regional or local level or a local private company can act as the local sponsor.

³⁷ "Activity" – a study or technical assistance program funded by USTDA

- It is quite realistic to obtain funds for drafting the ToR, and USTDA requirements to applications are quite precise and transparent;
- Provides for ToR development in accordance with standards of international finance organizations.

Key drawbacks (limitations) of application as an investment projects funding resource

- At infrastructural investment projects implementation, grant funds can be used only for the feasibility study (drafting the ToR); construction work cannot be funded.
- The funds are provided for drafting ToR for large-scale projects with budgets amounting to millions of dollars.

Examples of application in Ukraine

Modernization of the centralized heating system. The state enterprise "Production Association Southern Machine-Building Plant named after O.M.Makarov" obtained from USTDA a grant in the size of 556 929 USD for drafting a feasibility study for the purpose of defining technical and financial feasibility of the modernization plan implementation, renewal and / or change of the power supply method for a part of the centralized heating system, operation of which is carried out by this enterprise,.

Use of mine methane. For the purpose of reducing dependence of Ukraine on imported power carriers, Donetsk regional state administration received 586 214 USD for partial funding of the feasibility study for use of mine methane in Donetsk region.

Utilization of solid household waste. USTDA provided a grant in the amount of 300 000 USD for Yalta city council to fund drafting of the feasibility study for utilization of solid household waste in the city and adjoining territories.

4.3 Programs of East Europe Foundation

The East Europe Foundation (EEF) is an international charity organization support of which is carried out by the US Agency for International Development via the Eurasia Foundation³⁸ and by other donors – governments, funds, corporations and private donors.

From January, 2008 EEF programs have been assisting to civil, social and economic development of Ukraine, mobilization of resources, strengthening communities and supporting the partnership of the community, authorities and businesses.

The East Europe Foundation organizes energy efficiency projects competitions “Energy Efficiency: local partnership initiatives”. This project is aimed at support of partnerships between local authorities and communities for the sake of improving energy efficiency. The project envisages raising awareness of citizens in relation to energy efficiency innovative approaches and assistance to efficient technologies' implementation.

The objective of the competitions is involving the community, authorities and businesses for cooperation to improve energy efficiency at the local level.

Tasks of the competition include active involvement of citizens in energy efficient technologies' implementation; improvement of the quality of services provided for citizens by

³⁸ Eurasia Foundation is a non-profit charity organization support of which is carried out by the US Agency for International Development and other donors: governments, funds, corporations and private institutions. Starting from 1992, Eurasia Foundation has invested over \$ 380 million in projects and technical assistance programs in Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tadjikistan, Turkmenistan, Ukraine and Uzbekistan. Starting from 2008, the most successful programs of Eurasia Foundation in Ukraine are continued by East Europe Foundation.

local authorities; as well as implementation of energy efficiency technologies and use of alternative energy sources.

Participants of the competition can be: Ukrainian non-state non-profit organizations with the status of a legal entity in partnership with local authorities³⁹.

The competition geography, as a rule, is limited to several regions. Thus, the competition that was announced in July, 2009 was limited to the territory of Dnipropetrovsk, Lviv, Chernivtsi regions, AR Crimea and Sevastopol.

The maximal grant amount is 200 thousand UAH, the maximal project duration – 10 months.

The projects can include, but should not be limited to, the following directions of activity:

- analysis of energy efficiency opportunities and use of non-traditional energy sources, defining of economic efficiency of such technologies for target territories;
- development of energy efficiency increase programs for target territories;
- holding of public opinion studies, initiation of a public discussion on the tariff policy and other issues related to use of energy;
- holding of information campaigns related to energy efficiency and pilot projects suggested, as well as to the measures that citizens can apply for the purpose of energy efficiency;
- holding of campaigns for the purpose of involving resources of communities for energy efficiency projects;
- realization of pilot projects in the sphere of energy efficiency;
- technical assistance and training support in the field of energy efficiency technologies;
- development of mechanisms for evaluation of efficiency of energy efficiency projects and application of alternative energy sources;
- spreading of successful models in the sphere of energy efficiency.

Pilot projects must have a social effect and can include implementation of energy efficiency technologies at municipal objects, communal enterprises, in the housing and communal sector.

Winners of the competition are defined based on the following criteria:

- rich content of the project, innovative nature of approaches and technologies suggested;
- feasibility of achieving the project objective, specific definition of planned outcomes (preferably, formulated as quantitative indicators);
- expected long-term effect of the program;
- positive environmental impact of the suggested technologies;
- experience and active participation in realization of projects aimed at resolution of actual problems of local or regional communities;
- qualification of experts to be involved into work within the project;

³⁹ Grants within this competition are not provided for profit-making, commercial organizations, political parties, religious organizations and individuals.

- presence of partnership relations with local authorities;
- involvement of additional funding sources, in particular, local ones.

Preference is given to projects aimed at achievement of concrete measurable results directly after their completion and offering innovative models, which afterwards could be used in other regions of Ukraine without additional funding by EEF.

Grants budgets can envisage partial funding for implementation of pilot energy efficiency projects (in particular, purchase of special equipment and realization of work) provided involving no less than 50% percent of such pilot project's budget from local budgets or other sources.

Key advantages (opportunities) of application as an investment projects funding resource

- Availability for rural communities and small towns, which usually cannot take part in large international technical assistance projects;
- There is a real opportunity to involve grant funds for partial funding of energy efficiency projects (subject to conditions of co-funding due to funds of local budgets or other sources).

Key drawbacks (limitations) of application as an investment projects funding resource

- Funding of small projects only.
- Only Ukrainian non-state non-profit organizations with the status of a legal entity in partnership with local authorities can be participants of the competition.

Examples of projects implemented in Ukraine at funding of East Europe Fund

In the town of Chuguiv of Kharkiv region, a project of the Agency of International Cooperation covered several directions: realization of the energy audit of HCE objects and analysis of energy use efficiency; informing the public, representatives of local authorities, employees of the communal sphere and businessmen about energy efficiency issues and equipment installation in the local museum, the center for social and psychological rehabilitation of children and the city territorial center for servicing pensioners and single disabled citizens.

In Zaporizhyya, the Association of Environmental Education worked on opening a school energy office, where teachers received necessary knowledge and skills for teaching energy efficiency at schools within the curriculum and during optional sessions. Within the project, an ecological festival, poster contest, awareness campaign were organized, information manuals were released, an interactive eco-lecture and a photo exhibition were held, which contributed into formation of the ecological and power culture both among children and their parents.

Zaporizhyya Charity Fund “Unity for the Future” conducted trainings for representatives of condominiums, cooperatives' boards, initiative groups on the topic "Energy Efficiency and Energy Saving. Heating Energy Tariffs Setting”. After this, typical apartment houses were selected for installation of heating energy metering devices, which made it possible for their inhabitants to optimize the cost of heating.

Lugansk Regional Fund “Regions and the Community” within the framework of the project set a public energy efficiency committee at the regional state administration for the purpose of co-ordination of work for introduction of energy efficient technologies, which included representatives of NGOs, employees of the HCE sphere. A “public audit” was also conducted and three profiles for pilot cities and for the entire region were drafted. Other project activities

included: holding a competition of energy efficiency pilot projects, operation of the “hot” line. Activity under the project was covered within an extensive information campaign.

The project of the NGO “Poliska Initiative” contributed into awareness raising among local communities of Zhytomyr region in relation to energy efficiency and realization of concrete projects in this industry. The project helped to install new energy efficient boilers working based on biomass combustion in two schools. A contest was also organized for the best work on the topic of energy efficiency among schoolchildren, a curriculum was developed and introduced, and a textbook for schools of Korostyshiv rayon was published.

The project of the Western Ukraine Resource Center (2006-2008) had the objective of promoting energy efficiency through introduction of biogas technologies in Ivano-Frankivsk, Lviv and Ternopil regions. Working with small and medium businesses and communal enterprises, the organization conducted an extensive awareness campaign focused on application and advantages of using biogas technologies. As a result of the campaign, objects for installation of two pilot biogas plants were defined (respectively, the agricultural cooperative and the communal enterprise) and an educational center for use of energy efficient technologies was opened.

In Lviv region, the project of Sokalsky rayon council envisaged introduction of the heating remote control system for schools of Sokalsky rayon.

4.4 Program of the German Technical Cooperation (GTZ)

Essence of the program and investment programs' funding opportunities

German Technical Cooperation (GTZ) implements the project "Energy Efficiency in Buildings" in Ukraine jointly with Ukrainian partner organizations – the Ministry of Regional Development and Construction of Ukraine and the Ministry of Housing and Communal Economy of Ukraine.

Key priorities of this project are support for development of the national strategy in the field of energy efficiency of Ukraine and enhancing energy efficiency of buildings in cities of Ukraine by development of the policy and strategies that will be implemented in four pilot cities – Chernigiv, Ivano-Frankivsk, Myrgorod and Novograd-Volynsky.

These cities were selected based on results of a transparent national competition that was conducted in two stages. In each of the cities, a municipal department for energy efficiency with the permanent staff was created.

At GTZ's support each of the four cities will develop the municipal plan of energy efficiency for buildings paying special attention to the following activities:

- collecting data on energy consumption and buildings' need for energy resources;
- development of a long-term strategy (i.e., the energy plan and demand regulation activities);
- development of the action plan and preparation for its implementation;
- determination of funding and motivation mechanisms;
- realization of public awareness campaigns;
- development of the monitoring and reporting system.

Besides, each city will prepare one pilot project, for example, in houses renovation, creation of a municipal consultative center for condominiums and individuals, special awareness

campaigns, etc. These pilot projects will be implemented during the second stage of the project (from October, 2010 through 2013).

For the projects selected, GTZ will offer consultations on the issue of the energy concept, including the issue of profitability and quality control, promotion among the public, as well as training of design and construction organizations participating in the project.

A specialized jury will select only one project, at that the financial support does not include investment costs for the construction project or additional costs for energy efficiency technologies, for example, additional heat-insulation.

Acceptance of applications for participation in the competition lasted till 30.11.2009.

Key advantages (opportunities) of application as an investment projects funding resource

The project will offer the opportunity for the participating cities to implement municipal energy management, to develop the energy plan (strategy) and to learn how to draft investment projects.

Key drawbacks (limitations) of application as an investment projects funding resource

The project will not fund implementation of investment projects.

4.5 Programs of the British Council

Till 2009, the British Council funded the project Regional Energy Efficiency Campaign⁴⁰, the objective of which lied in cooperation with local authorities for informing and forming the publics' involvement into economy of natural resources and energy and suggestions for innovative ways of increasing energy saving and energy efficiency.

For this purpose, mini grants were offered to winners for funding energy efficiency projects. The total budget of the competition in 2008 made up 100 000 UAH.

In 2009, the portfolio of the British Council's projects did not envisage provision of grants for implementation of energy efficiency projects.

4.6 Swedish International Development Agency (SIDA)

Currently, the Swedish International Development and Cooperation Agency (SIDA) offers grants for accompanying activities.

Such practice is typical enough for investment projects' funding, when a loan of international finance organizations is accompanied with a grant.

Examples of SIDA's participation in provision of grants for accompanying activities are represented by the following projects in Ukraine:

1. **NEFCO Trust Management Fund** (project duration: April, 2008 – December, 2010)

SIDA provides a grant for the NEFCO Trust Management Fund for the purpose of assistance to introduction of energy efficiency measures in the sector of centralized heating. Resources of this Fund can be used for funding studies, implementation and monitoring of investments into energy efficient and environmental projects. The total budget of the project is 181 818 euros.

2. **"Municipal Infrastructure Development" Project in Ukraine** (project launched in December, 2007)

⁴⁰ <http://www.britishcouncil.org/uk/ukraine-science-energy-efficiency.htm>

In this project of the World Bank, provision of loans is envisaged for the sum of 140 million USD. The main part of the loan is intended for funding investments into the sectors of water-supply, sewage and processing of solid household waste. Approximately a half of the whole amount is intended for three pre-selected cities (Odesa, Ivano-Frankivsk, Chernigiv). The other part, the so-called "open component" for crediting energy efficiency projects, is accessible for all cities (water-supply facilities) meeting the set criteria. The grant from SIDA is intended for funding technical assistance provided within the entire project.

The total budget of the project makes up 4 090 909 euros.

3. **EBRD Ukraine Energy Efficiency Program (UKEEP), phase II** (the project was launched in December, 2008)

EBRD provided to the UKEEP program a credit line amounting to 110 million euros for implementation in Ukraine of energy efficiency and renewable energy sources projects. At the beginning of 2009, this credit line was extended to 150 million euros. SIDA and the Austrian Federal Ministry of Finance provided grant funding for drafting projects and realization of energy audits.

In this project, such Ukrainian banks as CreditPromBank, UkrExImBank, OTP Bank and Forum Bank take part.

The total budget of the project makes up 909 091 euros.

4.7 Canadian Agency for International Development (CIDA)

The overall objective of the Canadian program of cooperation with Ukraine is providing for successful integration of Ukraine into the world market economy and assistance to peaceful development of the democratic state system governed by the rule of law.

Thus, funding energy efficiency investment projects is not a direction of CIDA's cooperation with Ukraine.

5. Funding from Environmental and Other Foundations

5.1 Clean Technologies Fund

One of additional resources of funding investment projects is the Clean Technologies Fund (CTF), which offers resources as *cofunding* for resources of the World Bank, EBRD, other multilateral development banks⁴¹.

The multi-billion fund for development of ecologically clean technologies was created in the USA in 2008 in order to help China and other developing countries to fund state-of-the-art technologies for reduction of greenhouse gases emission and other contaminations. The fund's objective, foremost, is resolution of the problem of lack of resources for funding this sort of projects and bridging the gap between front-rank technologies and out-dated, cheap ones.

At the beginning of 2009, the National Environmental Investment Agency of Ukraine initiated a visit of the joint mission of multilateral development banks (MDB) to Ukraine for the purpose of forming the portfolio of projects for the Clean Technologies Fund.

In the period from April, 6 till April, 10, 2009, meetings of the MDB joint mission were conducted at participation of representatives of the National Environmental Investment Agency and the profile ministries of Ukraine. As a result of the visit of the joint mission, the "Investment Plan for the Clean Technologies Fund" was developed, which is currently being coordinated by the parties and will be signed in the nearest future.

Proceeding from suggestions of the World Bank, which is the Trust Manager of the Clean Technologies Trust Fund, and pursuant to the agreements stipulated in the Projects Portfolio Revision Protocol of Ukraine and the World Bank for funding from the Clean Technologies Fund signed on April, 10, 2009, the Parties agreed that resources of CTF can be involved for cofunding of such projects as:

- Credit line for energy efficiency promotion;
- Project for modernization of the gas transportation system of Ukraine;
- Projects in the field of heating.

Currently, in line with the order of the Ministry of Economy of Ukraine of May, 18, 2009 No. 456 for the purpose of involving resources of the Clean Technologies Fund and reduction of the cost of credits for Ukrainian enterprises, development of *the support mechanism* for implementing energy efficiency technologies both in the private sector and in the sector of state and communal enterprises, support of energy efficient equipment producers is being conducted.

⁴¹ *Multilateral development banks* – a specific type of financial institutions. These are banks statutory capitals of which are formed from budgetary funds of founding countries. MDBs provide funding for development projects. These may be projects of reforming state structures or projects of creation / reconstruction of the infrastructure (roads, water-supply, etc.), projects of small and medium businesses development, etc. Theoretically, one of criteria of providing money for such projects is that they cannot obtain the money from any other financial institution (i.e., for example, if no other bank would give money for modernization of heating in the city). Moreover, MDBs enjoy the highest reliability rating – AAA, that is why they can afford offering loans at low enough interest rates and for a long term. MDBs include: World Bank Group (International Bank for Reconstruction and Development (IBRD), and the four daughter structures, including the International Finance Corporation (IFC)); EBRD; EIB; Inter American Development Bank, Asian Development Bank, African Development Bank, Council of Europe Resettlement Fund, Scandinavian Development Bank, Caribbean Development Bank.

Cooperation with the Clean Technologies Fund, namely involvement of its resources for reducing the cost of credits for Ukrainian enterprises, is, in our view, highly credible and promising.

I.e., due to the Clean Technologies Fund there is the opportunity is cheapening already involved credit funds for minimization of losses within implementation of hi-tech projects aimed at implementation of ecological technologies.

Currently, UkrExImBank is authorized for selection and funding of the proper projects in Ukraine on behalf of the Clean Technologies Fund.

Key advantages (opportunities) of using CTF as a source of funding investment projects in the energy efficiency sphere in Ukraine:

- Access to funding with low interest rates;
- Indemnification of losses under already obtained credits for implementation of energy efficiency technologies;
- Realization of socially important projects, which because of expensive credit resources are extremely burdensome for local budgets;
- Provision of financial assistance due to this fund is not limited by the timeframe of Kyoto Protocol.

Key obstacles (limitations) of using CTF as a source of funding investment projects in the energy efficiency sphere in Ukraine:

- Absence of clear transparent mechanisms of access to the funds;
- Funds received from the Clean Technologies Fund are not grants, and thus they envisage funding of only cost-effective projects;
- Decision-making on allocation of funds, because of participation of international finance institutions, can be rather lengthy, which will not always coincide with the project implementation timeframe.

Examples of application in Ukraine

Currently, no such examples.

5.2 Kyoto Protocol Mechanisms

General characteristics

Carbon funding mechanisms (flexible mechanisms) – this term unifies three opportunities of a *flexible* approach to implementation by countries of their obligations for reduction of greenhouse gases' emission (selling quotas, joint implementation projects and clean development mechanism) in accordance with articles 6, 12 and 17 of Kyoto Protocol. These are key *market* mechanisms within the framework of Kyoto Protocol implementation. They were developed at the 7th conference of UN FCCC parties, which took place at the end of 2001 in Marrakech (Morocco), and ratified at the first meeting of Kyoto Protocol parties at the end of 2005.

Preconditions for appearance of carbon funding mechanisms. The precondition for appearance of these market mechanisms was the fact that due to fast economic development of the majority of industrially developed countries, which took place at the end of the past century, currently they to a certain extent exceed the level of greenhouse gases emissions set for them. At the same time, in countries with a transitional economy and in developing

countries, as a result of stagnation, which was observed at the end of the last century, the level of emissions is lower than the value assigned to them.

As a result, the so-called "quota misalliance" appeared, which became the precondition of market approach application for countries' performance of their obligations in relation to reduction of greenhouse gases emission.

It was decided to place the difference between the actual level of emissions and obligations assigned to countries of the world into the sphere of market relations. Due to such approach, industrially developed countries can independently choose *the method* of their obligations' implementation: i.e., they can either meet the quantitative obligations for emission or implement internal activities, or use the three markets mechanisms.

Box 6. A bit of history

The Parliament of Ukraine ratified the UN Framework Convention on Climate Change on October, 1996 and, pursuant to UN procedures, Ukraine is its Party starting from August, 11, 1997.

As of today, the Convention has been ratified by 191 states, including one organization of regional economic integration – the European Union.

The Convention does not contain *quantitative* obligations of the Parties in relation to limitation and reduction of greenhouse gases' emission, and thus for their setting another document was developed – Kyoto Protocol (1997).

In this document, quantitative obligations of the Parties are set for the period from January, 1 2008 till December, 31, 2012. The objective of the limitations is to reduce during this period total emission of greenhouse gases by 5.2% compared with the level of 1990. The key obligations were undertaken by industrial countries: EU must reduce emissions by 8%, Japan and Canada – by 6%, countries of the Eastern Europe and Baltic countries – by 8% on average. Russia and Ukraine undertook the obligation to "preserve" the average annual emission at the level of 1990. Developing countries, including China and India, did not undertake any obligations.

Ukraine signed Kyoto Protocol in March, 1997 and ratified it in February, 2004.

In April, 2007 subject to the Governmental Resolution, the National Environmental Investment Agency of Ukraine was created as the central executive body, activity of which is aimed at:

- participation in forming and providing for implementation of the public investment policy in the field of protection of the natural environment and public policy in the field of regulating negative anthropogenic impact on the climate change;
- implementation of provisions of the UN Framework Convention on Climate Change and implementation of the mechanisms envisaged by Kyoto Protocol to it, including in the part of implementation of projects aimed at environmental protection, involvement of investments for environmental protection;
- creation and providing for functioning of the national system of emission trade;
- realization of international activity under the UN Framework Convention on Climate Change and Kyoto Protocol to it.

This is the authorized national body for implementation of Kyoto Protocol provisions.

Description of the carbon funding mechanisms. There are three economic mechanisms of carbon funding set by Kyoto protocol for reduction of the gross costs of the parties at their obligations implementation:

1. *quotas trade mechanism (QTM).* Within the framework of this mechanism, one party of Kyoto Protocol within the emission quantitative limitations set for it has the right to sell to

another party a *permission* for emissions. The financial resources transferred into the budget of the selling country must be used for projects or programs aimed at reduction of greenhouse gases' emission (so-called "green" investments scheme – GIS). This mechanism operates only among parties to Kyoto Protocol. The right to sell surplus units of the set amount belongs to the state. Emission trade at the level of enterprises is possible only in the case of dividing the quotas on greenhouse gases' emissions inside the country;

2. *joint implementation mechanism (JIM)*. This mechanism envisages joint implementation of special projects, as a result of realization of which the project owner (i.e., the legal entity on whose object the measures for greenhouse gases emission are realized) obtains funding for implementation of these measures from a foreign investor. The latter, as indemnification for costs incurred, acquires special rights for emission of greenhouse gases in the volume in which reduction of emission is provided as a result of these measures' implementation. Such an investor might be represented by enterprises and companies, carbon funds (both public and corporate ones), as well as private investors. Participation in this mechanism is open to countries from the list of Annex 1 to the UN Framework Convention on Climate Change (Ukraine is also included into this list). Within the framework of this mechanism, the state authorizes the enterprise at which the joint implementation project (JIP) is realized, is to pass emission reduction units to the foreign investor that takes part in funding of this project;
3. *clean development mechanism (CDM)*. This mechanism is similar to the joint implementation mechanism (JIM), with the difference that projects for greenhouse gases' emission reduction are performed in the territory of one of UN FCCC countries that is not included into Annex 1 (as a rule, in a developing country. Ukraine is not considered one of them).

Consequently, such approach, when one country for the purpose of implementing joint obligations in relation to quantitative reduction of greenhouse gases' emission invests its funds and resources into another country, is referred to as "flexible mechanisms" or "carbon funding mechanisms".

Ukraine has the right to take part in two carbon funding mechanisms: the quotas (emission) trade mechanism and the joint implementation mechanism.

5.2.1 Joint Implementation Mechanism

Essence of the mechanisms, conditions and specific features of implementation

Emission trade through joint implementation (JI) projects is a new unique opportunity of involving foreign investments by enterprises of Ukraine for energy efficiency and technical modernization.

Participation in a JI project is open for separate enterprises of different forms of ownership. Funds from sale of emission reduction units (ERU) in this case will be directly transferred to the account of the enterprise that will realize the JI project. ERU can be sold both at the beginning of the project's realization and after completion of its implementation.

In April, 2008 Ukraine performed all conformity criteria under Kyoto Protocol for the possibility of realization of joint implementation projects under the *national* procedure (see Box 7), and after ratification of Resolution of the Cabinet of Ministers of Ukraine of August, 20, 2008 No. 718, which regulates relations of the parties within preparation and implementation of the projects, the mechanism for introduction of the national procedure for the JI project implementation was created.

Box 7. Schemes (ways) of realizing joint implementation (JI) projects

There are two schemes (two ways) of realization of joint implementation projects.

If the country where the JI project is implemented has performed all the six so-called *compliance criteria* (is a Party to Kyoto Protocol, the national system is created for inventory of greenhouse gases' emission, annually submits the recent cadastre of greenhouse gases' emission, created the National Register of Carbon Units, calculated and registered the amount of allowed emission, provides additional information on the set allowed emission units on accounts of the National Register), realization of the JI project can be conducted based on **Scheme 1**. This is a simplified scheme, which is also referred to as the "**national procedure**".

If the country where the JI project is implemented has not yet passed the inspection of compliance with requirements, realization of the JI project can only be conducted under **Scheme 2**. This Scheme (it is also referred to as the "**international procedure**") envisages registration of projects in the International Compliance Committee, passing determination and verification by the company with the help of an auditor company (accredited independent body), etc. This procedure requires additional financial costs from the project owner and is longer in time.

Before introduction of the national procedure (Scheme 1) due to high payments to international organizations for project registration, economically expedient for consideration under Scheme 2 were projects providing for reduction of greenhouse gases' emission in volumes over 20 thousand tons of CO₂ equivalent a year.

Now the National Environmental Investment Agency is conducting projects registration (under Scheme 1) free of charge.

Thus, preconditions allowing substantial acceleration of joint projects registration have been created in Ukraine⁴².

As of September, 2009 56 joint implementation projects were officially registered in the world, among them – 7 projects under the international procedure (Scheme 2), 49 – under the national procedure (Scheme 1).

The greatest number of joint implementation projects have been registered in Czech Republic (15 projects), Ukraine (10) and Germany (9), including:

- under the international procedure – Ukraine (3 projects), Lithuania (3), Bulgaria (1);
- under the national procedure – Czech Republic (15 projects), Germany (9), Hungary (8), Ukraine (7), New Zealand (6), Romania (2), France (2).

Now Ukraine remains the only country in which joint implementation projects are realized both under the international procedure and the national one⁴³.

A confirmation of the leading positions of Ukraine in this sphere is also the fact that for the first time in its practice one of regular meetings of the Joint Implementation Supervisory Committee – the higher executive body of the Secretariat of the UN Framework Convention on Climate Change on issues of joint implementation took place on September, 7-11, 2009 in Kyiv, not in Bonn (Germany), where it traditionally takes place.

How to get involved into the joint implementation mechanism? In order to register a project, the object owner or the person authorized by him shall submit to the National Environmental Investment Agency an application for receiving a letter of support in the set form in

⁴² For reference: three Ukrainian projects approved under the international procedure were considered by the authorized international bodies for more than two years.

⁴³ <http://ji.unfccc.int>

accordance with the order of the National Environmental Investment Agency of Ukraine of June, 25, 2008 No. 32 and of June, 25, 2008 No. 33.

After receiving the letter of support, for obtaining the letter of approval the owner of the source at which implementation of the JI project is planned or another person authorized by him (project developer, consultant or financial mediator) shall submit the following documents to the National Environmental Investment Agency:

1. Letter with the request to provide the letter of approval.
2. Copy of the letter of support.
3. Conclusion of an independent expert organization.
4. The project technical documents consisting of:
 - 4.1. *Overall description of the project.*
 - 4.2. *Most credible forecast of dynamics of anthropogenic emissions and / or absorption of greenhouse gases without the project's implementation (baseline study).*
 - 4.3. *Calculation of emission reduction units (absorption).*
 - 4.4. *Plan of monitoring of the project's implementation status.*
 - 4.5. *Evaluation of the impact of the project on natural environment.*
 - 4.6. *Plan of the project's funding.*
 - 4.7. *Other information that the project developer deems it wise to provide.*

After receiving the letter of support, the subsequent algorithm of work is set in accordance with the Procedure of Preparation, Consideration, Approval and Implementation of Projects Aimed at Reduction of the Volume of Anthropogenic Emission of Greenhouse Gases ratified by the Cabinet of Ministers of Ukraine with its Resolution of February, 22, 2006 No. 206 (in the reading of Resolution of the Cabinet of Ministers of Ukraine of August, 20, 2008 No. 718) and the Order passed by the National Environmental Investment Agency of December, 18, 2008 No. 79 "On Approval of the Instruction on Implementation of Joint Implementation Projects under the National Procedure".

Experience of application in Ukraine. Currently, the National Environmental Investment Agency of Ukraine provides for maintenance of 136 joint implementation projects in different sectors of the Ukrainian economy⁴⁴. It is expected that implementation of these projects will result in the total reduction of greenhouse gases' emission in the volume of approximately 130 million tons of the carbon dioxide equivalent and will substantially extend opportunities of domestic enterprises in relation to involvement of foreign investments. It is also important to emphasize that the number of such projects is steadily growing.

The list of projects for reconstruction of boiler plants and heating systems maintained by the National Environmental Investment Agency of Ukraine is shown in table 5.1.

⁴⁴ Out of them – 8 projects in the heating sector.

Table 5.1
Joint implementation projects for reconstruction of boiler plants and heating systems
that obtained the letter of support and the letter of approval of the National
Environmental Investment Agency

Name of the project	Object owner	Date of receiving	
		the letter of support	the letter of approval
Reconstruction of the heating system of Chernigiv region	OJSC "OblTeploKomunEnergo"	05.2004	05.2007
Reconstruction of the heating system of the Crimea	SE "KrymTeploKomunEnergo"	10.2004	07.2007
Reconstruction of the heating system of Donetsk region	SCE "DonetskKomunEnergo"	10.2006	08.2007
Rehabilitation of the communal heating system of Rivne region	CE "KomunEnergiya", a branch of "TeploTransServis"	10.2004	
Reconstruction of the heating system of the city of Kharkiv	CE "Kharkiv Heating Networks"	10.2007	12.2008
Reconstruction of the heating system of the city of Lugansk	CE "TeploKomunEnergo"	10.2007	
Reconstruction of the centralized heating system of the city of Lutsk	CE "LutskTeplo"	05.2008	
Enhancing efficiency of heating energy generation at boiler plants	Concern "Municipal Heating Networks", Zaporizhya	12.2008	

The total sum of emission reduction for 2008-2012 will make up over 3.5 million tons of CO₂ equivalent. The price of one ton fluctuates within the range from 10 to 20 euros.

Three joint implementation projects within the framework of Kyoto Protocol are already at the stage of realization at participation of Japanese corporations. This is the project "Utilization of Mine Methane at Zasyadka Mine" at participation of "Marubeni" corporation and the project "Supercession of Electric Power Production on the Basis of Extractive Fuel in the Electric Power Network by Introduction of the Gas Turbine Electric Power System of the Combined Type at Alchevsk Metallurgical Combine" at participation of the "Industrial Union of Donbas" and the corporation "Sumitomo" and "Mitsubishi Heavy Industries".

Within the framework of implementation of the project "Utilization of Mine Methane at Zasyadka Mine" Ukraine became the *first country in the world* that transferred 1.5 million units (parts) of the set amount from the account of Ukraine in the National Electronic Register of Anthropogenic Emissions and Absorption of Greenhouse Gases to the National Register of Japan in accordance with Resolution of the Cabinet of Ministers of Ukraine of October, 1, 2008 No. 1294.

Within the framework of the project "Supercession of Electric Power Production on the Basis of Extractive Fuel in the Electric Power Network by Introduction of the Gas Turbine Electric Power System of the Combined Type at Alchevsk Metallurgical Combine" due to the state-of-the-art Japanese technologies, it is planned to use as fuel blast-furnace and converter gases of this enterprise, and gases emissions shall be placed next to Alchevsk by-product coke plant. The indicated power units will be produced at enterprises of the industrial company of "Mitsubishi Heavy Industries". In 2008, the power units were delivered into Ukraine. Due to implementation of the newest Japanese technologies, it is planned to annually produce 300 MW of electric power without procurement of natural gas and coal, as well as to reduce emissions of greenhouse gases for 1.5 million tons annually.

5.2.2 „Green” Investments Scheme

Essence of the mechanisms, conditions and specific features of implementation

Potential opportunities of Ukraine for sale of assigned allocation units (parts) (AAUs) were finally defined in 2006 as a result of the initial report submitted by Ukraine, the compliance of which was confirmed pursuant to the procedure of verification by the Secretariat of the UN Framework Convention on Climate Change. Emissions in the baseline year 1990 were fixed at the level of 920 837 million tons of CO₂ equivalent. The set amount of reduction of emission for the obligations period is 4604.2 million tons of CO₂ equivalent.

In accordance with international treaties, a half of the total reductions is allocated for the mandatory reserve of the obligations period, namely – 2060.0 million tons of CO₂ equivalent. This is the reserve that cannot be sold. Moreover, the national reserve of the obligations period (what is reserved for economic development of the country in order not to buy emissions in the future) makes up 1500.0 million tons of CO₂ equivalent.

Consequently, the surplus of AAUs for the obligations period (2008-2012) that is intended for sale makes up in Ukraine about 1000 million tons of CO₂ equivalent.

International Emission Trade (IET) can only be carried out by the state. However, the funds from trading will be transferred in accordance with provisions of the agreement, but, as a rule, to the treasury to the respective foreign currency accounts opened in UkrExImBank. The funds indicated are added to the special fund of the state budget, and thus unused money is not written off at the end of the year to the revenue part of the budget but pass for the next budgetary period.

The National Environmental Investment Agency in accordance with Resolution of the Cabinet of Ministers of Ukraine of 17.04.2008 No. 392 is the authorized body for implementation of international obligations undertaken by Ukraine under UN FCCC and Kyoto Protocol to it.

At the beginning of March, 2009, as a result of activity of the National Environmental Investment Agency an agreement on sale of 30 million assigned allocation units (parts) (hereinafter – AAUs) was concluded with the Organization for Development of New Power and Industrial Technologies (Resolution of the Cabinet of Ministers of Ukraine of January, 29, 2009 No. 90-r). As a result, investments for the amount of approximately **3 billion UAH** were involved into the economy of Ukraine. The abovementioned funds are already on the accounts of the State Treasury of Ukraine.

In March-April, 2009, on the basis of Resolution of the Cabinet of Ministers of Ukraine of March, 18, 2009 No. 277-r the National Environmental Investment Agency signed three agreements for sale of 14 million AAUs with companies authorized by the Government of Japan. In accordance with agreements concluded with the Japanese companies, approximately 1.5 billion UAH will be obtained in 2010.

The abovementioned funds are a special fund filling the budgetary program under CPCE 2402020 "Implementation of Projects Aimed at Reduction of Emission or Increase of Absorption of Greenhouse Gases"

In accordance with provisions of agreements signed for sale of AAUs, the funds involved must be aimed at:

- energy efficiency;
- transition to alternative types of fuel;

- utilization of mine methane;
- introduction of renewable sources of energy;
- activity aimed at reduction of emission of greenhouse gases;
- environmental protection.

Funds obtained as a result of selling AAUs will first of all be used for the projects implementation of which through joint implementation mechanisms is inadvisable taking into account comparatively low volumes of reduction of greenhouse gases' emission. The point is, in particular, implementation of projects in the housing and communal economy (the budgetary sphere, residential buildings, etc.).

The projects' implementation must enable Ukraine to meet the declared obligations of reducing total emission of the six greenhouse gases till 2020 by 20%.

How to get involved into the "green investments" scheme? The procedure of receiving budgetary funds for projects implementation under the „green” investments scheme is defined with Resolution of the Cabinet of Ministers of Ukraine of February, 22, 2006 No. 206 (in the reading of Resolution of the Cabinet of Ministers of Ukraine of August, 20, 2008 No. 718).

For implementation of the abovementioned Resolution of the National Environmental Investment Agency, the form for submission of the project offer in relation to a potential project of targeted ecological (green) investments was developed.

The applicant for a project can be only a central executive body, the Council of Ministers of AR Crimea, regional / city state administration.

The applicant forms the portfolio of project offers on the basis of information obtained from objects owners.

The subsequent process of projects selection and funding takes place in accordance with the set procedure.

Investment resources obtained within the framework of the green investments scheme are *free of charge* for their recipient. However, if the planned project is not implemented till 2012 (or is not implemented in full), the state will have to buy out the assigned allocation units (parts) sold to foreigners at *actual* market prices. These are the so-called risks of the state under investing into the projects that will be implemented under the green investments scheme.

Experience of application in Ukraine. In 2009, no expenditures for „green” investments were allocated in Ukraine, although the tentative volume of funding was defined in the amount of 50 million UAH.

These funds must be spent in accordance with the Plan approved with Resolution of the Cabinet of Ministers of Ukraine of September, 16, 2009 No. 1036 (table 5.2).

Table 5.2
Plan of activities for preparation and implementation in educational and healthcare facilities of targeted ecological (green) investments aimed at reduction of the volume of greenhouse gases' emission
(in accordance with Resolution of the CMU No.1036 of September, 16, 2009)

Name of the activity	Implementation term
1. Preparation and implementation of targeted ecological (green) investments projects aimed at reconstruction of hot water-supply and heating systems with installation of heat-pumps in Dykansky and Poltavsky rayons of Poltava region, the towns of Kilia and Ovidiopol of Odesa region, the cities of Kramatorsk and Slovyansk of Donetsk region, Volodymyretsky rayon of Rivne region	October, 2009 – March, 2010
2. Preparation and implementation of targeted ecological (green) investments projects aimed at reconstruction of heating systems with installation of boilers equipped with the system of automatic supply of solid biofuel (timber offcuts, pellets and granules from plant materials) in Putylsky rayon of Chernivtsi region, Ovrutsky rayon of Zhytomyr region, Reshetylivsky rayon of Poltava region	October, 2009 - January, 2010
3. Preparation and implementation of targeted ecological (green) investments projects aimed at reconstruction of heating systems with installation of boilers equipped with the system manual supply of solid biofuel (timber offcuts, pellets and granules from plant materials) in Gluhivsky, Krolovetsky and Putyvlsky rayons of Sumy region	October, 2009 - January, 2010
4. Preparation and implementation of targeted ecological (green) investments projects aimed at construction and reconstruction of boiler plants with installation of boilers operating on straw in Ohtyrsky and Sumsky rayons of Sumy region, Tlumatsky rayon of Ivano-Frankivsk region	October, 2009 – January, 2010
Tentative amount of funding - 46 million UAH	
5. Creating the list of potential targeted ecological (green) investments projects aimed at reduction of the volume of greenhouse gases' emission in 2010 - 2011 and drafting of design and estimate documentation for separate targeted ecological (green) investments projects	October, 2009 – March, 2010
Tentative amount of funding - 4 million UAH .	

Key advantages (opportunities) of applying the mechanisms of carbon funding as a source of funding investment projects in the heating sphere in Ukraine

- Investment resources obtained within the green investments scheme are *free of charge* for their recipient;
- Separate socially significant projects, following the Government's decision, can be funded for 100% from their total cost (under the green investments scheme);
- Partial indemnification of financial costs for the project's implementation;
- Motivation for implementation of modern energy efficient technologies, which will provide for *substantial* reduction of greenhouse gases' emission;
- All mechanisms and procedures of funding of both joint implementation projects and the projects, realization of which is envisaged under the green investments scheme, have currently been developed.

Key obstacles (limitations) of applying the mechanisms of carbon funding as a source of funding investment projects in the heating sphere in Ukraine

1. Under the green investments scheme:

- All risks of budgetary funding are applicable (amendment of the procedure of using budgetary funds, allocation of funds at the end of the year, change of their target destination, etc.)
- Numerous inspections concerning targeted, effective and rational use of funds of the state budget of Ukraine;
- The one who will implement the project must necessarily pass through the tender (competition) procedure, pay the tender security (block a part of his turnover assets) and take part in protracted bureaucratic procedures.

2. Under joint implementation projects:

- Under Scheme 1 – the risk of non-fulfillment of contractual obligations by the foreign investor;
- Under Scheme 2 – considerable financial costs of coordination of projects at JISC institutions. For this reason, under this Scheme it is economically reasonable to implement projects providing for reduction of greenhouse gases' releases in volumes exceeding 20 million tons of CO₂ equivalent.
- Not receiving in full or partial repayment of already obtained funds if actual units of emission reduction appear significantly less than expected (based on calculations).
- Not complete accordance of current methods (officially recognized at the international level) to requirements of a concrete Ukrainian project.

6. Private Investments

6.1 Mechanism of Energy Performance Contracts

Conclusion of energy performance subcontracts is currently one of the most feasible financial instruments for *resource efficiency* development in the field of the housing and communal economy.

Essence of the mechanism, terms and specific features of funding

Energy Performance Contracting, the performance contract is an agreement for implementation of energy efficient technologies.

Performance contracts first appeared at the end of the 1970s-beginning of the 1980s in countries of the Western Europe and the North America. Exactly then some companies that worked in the field of energy efficiency offered to their clients a new variety of the service, in the framework of which work for an energy efficiency project's implementation can be covered due to the future economy provided as a result of its implementation.

A performance contract is concluded between the customer⁴⁵ and the company that provides energy efficiency enhancement services. Most frequently, an energy servicing company (ESCO – see Box 8) acts as such company, although this can also be any other private consulting firm.

The subject of a performance contract is performance of a range of work for implementation of energy efficiency measures.

Box 8. What is ESCO?

An energy servicing company (ESCO) is an individual or a legal entity providing power services and / or performing other energy efficiency enhancement measures at an object or in premises of the user and undertaking a certain financial risk that is related to realization of this activity. The fee for services provided (fully or partly) depends on results of energy efficiency enhancement and performance of other agreed activity evaluation criteria⁴⁶.

ESCO, as a rule, provides the following technical services:

- realization of investment power audits;
- determination of energy efficiency measures;
- designing of an energy efficiency project;
- performance of assemblage and commission work at the object;
- training of the technical staff working at the object;
- realization of service and warranty repair of energy efficiency capacities;
- monitoring of the savings obtained.

Activity of ESCO, however, is not limited to provision of technical services. ESCO must also conduct analysis and prepare information necessary for financial institutions in order to estimate the financial and economic expedience of the project.

ESCO can perform work on the basis of performance contracts (funding of work due to own means and repayment of the funds from the future saving of the customer's costs) or on the basis of ordinary work performance subcontracts.

⁴⁵ Any person that is the owner or representing the owner of the object at which it is necessary to reduce energy consumption can act as the customer (thus, for example, LSGBs can come forward as the customer in relation to production capacities and objects of the budgetary sphere, heating enterprises in relation to production capacities, joint owners directly (or via the condominium) in the housing fund).

⁴⁶ Report "Suggestion on the ESCO Scheme in Ukraine" under a project No. 24211-A,B within the framework of consulting services provision by EBRD, May 2009; updated in 2008 "Report on Energy Servicing Companies in Europe for 2005 (Report on European ESCOs)", published by the Directorate General of the European Commission "Joint Research Center " in 2005.

Specific features of the performance contract. Energy Performance Contracts (performance contracts) differ from traditional contracts with power-technical or consulting companies, because the remuneration to the company (be it ESCO or another company) is paid from the power savings actually obtained as a result of project implementation, not on the basis of a price fixed in the contract.

Consequently, the specific feature of performance contracts is that at their conclusion opportunities are created for investing without involvement of own resources of the customer. All expenses of energy efficiency measures' implementation are incurred by the contractor. Their repayment takes place due to the future economy provided as a result of the project's realization.

Validity term of the performance contract. As a rule, the validity term of a performance contract makes up from 3 to 15 years. However, in every concrete case the parties freely coordinate it. Decisive there are aspects related to funding and property.

Risks. For energy servicing companies, a performance contract is a rather risky transaction. Only a respectful energy servicing company with an extensive experience of energy efficiency technologies implementation can offer such service.

The main risks of ESCO include the following:

- The risk of the customer's providing unreliable and (or) incomplete information both at the stage of realization of the investment power audit and at the stage of operation and monitoring;
- The risk of unskilled operation by the customer of the energy efficient equipment;
- The risk of the customer's insolvency.

To minimize such key risk as the customer's insolvency, before conclusion of the performance contract it is necessary to conduct an *investment audit*⁴⁷. The main task of the experts who conduct the investment audit is to formulate conclusions concerning financial capacities of the customer (enterprise) in the long-term prospect.

Box 9. ESCO in Ukraine

Currently, in Ukraine more than 10 energy servicing companies (ESCOs) have been created and are functioning, but implementation of performance contracts is not their key type of activity.

The point is that the beginning of ESCOs' activity in Ukraine took place in the middle and at the end of the 1990s of the past century, when first attempts to take care of energy efficiency in different sectors of the industry were made. However, the then low cost of power carriers did not induce enterprises to introduce energy efficiency measures.

Considering that, almost all ESCOs were forced to reorient to other types of activity related to economic use of energy carriers, provision of information services, selling of energy efficient equipment, development and realization of energy carriers, providing services in the communal sphere. Currently, the list of ESCOs' activities in Ukraine includes such types as power consulting, power audit, energy efficiency programs development in regions, drafting perspective development

⁴⁷ Investment audit within the framework of performance contract's implementation envisages analysis of all spheres of activity of the enterprises that can influence solvency of the enterprise in the future (legal examination of constituent documents and documents confirming the property right or other rights to ownership and disposal of the enterprise's property; analysis of the credit history of the enterprise; analysis of liquidity and efficiency of use of fixed assets, profitability in dynamics; analysis of financial indicators of the customer for the three previous years; analysis of account payable and receivable, settlements under tax obligations for the three previous years; analysis of the system of the financial planning, control and accounting, etc.).

plans for communal economies.

The largest and best known in the territory of Ukraine are CJSC "UkrESCO" (Kyiv), "ESCO-Rivne" (Rivne), "ESCO-North" (Kharkiv), ESCO "EcoSys" (Zaporizhya), CEC "ESCO-Center" (Kyiv), "ESCO-East" (Zaporizhya), CE "Communal Energy Servicing company of Kherson", ESCO "EnergoEngineering" (Dnipropetrovsk).

Currently, "UkrESCO" and "ESCO-Center" are virtually the only energy servicing Ukrainian companies using the mechanism of funding on the basis of energy performance contracting. Dnipropetrovsk ESCO "EnergoEngineering" also intends to implement energy efficiency activities in buildings of the budgetary sphere on the basis of energy performance contracting.

Types of performance contracts. There are two main types of performance contracts⁴⁸:

1. with *joint* savings, when the financial risk related to funding by a third party (the creditor) is undertaken by the ESCO reflecting the credit in its balance. The savings are distributed between the ESCO and the municipality, while receipt by the municipality of a certain *percent* of the savings is stipulated in the contract, but the *scale* of these savings is not guaranteed;
2. with *guaranteed* savings – when funding from the third party (creditor) is involved by the municipality, which reflects the credit in its balance. Consequently, the financial risk is undertaken by the municipality. The ESCO guarantees repayment of the credit (i.e., it guarantees that the savings will be sufficient for covering the investment costs, and if they appear not enough, the ESCO pays the difference between the savings obtained and payments under the project) and a certain volume of the additional savings that may be distributed between the municipality and the ESCO.

There may also exist different options or combinations of these two main types. The essence of performance contracts common for the both types lies in that the contract is drafted so that investment costs are paid due to the savings.

Performance contracts with guaranteed savings include lower risks for municipalities than contracts with joint savings due to the combination of the lower risk with the lower cost of the funding that municipalities can involve (for example, through a donor). Sometimes financial institutions are more willing to credit municipalities, not ESCOs, as, in their opinion, such credits are better secured (ESCOs in Ukraine are still at the stage of becoming, and they do not have a sufficient credit history).

Possible sources of funding for energy efficiency projects. Providing for a project's funding is one of the most important tasks for its successful implementation. ESCOs are selected among the currently accessible financial sources in the market adapting them for using within a performance contract.

Thus, in particular, the sources of ESCOs' energy efficiency projects funding can include the following:

- Own funds of the customer;
- Own funds of the contractor;
- Loan funds involved either directly by the customer or by the ESCO contractor;

⁴⁸ The principles of funding municipal energy efficiency projects in the countries of the Commonwealth of Independent States // Alliance To Save Energy. - 2007. – Electronic resource. – Access: http://reenergy.by/index.php?option=com_content&task=view&id=236&Itemid=88888955

- Budgetary funds (of the state and / or local budgets) allocated under the respective programs;
- "Grant" funds provided by third parties – non-state organizations interested in energy efficiency projects' implementation;
- Funds of international technical assistance.

The type of funding depends on whether the customer wishes to have obligation beyond its budget, on who risks at the project's implementation and what obligations under payments it is necessary to provide for a concrete project.

All sources of funding, regardless of their origin, require substantiation for their use. I.e., any project must pass the stages of power audit, business plan development, realization of feasibility calculations to find out expedience of its implementation for the customer and for the ESCO, which must guarantee the economic effect of the project both for the customer and itself. If calculations conducted are convincing for the investor, the funding will take place, because, not depending on funding sources, any investor (even if these are grant funds) is interested in their effective use and repayment.

The practice of investments involvement under the mechanism of the performance contract in Ukraine proves that the investor extremely needs feeling support on the part of the customer or the state, or the local self-government body. Currently, this is expressed in the request to provide for mandatory cofunding for such projects (the part that the customer or the state / LSGB funds must make up 15-30% from the project cost. Investors are ready to fund the rest⁴⁹).

The stages of designing a municipal project using a performance contract are represented in Box 10.

Box 10. The stages of designing a municipal project using a performance contract

- 1) **Preparation and sending of the Expression of Interest (EI)** for realization of an investment power audit and implementation of an energy efficiency enhancement project in a target sector (for example, municipal buildings). The Expression of Interest consists of a short description of the essence of the work and basic data about the municipal objects in relation to which the audit is conducted, as well as a request for information about economic and financial capacities of the firm, including its HR potential, audit tools and experience.
- 2) **Sending the Call for Offers (CO)** to all firms deserving attention and that responded to the EI. In the Call for Offers, information in relation to consumption of energy at the object, equipment, working schedule, servicing problems, information about the equipment that it is planned to install or about reconstruction plans, as well as the dynamics of communal payments for the recent three years are indicated. It is recommended to organize a visit for interested ESCOs to the object, so that they could familiarize with it and communicate with the object staff before providing the response to the CO.
- 3) **Offers' evaluation** in accordance with provisions of the Call for Offers.
- 4) Completion of ESCO selection based on the skills and experience available, at the same time envisaging the accordance of the skills possessed by the ESCO with the needs of the municipality.
- 5) **Signing the investment audit contract**, an agreement with the ESCO about development of the project concept and holding of the investment audit (IA). The IA findings report serves as a basis for the performance contract between the municipality and the ESCO, in which all short-

⁴⁹ All over the world, performance contracts as they are appear profitable. In Ukraine, subject to condition of the current tariff policy, performance contracts are not such, since no economy in the monetary form is achieved, although saving in Gkal can be achieved. That is why such support is necessary.

term, medium- and long-term energy efficiency activities and periods of their pay back, as well as the baseline data to be used during monitoring and verification are submitted.

- 6) **Preparing information about the project for funding by a third party**, if it is needed for the project. The party that wishes to involve funding for the project's implementation (the municipality or ESCO) prepares a set of data about the project, including the IA report, for submission to financial institutions for their analysis. Financial information contained in the IA report is the key factor for convincing the financial institution of the expedience of providing the credit.
- 7) **Performance contract conclusion**. In the contract, they set the terms and determine the conditions in accordance with which the ESCO shall implement energy efficiency enhancement activities, including obligation of the ESCO and the municipality, terms of paying the remuneration to the ESCO, terms of funding, servicing procedures, staff training, monitoring and verification, risks and risks reduction action plan, etc.
- 8) **Monitoring and verification** of outcomes are conducted in accordance with procedures set in the performance contract. In the M&E process, the actual savings during the contract validity term are defined and receipt by all the parties of complete return from the performance contract is provided for, including the ESCO's remuneration. This process consists of confirmation of equipment installation proceeding from specifications indicated in the contract and envisages regular exchange of information between the ESCO and the municipality for the sake of monitoring of successful energy efficiency measures' implementation.

Source: The principles of funding municipal energy efficiency projects in the countries of the Commonwealth of Independent States // Alliance To Save Energy. - 2007. – Electronic resource. – Access: http://reenergy.by/index.php?option=com_content&task=view&id=236&Itemid=88888955

Compared with traditional mechanisms, a performance contract envisages conclusion of long-term agreements, requires impeccably operating communications, managerial skills and ability to forecast risks.

Key advantages (opportunities) of application as an investment projects funding resource

- The performance contract creates opportunities for investing without involvement of the customer's own resources;
- Attractiveness of the performance contract for the customer is obvious: if there is no economic effect – there is no payment for the ESCO's services. I.e., if no savings are achieved, the ESCO will not claim for compensation of the costs incurred as a result of the project's implementation;
- The customer (for example, the municipality, heating enterprise or joint owners of apartment houses) carries out settlements only due to funds economized as a result of implementation of energy efficient technologies. At the same time, no own funds are allocated for the project's implementation;
- The mechanism of performance contracts contributes into efficient use of funds (if the contractor performs the work due to budgetary funding, it obtains the money regardless of whether the economic effect from such project is achieved or not; in the case of the project's implementation under a performance contract, obtaining of the economic effect is the key and necessary condition of settlements for the work performed)
- For implementation of an energy efficiency project, the customer does not need to have the entire amount of funding, only 15-30%, the rest is the concern of the ESCO, which selects the investor;
- The funding risks are distributed among the investor, customer, ESCO.

Key drawbacks (limitations) of application

- Undeveloped ESCO market in Ukraine. Insufficient number of the companies that would be able to provide services on the basis of performance contracts;
- Absence of clear understanding of the essence and opportunities of performance contracts on the part of top management of LSGBs and HCE enterprises. This service is only appearing in Ukraine, and thus a certain distrust is observed in its regard;
- Even if managers of local self-government bodies and HCE enterprises understand all positive aspects of performance contracts, not always there are financial institutions ready to finance energy efficiency projects in the field of the HCE;
- Local self-government bodies cannot undertake financial obligations under energy servicing agreements exceeding one budgetary period, as this is not envisaged by the Budgetary Code of Ukraine. As a result, there are known examples of breaches of contract terms on the part of municipalities, and thus companies providing services in the field of energy efficiency do not wish to undertake all the risks related to conclusion of contractual relations with municipalities;
- The system of pricing and charging payment for power resources and housing and communal services does not provide for the economic basis for performance contracts' realization, as it does not make it possible for the ESCO during such contract's implementation (1) to carry out charging users for power resources for the volume of consumption fixed before the energy efficiency measures' implementation; (2) to leave in the tariff calculation the volume of power resources fixed before the project's implementation. Accordingly, there is the problem of returning the ESCO's investments due to achievement of resources' economy.
- The system of state regulation of tariffs on housing and communal services in Ukraine does not currently make it possible to enter into contracts between services providers and users under a certain agreed price for a certain term. In accordance with requirements of the legislation, tariffs on housing and communal services must be formed and set (coordinated) based on the procedure set by the Cabinet of Ministers of Ukraine.

Examples of applying performance contracts in the HCE sphere in Ukraine

The experience of implementing energy efficiency projects under performance contracts in the housing and communal economy of Ukraine has so far not become widely popular. However, certain experience does exist both in the housing fund and in buildings of the budgetary sphere.

Housing sector

Within the framework of the international technical assistance project „Sustainable Self-Governance of Apartment Houses”, which was funded by the Program of Social Transformations in the Central and Eastern Europe (MATRA) of the Ministry of Foreign Affairs of the Kingdom of Netherlands, a scheme of involving investments was developed for realization of capital work in apartment houses.

Only the houses where condominiums were created (associations of joint owners of apartment houses) could participate. In fact, it is condominiums that are the "organized owner" able to form and express the common will of joint owners of the apartment house. Currently, condominiums are the only legitimate mechanism of decision-making in the conditions of common property at absence of hundred-per-cent consent of the joint owners.

At the condominium's board meetings the decision was made to authorize specialists of LLC "CEC "ESCO-Center"⁵⁰ and LLC "Henkel Bautechnik (Ukraine)"⁵¹ to conduct power audit and to prepare recommendations in relation to energy efficiency enhancement in apartment houses, the list of activities and the amount of savings that can be obtained after their implementation.

At the condominium's board meetings the decision was made to conduct the work⁵² and LLC "CEC "ESCO-Center" was selected as the provider of centralized heating and hot water supply services. The resolution of the condominium determining the services provider was coordinated with the executive committee of Nizhyn city council. The status of the services provider gave LLC "CEC "ESCO-Center" the right to conclude agreements⁵³ with every owner of the apartments about provision of centralized heating and hot water supply services and to conclude an agreement with the heating organization for purchase of heating energy.

In the agreement between the condominium and LLC "CEC "ESCO-Center", the average annual level of heating energy consumption as of the beginning of the house's thermo-modernization work was fixed. The saving of heating energy used for heating and hot water-supply is expected to be at the level of up to 50%. For the ESCO, the difference between the fixed level of energy consumption by the house (in relations with the condominium) and the actual level of energy consumption after energy efficiency measures' realization (in relations with the heat-generating organization) will be the source of credit repayment. Joint owners of apartment houses participating in the project will obtain comfortable living conditions and will gradually repay to the ESCO the cost of the work performed by payment of monthly fees for services.

The total cost of the work on realization of energy efficiency measures in the 2 residential houses of Nizhyn makes up approximately 680 thousand euros, which makes up 45 euros per 1 sq.m⁵⁴.

LLC "CEC "ESCO-Center" addressed the Fund "Dutch International Guarantees for Housing" (DIGH⁵⁵) with the prepared business plan for funding, which came forward as a partner in realization of a pilot project representing the Dutch side. The term of the agreement – 10 years. Date of loan repayment – 26.02.2019. The credit is secured with the claim right to monetary obligations⁵⁶.

Based on the generally accepted rules, the fund funds 75% of the project cost. 25% must be financed from other sources. In this example, funds of joint owners, the city budget and the state budget became such other sources⁵⁷.

⁵⁰ <http://www.esco-center.com.ua>

⁵¹ www.henkel.ua

⁵² For the list of activities planned for realization, see <http://www.minjkg.gov.ua/activity/jp/jp-kp/221-v-nizhini-prezentovano-pershij-v-ukrayini.html>.

⁵³ Typical agreement about centralized heating, cold and hot water supply and sewage services provision ratified with Resolution of the Cabinet of Ministers of Ukraine of July, 21, 2005 No.630

⁵⁴ It is necessary to note that this figure is tentative. A concrete list of activities recommended for this house is prepared during realization of the power audit of a concrete house, calculation of labor costs, as well as the order of the activities' implementation were conducted. At calculation, important are both the size of the building, the number of apartments, the heating floor space, the number of inhabitants, as well as the cost of materials and labor force in the region.

⁵⁵ For information about DIGH and terms of funding, see chapter 3.4.6 hereof

⁵⁶ For more details, see 3.3.

⁵⁷ As of the moment of drafting this report, for one of the houses funding from the state budget was not yet allocated. This made it impossible to use the borrowed funds in full. Work in the house was initiated at the expense of funds of LLC "CEC "ESCO-Center".

Budgetary institutions

An example of an energy efficiency project's implementation under the performance contracting mechanism in budgetary institutions is modernization of heating systems of secondary rural schools of Snyatynsky rayon of Ivano-Frankivsk region. This project was implemented by UkrESCO – the first in Ukraine and CIS countries energy efficiency servicing company offering "turn-key" energy efficient technologies with involvement of financial resources of the European Bank for Reconstruction and Development (EBRD).

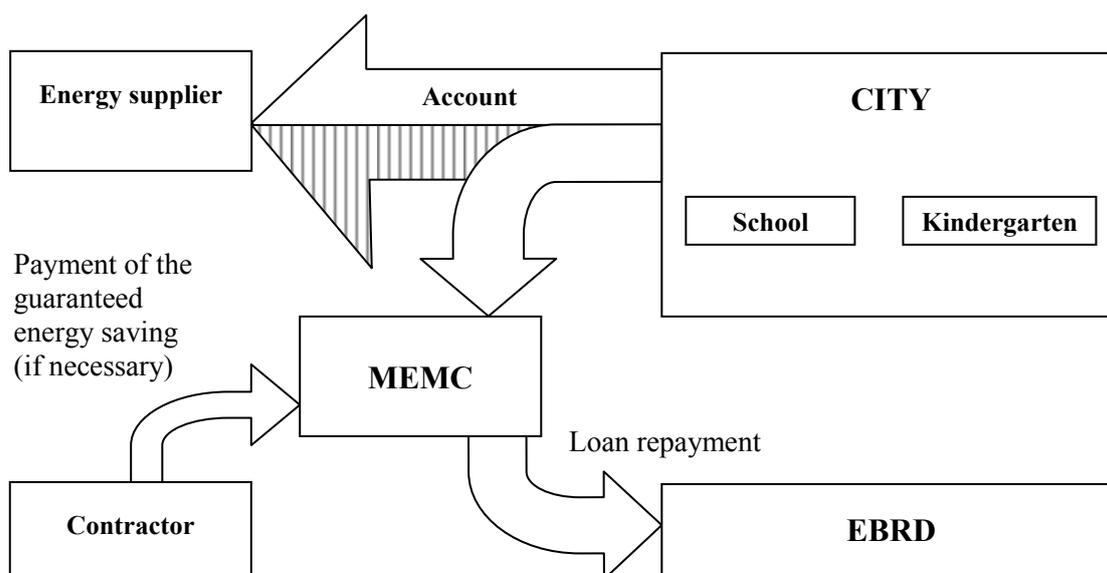
Within the framework of the project, nine energy efficiency activities were realized at nine schools of the rayon. In particular, reconstruction of heating systems of schools was carried out with complete replacement of main and auxiliary equipment of individual boiler plants.

Moreover, EBRD tries to implement the concept of ESCO in the budgetary sphere of the cities of Dnipropetrovsk, Odesa and Zaporizhyya:

- EBRD consultants have performed the analysis of the regulatory and legal framework in the sphere of budgetary relations and procurement and developed the ESCO concept based on the example of the cities of Dnipropetrovsk, Odesa and Zaporizhyya;
- EBRD is preparing a project with Dnipropetrovsk – it is planned to provide a loan amounting to 20 million euros for the communal energy management company for funding energy efficiency measures in budgetary houses (schools, kindergartens, hospitals);
- A significant program of technical assistance is planned for preparation and implementation of the projects – selection of houses, holding of power audits, determination of baseline energy consumption, development of a typical energy performance contract, holding of tenders, construction of the monitoring system, etc.

The project implementation mechanism envisages the following scheme of money flows (pic.1).

Pic. 1. Scheme of money flows after implementation of the energy efficient project in the budgetary sphere



Source: Presentation by G.Gayda. S. Maslichenko, EBRD, 10.12.2009 "Funding Projects in the Municipal Sector: EBRD experience and plans"

6.2 Public-Private Partnership

6.2.1 Lease

The essence and mechanism of involving funds within lease agreements

Organizational and economic relations of lease of communal property are regulated by the Civil (in particular, Section 58), Economic (§ 5, Section 30) Codes of Ukraine and the special legislative act – the Law of Ukraine “On Lease of State and Communal Property” of 10.04.1992 No. 2269-HP, with amendments (hereinafter – Law No.2269), as well as separate provisions of the Law of Ukraine "On the State Budget of Ukraine for 2009" (article 73) and numerous secondary regulatory and legal acts.

In accordance with the current legislation, the lease is contract-based term payable use of property necessary for the tenant for realization of commercial and other activity. In accordance with part one of article 283 of the Economic Code of Ukraine, under a lease agreement one party (lessor) passes to the second party (tenant) property for realization of economic activity for use for a pay for a certain period. Starting from 2007, laws of Ukraine On the State Budget of Ukraine for the proper years contain an imperative provision, in accordance with which transfer for lease of state and communal property is carried out exclusively on competitive basis.

Consequently, organizational legal and financial economic relations of the parties under a lease agreement are registered with a lease contract, substantial provisions of which, in accordance with provisions of Law No.2269, include:

- Lease object (property composition and cost in view of its indexation);
- Term for which the lease contract is signed;
- Rent in view of its indexation;
- Procedure of using depreciations deductions;
- Restoration of property leased and condition of its returning;
- Performance of obligations;
- Security of the obligations' performance – a forfeit (fine), bail, advance payment, collateral, etc.;
- Procedure of the lessor's control lessor over the state of the lease object;
- Responsibility of the parties;
- Insurance by the tenant of the property leased;
- Duties of the parties in relation to fire safety of the leased property;
- Other terms upon the parties' consent.

Proceeding from the abovementioned, it is possible to consider that the most feasible sources of funding energy efficiency investment projects under agreements of leasing communal property under conditions of the current legislation are:

1. Depreciation deductions on leased fixed assets, other irreversible tangible assets and intangible assets. Charging depreciation for irreversible tangible assets and intangible assets in the *bookkeeping* accounting is carried out by centralized heating enterprises in accordance with the requirements of Order of the Ministry of Finance of Ukraine "On Approval of the Provision (Standard) of Bookkeeping 7 "Fixed Assets"" of April, 27,

2000, No. 92 with amendments. Depreciation deductions under Law No. 2269-HP are used for restoration of leased capital assets.

2. Investment obligations of the tenant due to own funds and profit in accordance with conditions of the lease agreement for restoration (improvement) of the leased property under an investment program coordinated with the lessor, which is an inalienable constituent part of the of lease contract.
3. Investment constituent in the set tariffs on heating energy and centralized heating services.

Each of the abovementioned sources must be described in detail in provisions of the contract of communal property lease. The mechanisms of involvement and funding of investment projects by the tenant should preferably also be included into lease conditions during realization of the communal property lease competition.

Key advantages (opportunities) of application

- Responsibility of the tenant set by legislative acts of Ukraine and the agreement for target use of depreciation deductions for improvement of leased objects and the investment constituent of tariffs, including for the purpose of investment projects implementation;
- Involvement of short-term (long-term) investments due to own funds of the tenant (private business) for technical re-equipment of heating enterprises;
- Regulatory and organizational opportunities of influencing and control realization by the lessor over the targeted use of investment funds by setting the tenant's competition selection terms.

Key drawbacks (limitations) of application

- Limited financial and credit resources of potential tenants as a result of the financial crisis and dependence of lease decisions on subjective factors;
- Substantial risks of a failure of the tenant to perform undertaken obligations related to implementation of the investment program for improvement of fixed assets and absence of efficient mechanisms of enforcing their implementation, apart from judicial settlement;
- Risks of non-targeted use by the tenant of depreciation deductions and the investment constituent in tariffs;
- Absence of a systemic control by public authorities, parliamentary commissions and responsible structural subdivisions of executive committees of city councils over respecting interests of the territorial community and performance by the tenant of agreement provisions, targeted use of depreciation deductions, the investment constituent of tariffs and investment contractual obligations.

Examples of application in Ukraine

A positive example of successful application of lease relations in the sphere of heating in Ukraine is activity of lease enterprises "Western Boiler" in Khmelnytsky, "Novograd-VolynskTeploKomunEnergo" in Novograd-Volynsky of Zhytomyr region. During the period of activity of these lease enterprises, capital assets of the heating integral property complex (IPC) have been substantially updated, and all improvements created were transferred by lease collectives into communal property of territorial communities without any indemnification for the tenants.

The American company "Contour Global" leases Kramatorsk power-plant and heating objects of Kramatorsk. OJSC "ObiTeploKomunEnergo" in Chernigiv, LLC "NizhynTeploMerezhi", CJSC "TeloVodEnergiya" of Kamyanets-Podilsky have already for a few years leased the heating IPCs of the cities. However, these enterprises do not reveal information about performance of investment provisions of the communal property lease agreements.

6.2.2 Concession

The essence and mechanism of involving funds within the agreements

Concession, pursuant to art. 1 of the Law of Ukraine "On Concessions" of July, 16, 1999 No.997-XIV with amendments (hereinafter – Law No.997), is considered to be provision for the purpose of satisfaction of public needs by an authorized executive body or a local self-government body on the basis of a concession agreement on the payable and term basis for a legal entity or an individual (a subject of entrepreneurial activity) the right to creation (construction) and (or) management (operation) of the concession object (term payable ownership) under the condition of the subject's of entrepreneurial activity (the concessionaire) undertaking of obligations for creation (construction) and (or) management (operation) of the concession object, property responsibility and possible business risks.

A similar definition of the concession is also contained in RT. 406 of the Economic Code of Ukraine.

In other words, the authorized person (property owner) provides a stakeholder with the right to create certain amenities at its own expense and risk, subject to the condition of their (amenities') further operation by this person in accordance with the agreement signed and payment of set fees for that.

Relations associated with concession activity are regulated by the Economic Code of Ukraine (chapter 40), the law on concessions No. 997, other regulatory and legal acts passed in accordance with them.

Article 10 of Law No.997 defined substantial provisions of the concession agreement, in particular:

- Concession object (composition and cost of the property or technical and financial conditions of creating the concession object);
- Procedure of using depreciation deductions;
- Terms and volumes of improving the concession object and the procedure of indemnification of the improvements indicated;
- Restoration of the concession object and condition of its returning;
- Conditions of transfer to grantor of the concession object upon termination of the validity term of the concession agreement in the proper technical state pursuant to requirements of state standards, norms and rules operating as of the moment of transfer in the respective activity sphere;
- Liability for a failure to perform or improper performance of obligations implied by the concession agreement;
- Conditions of setting, changing prices (tariffs) on commodities (work, services) produced (provided) by the concessionaire;
- The right to receiving information and realization of verification of the agreement's provisions implementation;

- Insuring by the concessionaire of concession objects taken as concession;
- The procedure and conditions of transferring, including with provision of a guarantee for creditors, the rights and obligations implied by the concession agreement, etc.

Upon the consent of the parties, it is also possible to stipulate in the concession agreement other terms, including those envisaged by special laws on concession activity in separate spheres of economic activity.

Thus, concession, as well as lease, as it is mentioned above, is one of forms of public-private partnership. As well as in lease contracts, under concession agreements on communal property, the possible sources of funding investment projects are the following:

- Depreciation deductions in accordance with the current legislation. As a substantial concession agreement provision, the mechanism of charging and using depreciation for restoration of leased irreversible assets is expressly represented in the concession agreement.
- Investment obligations of the concessionaire in compliance with provisions of the agreement and the concession competition for restoration (with indication of the volumes of improvement) of the concession object, which are an inalienable constituent of the concession agreement.
- The investment component in the set tariffs on heating energy and centralized heating services as the source of targeted funding by users of investment programs.

Key advantages (opportunities) of application

- Set by legislative acts of Ukraine and the agreement *responsibility* of the concessionaire for operation, repair, capital investments related to restoration of the fixed assets of the territorial community, maintenance and expansion, improvement of the quality of services;
- The agreement stipulates *targeted* use of depreciation deductions and the investment constituent of tariffs for restoration of concession objects (including for realization of energy efficiency investment projects), which in the case of availability of effective control by the territorial community and CRD bodies makes their non-targeted use impossible;
- The possibility of involving long-term investments of the private sector for technical re-equipment of heating enterprises and realization of energy efficiency activities and due to reversible assets or profit of the concessionaire;
- Risks of non-funding or insufficient funding are substantially limited (legislatively set opportunities of receiving information, as well as realization of verifications by the concession objects owner in relation to observance by the concessionaire of provisions of the concession agreement and targeted use of depreciation and investment funds).

Key drawbacks (limitations) of application

- There is virtually no experience of concluding concession agreements in the field of heating in Ukraine;
- Risks of non-performance by the concessionaire of undertaken obligations of funding the investment program envisaged by the agreement and the risk of non-targeted use of investment funds;
- Limited available financial and credit resources of potential investors-concessionaires

as a result of the financial crisis;

- Non-perfect judicial system and non-efficient judicial settlement of disputes related to performance of concessionaires' investment obligations.

Examples of application in Ukraine

The city of Artemivsk (Donetsk region). In 2007, Artemivsk city council was the first in Ukraine to sign a concession contract in the field of heating with the Baltic company E-Energia (Lithuania)⁵⁸. The affiliate company LLC "Artemivsk-Energiya" of the Lithuanian group E-Energia took in concession objects of the city communal enterprise "ArtemivskMiskTeploMerezha" for the term of 40 years.

The annual concession payment into the local budget is 0.5 million UAH.

The concessionaire allocates funds for modernization of heating systems. Investors conduct replacement of the heating systems, modernization of boiler plants, installation of new boilers. Thus, for example, in 2009 the concessionaire involved its own financial resources in the amount over 13 million UAH (approximately 1.63 million USD) for modernization of the heating system of the city.

LLC "Artemivsk-Energiya" also calculated that replacement of boilers and heat-insulation of the networks will not result into significant economy of energy resources unless energy efficiency measures are realized in the houses, where up to 50% of heat are lost. Taking that into account, a project for heat-insulation of houses of one district was developed jointly with the city administration, implementation of which would make it possible to reduce heat losses by up to 10-15%. The cost of implementation of the pilot project "Warm House" was evaluated as 86 million UAH. A half of this sum was funded due to funds of the local budget, the rest was paid by private investors and inhabitants of the houses. At the same time, for inhabitants this was quite an acceptable amount – approximately 1.5 thousand UAH per apartment.

Based on estimations, the pay back period for such project makes up seven or eight years⁵⁹.

The city of Severodonetsk (Lugansk region). In accordance with Resolution of the 69th session of Severodonetsk city council of the fifth convocation of 24.03.2009 No. 3011 "On determination of the winner of competition concession for the communal property object of the territorial community of the city of Severodonetsk of Lugansk region – CE "SeverodonetskTeploKomunEnergo", property of which is an integral property complex", of July, 17, 2009, the concession agreement was concluded between Severodonetsk city council and LLC "SeverodonetskTeplo".

The integral property complex of CE "SeverodonetskTeploKomunEnergo" is the concession object.

The right to management (operation) of the concessions object and its substantial improvement for the purpose of satisfying public needs in the field of centralized heating and hot water-supply services provision for all categories of consumers in Severodonetsk is passed to the concessionaire for the period of 30 years.

⁵⁸ <http://www.dsnews.ua/infrastructure/art32070.html>

⁵⁹ <http://news.finance.ua/ua/~2/80/all/2009/02/22/152118>

6.3 Incorporation of communal enterprises

Legislative aspects

Involvement of private capital into the communal sphere can be carried out through the mechanisms of incorporation of communal unitary enterprises by their transformation into economic partnerships, the most popular types of which there are limited liability companies (LLC) or joint-stock companies (JSC).

The key difference of LLCs from JSCs is that for an LLC involvement of private capital takes place not by issue of shares, as it happens with a JSC, but by participants' contributions, as to such company the very concept of shares does not apply. Instead, there are participants' parts. However, LLC participants cannot as freely dispose of their part as JSC shareholders can dispose of their shares. This can be a restrictive factor for potential investors.

At the same time, the point can be increasing of the statutory capital of the enterprise (created in the form of LLC) simultaneously with acceptance of a new participant as its participant, i.e. an investor. This requires amending the company's statute, however, from the organizational point of view it is a simpler way than additional emission of shares for a joint-stock company.

At the same time, transformation of a communal unitary enterprise into a JSC creates greater opportunities for involvement of private investments, that is why in this part of the report the point should rather be emission of shares of incorporated enterprises.

Emission of shares as a mechanism of involving investments can be used both by joint-stock companies created based on private property and by joint-stock companies based on community property ("incorporated"). Actually, issue and placement of own shares are a sign of a joint-stock company as such and are envisaged, in particular, by art. 152 of the Civil Code of Ukraine, articles 80 and 82 of the Economic Code of Ukraine, the Law of Ukraine "On Joint-Stock Companies", etc.

Box 11. What is a corporate communal enterprise?

The term a "corporate enterprise" in Ukraine is traditionally applied to enterprises of the state property that were transformed into open joint stock companies pursuant to Decree of the President of Ukraine "On Incorporation of Enterprises" of 15.06.1993. The same decree, actually, sets the definition of the term "incorporation", understanding it as "transformation of *state* enterprises, closed joint-stock companies more than 75 percent of the statutory fund of which are in the public domain, as well as production and research and production unions, the legal status of which was not before harmonized with the current legislation, into open joint-stock companies".

However, first, the abovementioned decree refers to enterprises of the state property. Point 3 of the decree only recommends to bodies authorized to manage communal property to realize incorporation pursuant to this decree. On the whole, the Decree of the President of Ukraine "On Incorporation of Enterprises" is mainly oriented towards resolution of the tasks of state property management and pre-privatization preparation of enterprises in the public domain.

Secondly, the abovementioned decree and other secondary regulatory and legal acts passed for its implementation currently no longer fully comply with the laws in force in Ukraine – in particular, taking into consideration enactment of the Law of Ukraine "On Joint-Stock Companies", which no longer envisages the organizational and legal form of an "open" joint-stock company (it was replaced with the "public" one).

It is also necessary to differently define the concept of incorporation. Article 63 of the Economic Code of Ukraine stipulates that "depending on the method of incorporation (founding) and forming of the statutory fund, unitary and corporate enterprises operate in Ukraine". It is thus directly indicated that corporate enterprises are "cooperative enterprises, enterprises created in the form of an economic partnership, as well as other enterprises, including those based on private property of two or more

entities". Consequently, in accordance with the current legislation of Ukraine, it would be correct to refer to incorporation, in general, in the case of transformation of any unitary enterprise into any corporate one in accordance with the abovementioned definition in the Economic Code.

Based on the abovementioned, below we interpret incorporated communal enterprises as communal enterprises transformed into joint-stock companies – regardless of whether such transformation was carried out in accordance with the Decree of the President of Ukraine "On Incorporation of Enterprises".

The specific feature of an *incorporated enterprise* is that after transformation of a communal unitary enterprise into a joint-stock company, all shares of the latter belong to the respective territorial community.

After that, two options of shares *alienation* are possible⁶⁰: either the territorial community alienates a part of the shares that belonged to it, or the joint-stock company conducts an additional emission of shares (for increasing of the statutory capital), and the additionally issued shares are sold to investors.

The first approach involves certain funds only into the local budget and thus *cannot* be considered as an instrument of involving investments for the enterprise.

At the same time, the second approach provides for that in exchange for the additionally issued shares, the enterprise can receive from shareholders funds in the form of contributions into its statutory capital. The possibility and the procedure of realizing an increase of the statutory capital of a joint-stock company by an additional issue of shares is defined by article 156 of the CCU and article 15 of the Law of Ukraine "On Joint-Stock Companies".

It is necessary to pay attention to that acquisition of shares of an enterprise (for certain exceptions) gives their owner the right to take part in its management, in particular – to vote at the general meeting of shareholders.

As well as in the case of bonds of enterprises, which were discussed in previous sections, shares issue is subject to registration. In accordance with part ten of article 6 of the Law of Ukraine "On Securities and the Stock Market", registration of shares issue is carried out by the State Commission for Securities and the Stock Market according to the procedure set by it. Actually, circulation of shares is allowed after registration by the State Commission for Securities and the Stock Market of the report on the results of shares placement and certification of the shares issue's registration.

The nominal cost of shares is set only in the national currency of Ukraine. As well as bonds, shares of Ukrainian enterprises can be placed outside Ukraine only based on a permission of the State Commission for Securities and the Stock Market (article 37 of the Law of Ukraine "On Securities and the Stock Market").

Speaking about additional shares issue by incorporated communal enterprises, it is necessary to also mention the specific features and sources of forming the statutory capital of such enterprise – for it is the available statutory capital that is one of major factors influencing decision-making by potential buyers of the enterprise's shares.

The specific features of the status of incorporated communal enterprises carrying out activity in the field of heating. Communal enterprises carrying out activity in the field of heating differ

⁶⁰ The possibility of shares' alienation for an incorporated enterprise belonging to the territorial community conditioned by provisions of part four of article 3 and part one of article 5 of the Law of Ukraine "On Privatization of State Property".

from lots of other communal enterprises because in the composition of property registered with them, there is property that cannot be privatized.

The point is "objects of the engineering infrastructure and equipping of cities, including networks, buildings, equipment related to supply of water, gas, heat for consumers, as well as sewage and purification of waste water" indicated in point "r" of article 5 of part two of the Law of Ukraine "On Privatization of State Property".

From the point of view of holding incorporation of a communal enterprise, its having the property that is not subject to privatization predetermines special conditions of its possible further use by the incorporated enterprise.

As the Law of Ukraine "On Privatization of State Property" forbade privatization of the abovementioned objects of the engineering infrastructure and cities equipping, they cannot – even with a consent of the respective local self-government body – be alienated for the benefit of individuals and legal entities, no sanction can be applied to them, they cannot be mortgaged. Such objects cannot be included into the statutory capital of the economic partnership⁶¹.

Thus, property of a communal enterprise that carries out activity in the field of heating in the process of incorporation is divided into two groups:

- the one that in accordance with the current legislation can be privatized
- the one that in accordance with the current legislation is not subject to privatization.

In the process of incorporation of a communal enterprise, the part of property of each of these groups is different.

Property subject to privatization is included into the statutory capital of the joint-stock company created.

Property not subject to privatization is passed to the joint-stock company created in the process of incorporation on the basis of a lease, concession, management agreement.

Besides, legislation also envisages other property rights, on the basis of which property can be passed to the enterprise – for example, the right to usage, etc. The separated *right to use the property* represents a considerable interest from the point of view of the possibility of including such right into the statutory fund of the incorporated enterprise. As in that case the economic partnership created as a result of the incorporation obtains the right to use the property, not the ownership right, it is thus possible to also pass to it property not subject to privatization. The current legislation assumes such opportunity, although no examples of its use in relation to property of communal enterprises in Ukraine are known to us.

However, it seems, it is exactly presence in the statutory capital of a joint-stock company of the separated *right to using the property* that is most attractive for potential investors, for the cost of such right, depending on other conditions, can be comparable with the cost the actual property the right to use which is included into the statutory capital of the partnership.

⁶¹ A joint-stock company, one of types of economic partnerships, is a legal entity. As follows from the content of article 1 and part four of article 3 of the Law of Ukraine "On Privatization of State Property", privatization is alienation of state and communal property for the benefit of legal entities and individuals. Part one of article 115 of the CCU and part one of article 85 of the ECU provide for that an economic partnership is the owner of the property passed by participants as their contributions. I.e., transfer of the property indicated in point "r" of part two of article 5 of the Law of Ukraine "On Privatization of State Property" into the statutory capital of a joint-stock company – even the one created based on a communal unitary enterprise – would be privatization of this property, and thus cannot be conducted.

Moreover, seizure of the property right included into the statutory capital of the joint-stock company is possible only at its liquidation, which advantageously differs it from lease, concession and other agreements, which imply a certain risk of termination for "political" reasons (in the case of changing of local self-government bodies' composition).

Key advantages (opportunities) of application

- Additional issue of shares of an incorporated communal enterprise makes it possible to involve into its statutory capital additional funds, which can be used for investment needs.
- Additional issue of shares of such enterprise means involvement of private capital, owners of which are interested in effective operation of the enterprise, its profitability and private investors' obtaining the opportunity guaranteed by the law to take part in management of the enterprise.
- Involvement of funds due to additional issue of shares does not require securing – mortgage, bail, guarantee, etc., although it requires competent and balanced forming of the statutory capital at the stage of the enterprise's incorporation.

Key drawbacks (limitations) of application

- Actual emission of shares is a comparatively complicated measure from the organizational point of view.
- In order to provide for actual attractiveness of the enterprise for potential investors, it is necessary to form quite a large statutory capital even at the stage of incorporation, which it is not easy to do taking into account the legislative prohibition of privatization of the greater part of communal property set for heating enterprises.

Examples of application in Ukraine

An example of incorporation is the Limited Liability Company "SvitlovodskPobut" created in the city of Svitlovodsk of Kirovograd region. The company was created with the local self-government body jointly with private partners and provides users with communal centralized heating and hot water-supply services.

6.4 Financial leasing

Financial leasing is one of possible tools of funding investments into the heating sphere.

Legislative aspects of financial leasing

Legislative and economic principles of financial leasing are defined in the Law of Ukraine "On Financial Leasing" No.723/97-VR of 16.12.1997 (in this section, hereinafter – the law).

In accordance with article 1 of the law, financial leasing (hereinafter – leasing) is a type of civil and legal relations arising out of a financial leasing agreement. Under a financial leasing agreement (hereinafter – the leasing agreement), the lessor is obliged to acquire an object as property from the seller (supplier) in accordance with the specifications and terms set by the lessor and to pass it for use to the lessee for a certain term no less than one year for a set fee (leasing payments).

In accordance with article 4 of the law, any legal entity can be a lease *subject*, namely:

- lessor – a legal entity that passes the right to owning and using the leasing object to the lessee;

- lessee – an individual or a legal entity that acquires the right to owning and using the leasing object from the lessor;
- seller (supplier) – an individual or a legal entity from which the lessor acquires the object that in the future will be passed as the lease object to the lessee;
- other individuals or legal entities being parties to a multilateral lease agreement.

The relations that arise in connection with the financial leasing agreement are regulated by provisions of the Civil Code of Ukraine on leasing, rent (lease), purchase and sale, supply taking into account the specific features set by the Law of Ukraine "On Financial Leasing".

Article 6 of the Law stipulates that the substantial conditions of a leasing agreement are:

- the object of leasing;
- the term for which the lessee obtains the right to use the object of leasing (lease term);
- the amount of lease payments;
- other conditions in relation to which upon the request of at least one of the parties it is possible to achieve a consent.

The law sets general rules and limitations in relation to definition of substantial provisions of the financial leasing agreement.

The object of leasing. In accordance with article 3 of the law, there is a limitation related to the object of leasing. The object of the leasing agreement (hereinafter – the object of leasing) can be a non-consumer item (intended for a repeated use) defined by individual features and related in accordance with the legislation to capital assets.

Plots of land and other natural objects, uniform property complexes of enterprises and their separated structural subdivisions (branches, workshops, areas) cannot be objects of leasing.

Property in public or communal domain and in relation to which there is no prohibition of transfer for use and / or ownership can be passed in leasing according to the procedure set by this Law.

Lease term. Article 6 of the law defines that the lease term is set by the parties to the leasing agreement in accordance with requirements of the law and, thus, cannot be more less than one year.

Leasing payments. In accordance with article 16 of the law, contribution of leasing payments is carried out according to the procedure set by the agreement. Leasing payments may include:

- a) the amount that compensates a part of the leasing object's cost;
- b) payment as a remuneration for the lessor for the property obtained in leasing;
- c) repayment of interests under the credit;
- d) other costs of the lessor directly associated with performance of the leasing agreement.

Key advantages (opportunities) of application

- The legislation of Ukraine does not contain limitations for the circle of legal entities that can carry out the activity of granting financial leasing services and using financial leasing services;
- An enterprise (lessor) not necessarily must be a financial institution for granting property to another enterprise in the form of financial leasing;

- Under conditions of financial leasing, there are no additional requirements concerning the collateral or security, as the property passed in leasing is a form of securing obligations under the agreement.
- One can start using the equipment at once, while it is possible to repay its full cost later (i.e., working assets are released for other objectives);
- There is the opportunity of drafting a special payments schedule with the lessor taking into account seasonal needs;
- All leasing payments can be added to gross expenditures of the enterprise.

Key drawbacks (limitations) of application

- The cost of financial leasing, which – compared with the credit – includes not only the interest, but also other costs of the lessor directly related to performance of the leasing agreement (remuneration, other costs incurred by the lessor, etc.), costs of insuring the property passed in leasing, etc.
- For registration of the financial leasing agreement, the lessee must pay an advance payment, which makes up from 20 to 50% of the commodity cost.
- Currently, in Ukraine leasing companies suggest signing agreements for the term of up to 5 years.
- Financial leasing actually limits the enterprise that needs to buy equipment in the choice of the equipment only to those suppliers that can offer the sale subject to financial leasing conditions, or they need to involve leasing companies, which will increase the cost of the agreement.

Examples of application in Ukraine

There is currently no available information about use of financial leasing in the field of heating. There are separate information messages from some producers offering their products subject to financial leasing conditions. There are also companies supplying power equipment subject to financial leasing conditions (in particular, LLC "Energo-Leasing Plus", which operates in Lviv region).

CJSC "Holding Company UkrTehnoProm" (producer of heating engineering) offers the program "Turnkey Boiler Plant" and assistance in obtaining funding subject to leasing conditions. In table 6.1, the average annual calculation of payments under financial leasing for the term of 2 years is shown provided advance payment of 30% of the commodity cost as leasing payment.

Table 6.1
Funding equipment acquisition subject to financial leasing conditions (offer of CJSC "Holding company UkrTehnoProm")

Name of units	Total unit cost, thousand UAH	Advance payment, 30% from the unit cost, thousand UAH	Funding subject to leasing of 70% of the unit cost, thousand UAH	Monthly payment, thousand UAH
HHB-192	259	77.7	181.3	12.1
HHB-288	346	103.8	242.2	16.1
HHB-384	399	119.7	279.3	18.6

Source: Prepared based on information from <http://www.ukrtehnoprom.com/uk/news/?id=1707>

7. Targeted Contributions of Condominium Members

Legislative aspects

Alongside with the concept of contributions (including targeted ones) the legislation uses the concept of payments by joint owners of apartment houses. But if payments (in the meaning of payments for maintenance and repair of the house or for housing and communal services) by joint owners are paid regardless whether a condominium is created in the house, contributions can be paid only by joint owners united in a condominium or a housing and construction cooperative.

Further, the issue of payments will be considered only in relation to condominiums – as in the absolute majority of cases only within the framework of this organizational and legal form it is possible to pass a legitimate decision in relation to realization of energy efficiency measures in a house, and that is why within the framework of this organizational and legal form use of contributions for these purposes has a practical sense.

Box 12. Concepts "contributions" and "payments" of apartment houses' joint owners

In the Law of Ukraine "On Association of Joint Owners of an Apartment House" use of the terms "contributions" and "payments" is ambiguous and not always, as it seems, proper. Here, these terms partly overlap but are not identical. The term "payments" is used in the context of "payments for maintenance and repair" of common property (art. 20). As follows from analysis of provisions of the law, "payments" (in contrast to "contributions") are necessary and mandatory. In this connection, the legislator pays separate attention to determination of the principles of making such payments (determination of the part of each of joint owners in the total volume of mandatory payments): according to the general rule, the part of a joint owner in the general volume of mandatory payments for maintenance and repair of common property is set proportionally to the total floor space of the premises owned by such joint owner.

Article 21 of the abovementioned law provides for that an association is authorized, "in accordance with the statute", to determine not only amounts of mandatory payments for servicing and repair of common property, but also their list. Though the Typical Condominium Statute ratified with Order of the State Committee for Housing and Communal Economy No.141 of 27.08.2003 does not develop this provision and does not set the procedure of defining the list of mandatory payments. Similarly, neither the law, nor the Typical Statute define jurisdiction of which of the condominium's management bodies includes setting of the *list* of mandatory payments – article 10 of the law attributes the general meeting with the right to only define their *amount*. Obviously, following the analogy, the authority of defining the list of mandatory payments of joint owners should also be attributed to jurisdiction of the condominium's general meeting.

It should be noted that point 7.11.7 of article 7 of the Law of Ukraine "On Taxation of Profits of Enterprises" directly mentions among incomes of a condominium exempt from taxation only contributions, but not payments (they are covered by another term used in this point – "funds").

On the other hand, it is important that mandatory payments for *running* repair can be partly or fully compensated for the joint owners by the state through the system of privileges and subsidies.

The issue of introduction or abolition of joint owners' contributions is not regulated enough: the Law of Ukraine "On Association of Joint Owners of an Apartment House" does not envisage the right of a condominium to determine the *list* of contributions at all. At the same time, the law attributes definition of their amount to jurisdiction of the general meeting. The list of possible contributions of joint owners – broken down by the special funds to which they are directed – can be defined based on the Procedure of Creating Special Funds of Associations of Joint Owners of an Apartment House ratified with Resolution of the Cabinet of Ministers of Ukraine No. 1521 of October, 11, 2002. Thus, the procedure envisages that

joint owners, based on the decision of the condominium's general meeting, can pay contributions for the following purposes:

- conducting work for improvement of operation of internal house engineering systems;
- capital repair of the house;
- other activities set by the general meeting.

The same procedure envisages that contributions by joint owners can be both one-time and regular (monthly) ones.

Article 17 of the Law of Ukraine "On Association of Joint Owners of an Apartment House" envisages the possibility of charging joint owners with arrears under contributions and payments within the judicial procedure.

In accordance with p.7.11.7 of article 7 of the Law of Ukraine "On Taxation of Profits of Enterprises", incomes of a condominium in the form of the abovementioned contributions are exempt from taxation.

Thus, to define the list, size and use of targeted contributions of joint owners for the needs of energy efficiency measures in apartment houses, it is possible to take as a basis the following legislative opportunities:

1. Collection of funds by joint owners for the mentioned purposes is possible through the mechanism of contributions into a special funds;
2. For introduction of contributions for the purposes indicated, it is necessary that the condominium's general meeting made the decision on payment of contributions into the special fund (for example, the capital repair of the house); the general meeting must also define the purposes and the procedure of spending the money from such fund;
3. The sizes of contributions are set by the condominium's general meeting and, based on the general rule, proportionally to the total floor space of premises owned by a joint owner;
4. The Law of Ukraine "On Taxation of Profits of Enterprises" directly mentions contributions as incomes of a condominium that are tax exempt.

Key advantages (opportunities) of application

- Involvement of funds of joint owners through the mechanism of contributions is comparatively easy (compared, say, with the credit) from the organizational point of view and the mechanism of mobilizing internal resources of a condominium.
- In the case of creating a condominium, there is the opportunity to legitimately involve through the mechanism of contributions funds of ALL joint owners of the apartment house for realization of capital work in the housing fund. By pooling contributions of joint owners with other sources of funding, it is possible to obtain, as a result, a significant effect.
- The decision made at the condominium's general meeting and collection of funds to the settlement account makes it possible to bring to account unconscientious owners not wishing to pay contributions timely.

Key drawbacks (limitations) of application

The key drawbacks of involving funds of joint owners for realization of investment projects through the mechanism of contributions are the following:

- The volume of funds, which it is thus possible to mobilize in a short time, is limited. At the same time, gradual accumulation of funds during a long time is ineffective because of devaluation as a result of inflation. This source suits best funding of indirect (periodic) small costs or for gradual repayment of a credit or funding commodities (works) for payment of which an installment was offered to the association.
- The current system of privileges and subsidies for low-income citizens does not cover contributions of joint owners used for energy efficiency measures.

Examples of application in Ukraine

In the authors' opinion, joining efforts of authorities and the community – budgetary funds and contributions of joint owners – is the most efficient approach. For receiving the opportunity of involving funds of the local budget for realization of measures in the residential houses in which joint owners undertook the responsibility for maintenance of their habitation, it is necessary to develop at the level of the respective community and to approve the "Program of Support for Associations of Joint Owners of Apartment Houses" or to envisage the proper section in another local program⁶².

Experience of some cities of Ukraine in involving contributions of joint owners for implementation of investment measures in the housing fund are shown below.

Thus, for example, in Kharkiv⁶³ the Program for supporting housing and construction cooperatives, housing cooperatives and associations of joint owners of apartment houses envisages mandatory co-funding of houses' major repair work involving own funds of HHC, HC and condominiums in the amount not less than 10% from the total cost of the repair and restoration work.

In Cherkasy⁶⁴, for support of condominiums, the session of the city council of November, 11, 2008 No. 4-683 approved the Program of forming and stimulating the effective housing owner – associations of joint owners of apartment houses of Cherkasy for 2008-2011. The city authorities fund 50% of the sum of the necessary major repair, the rest of the funding is provided by the condominiums' members⁶⁵. For example, some condominiums buy with their part of funds construction materials, and funds of the city budget are used for paying for the work.

The city of Chernivtsi has a long experience of involving the community into co-funding⁶⁶. Starting from 2006, annual city competitions among the population self-organization bodies, associations of joint owners of apartment houses, HHCs and HHTs for the best project of maintenance and equipping of residential houses, adjacent and inter-household territories take place in Chernivtsi. The funds are used for reconstruction of electric networks and equipment using energy efficient technologies, implementation of energy efficient technologies and equipping entrances and stairs of residential houses. The correlation of funds of city inhabitants and the city budget is 30/70.

It is also necessary to add that the impulse for approval of such programs for supporting condominiums was given due to activity of the United Nations Development Program

⁶² Thus, in the city of Novovolynsk supporting of condominiums is envisaged by measures of the Sustainable Development and Investment Climate Program (http://www.novovolynsk-rada.gov.ua/download/pish_rady/2008/23-20-d-15.08.08.doc).

⁶³ <http://www.citynet.kharkov.ua/citynet/index.jsp?pagename=mprogram54&language=ua>

⁶⁴ <http://www.ckrada.com/index.php?page=vykonkom>

⁶⁵ <http://www.rada.ck.ua/?page=news&id=1323>

⁶⁶ <http://www.city.cv.ua/cgi-bin/citynews.cgi?14.03.2008.14.13.37>

(UNDP⁶⁷), which came forward as a partner in funding projects subject to co-funding with the local budget and joint owners of apartment houses.

The attempt to help joint owners for realization of major repair work is made in the city of Alchevsk. Within the framework of the project "Affordable District Heating in Alchevsk", which is funded by USAID and implemented by the Municipal Development Institute, the model of implementing a demonstration energy efficiency project in the residential building by the address Gmyri str. 13, condominium "Vostok-2003" has been developed.

The general meeting of the condominium made the decision on holding the major repair and setting an additional mandatory payment for members of the Association.

The cost of all the work indicated, including development and approval of the design and estimate documents, supervision over construction work and the cost of materials, will make up approximately 1.5 million UAH.

For funding of all the work, "Alchevsk Development Fund" considers the possibility of allocating for the association 1.5 million UAH of charity assistance, out of which 1.2 million UAH – on the non-payable basis, and 300 thousand UAH – on the reverse non-payable basis.

The funds from the introduced mandatory payment by members of the association for realization of major repair and energy efficiency measures will be directed to the repair fund and will be accounted on a separate sub-account. To the owners of apartments in the house who are not members of the Association, it was offered to contribute the payment mentioned subject to the same conditions as to members of the Association.

Implementation of the investment mechanism that was developed in the city of Alchevsk is planned for 2010.

⁶⁷ <http://www.undp.org.ua/ua/home>

Annex 1

MUNICIPAL RATING OF LOCAL LOANS BONDS ISSUES IN 2005-2009*

Contractors	Rating kind	Rating	Forecast	Emission date	Last event date
Rubizhanska city council	DR Debtor's Rating	<i>suspended</i>		25.12.07	12.05.09
Rubizhanska city council	RD Rating of a Debt: Bonds total amount 10 000 000 UAH	<i>suspended</i>		27.06.08	12.05.09
Sevastopol city council	DR Debtor's Rating	<i>suspended</i>		24.12.04	14.04.09
Severodonetsk city council	RD Rating of a Debt: A series bonds for the amount 20 000 000 UAH	<i>recalled</i>		13.09.07	28.04.09
Severodonetsk city council	DR Debtor's Rating	<i>recalled</i>		13.09.07	28.04.09
Simferopol city council	DR Debtor's Rating	uaA	Stable	14.09.07	19.06.09
Simferopol city council	RD Rating of a Debt: Bonds total amount 20 000 000 UAH	uaA	Stable	14.09.07	19.06.09
Sumy city council	RD Rating of a Debt: Bonds total amount 50 000 000 UAH	uaA-	Stable	16.10.08	06.10.09
Sumy city council	DR Debtor's Rating	uaA-	Stable	16.10.08	06.10.09
Ternopil city council	RD Rating of a Debt: Bonds interest-bearing total amount 20 000 000 UAH	uaBBB-	Stable	12.06.08	18.06.09
Ternopil city council	DR Debtor's Rating	uaBBB-	Stable	12.06.08	18.06.09
Kharkiv city council	RD Rating of a Debt: Bonds total amount 100 000 000 UAH	<i>recalled</i>		14.06.05	04.09.08
Kharkiv city council	RD Rating of a Debt: Bonds total amount 505 000 000 UAH	<i>recalled</i>		13.05.08	21.04.09
Kharkiv city council	DR Debtor's Rating	uaA	Stable	03.12.04	17.09.09
Cherkasy city council	DR Debtor's Rating	uaBBB	Stable	21.06.07	28.10.09
Cherkasy city council	RD Rating of a Debt: Bonds total amount 5 000 000 UAH	uaBBB	Stable	28.11.05	28.10.09
Cherkasy city	RD Rating of a Debt:	uaBBB	Stable	12.10.07	28.10.09

* Source: Rating agency "Credit Rating". - Access: <http://www.credit-rating.com.ua>

MUNICIPAL HEATING REFORM

Contractors	Rating kind	Rating	Forecast	Emission date	Last event date
council	Bonds total amount 65 000 000 UAH				
Chernivtsi city council	DR Debtor's Rating	suspended		29.05.08	03.03.09
Lutsk city council	DR Debtor's Rating	uaBBB+ check list	Negative	15.03.07	22.10.09
Lutsk city council	RD Rating of a Debt: 1-A interest-bearing bonds for the sum 10 000 000 UAH	uaBBB+ check list	Negative	15.03.07	22.10.09
Lutsk city council	RD Rating of a Debt: E series interest-bearing bonds for the amount 50 000 000 UAH	uaBBB+ check list	Negative	13.03.09	22.10.09
Lutsk city council	RD Rating of a Debt: 1-B, 1-C, 1-D series interest- bearing bonds for the amount 30 000 000 UAH	uaBBB+ check list	Negative	06.03.08	22.10.09
Mykolaiv city council	DR Debtor's Rating	uaBBB	Stable	11.09.06	28.10.09
Mykolaiv city council	RD Rating of a Debt: A, B series bonds for the amount 50 000 000 UAH	uaBBB	Stable	27.09.07	28.10.09
Novokahovska city council	DR Debtor's Rating	recalled		14.09.04	19.08.05
Odesa city council	RD Rating of a Debt: for the amount 48 000 000 UAH	recalled		02.11.04	24.01.06
Odesa city council	DR Debtor's Rating	suspended		01.04.05	08.09.09
Poltava city council	DR Debtor's Rating	uaA	Stable	02.09.08	21.05.09
Frankivsk city council	RD Rating of a Debt: Bonds total amount 5 500 000 UAH	uaBBB+	Stable	02.11.05	07.05.09
Ivano-Frankivsk city council	DR Debtor's Rating	uaBBB+	Stable	07.05.09	07.05.09
Illichivsk city council	DR Debtor's Rating	uaA	Stable	11.10.07	19.10.09
Kamyanets-Podilsky city council	DR Debtor's Rating	suspended		27.04.06	28.10.09
Kamyanets-Podilsky city council	RD Rating of a Debt: Bonds interest-bearing total amount 20 000 000 UAH	suspended		07.05.09	28.10.09
Kirovograd city council	DR Debtor's Rating	recalled		21.12.04	30.09.05
Komsomolsk city council	DR Debtor's Rating	uaA-	Negative	06.04.06	26.05.09
Komsomolsk city	RD Rating of a Debt:	recalled		29.05.06	15.09.09

Contractors	Rating kind	Rating	Forecast	Emission date	Last event date
council	Bonds total amount 8 000 000 UAH				
Kramatorsk city council	RD Rating of a Debt: Bonds total amount 15 000 000 UAH	uaBBB	Negative	14.12.07	19.05.09
Kramatorsk city council	DR Debtor's Rating	uaBBB	Negative	14.12.07	19.05.09
Donetsk city council	RD Rating of a Debt: Bonds interest-bearing total amount 60 000 000 UAH	uaAA	Stable	04.06.09	04.06.09
Donetsk city council	RD Rating of a Debt: Bonds total amount 75 000 000 UAH	uaAA	Stable	17.04.08	04.06.09
Energodar city council	RD Rating of a Debt: Bonds total amount 10 000 000 UAH	uaA	Stable	01.09.08	22.10.09
Energodar city council	DR Debtor's Rating	uaA	Stable	01.09.08	22.10.09
Zhytomyr city council	RD Rating of a Debt: Bonds total amount 40 000 000 UAH	uaBBB	Stable	06.12.07	19.06.09
Zhytomyr city council	DR Debtor's Rating	uaBBB	Stable	06.12.07	19.06.09
Zaporizhya city council	RD Rating of a Debt: for the sum of 25 000 000 UAH	recalled		23.02.04	01.02.07
Zaporizhya city council	RD Rating of a Debt: Bonds total amount 60 000 000 UAH	uaAA-	Negative	01.04.08	21.05.09
Zaporizhya city council	DR Debtor's Rating	uaAA-	Negative	01.04.08	21.05.09
Zaporizhya city council	RD Rating of a Debt: Bonds total amount 75 000 000 UAH	uaAA-	Stable	18.04.05	21.05.09
Antratsit city council	RD Rating of a Debt: A series interest-bearing bonds for the amount 1 290 000 UAH turnover term till 18.11.07	recalled		10.08.04	25.03.05
Boryspil city council	DR Debtor's Rating	uaA	Stable	04.12.07	19.06.09
Boryspil city council	RD Rating of a Debt: Bonds total amount 9 000 000 UAH	uaA	Stable	04.12.07	19.06.09
Brovary city council	DR Debtor's Rating	uaBBB+	Stable	21.03.06	14.08.09
Vinnytsya city council	RD Rating of a Debt: Bonds total amount 10 000 000	uaBBB-	Negative	27.03.08	29.05.09

MUNICIPAL HEATING REFORM

Contractors	Rating kind	Rating	Forecast	Emission date	Last event date
	<u>UAH</u>				
Vinnytsya city council	<u>RD Rating of a Debt:</u> <u>Bonds total amount 20 000 000</u> <u>UAH</u>	uaBBB-	Negative	13.10.05	29.05.09
Vinnytsya city council	<u>DR Debtor's Rating</u>	uaBBB-	Negative	12.04.07	29.05.09
Vinnytsya city council	<u>RD Rating of a Debt:</u> <u>Bonds total amount 15 000 000</u> <u>UAH</u>	uaBBB-	Negative	12.04.07	29.05.09
Donetsk city council	<u>RD Rating of a Debt:</u> <u>Bonds total amount 75 000 000</u> <u>UAH</u>	uaAA	Stable	17.04.08	04.06.09
Donetsk city council	<u>DR Debtor's Rating</u>	uaAA	Stable	06.05.04	04.06.09

Annex 2

**NEFCO CLEANER PRODUCTION / ENERGY SAVING FACILITY
PROJECT PROPOSAL**

1. Project name	
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2. Borrower (enterprise)	
Type of ownership	
Address	
Phone / fax	
E-mail	

3. Project description (approximately 150 words, including listing of measures)
List of measures:
Total project value:
Planned type of the loan security:
Please, submit to NEFCO the balance sheet and the financial statement of the borrower for the recent three years

4. 4. Environmental benefits [tons/year]*	CO ₂	SO ₂	NO _x	CO	FOS**	Dust
Existing emission						
Emissions after implementing measures						
Total reduction in emissions						

* Table could be specified or added by other environmental benefits, for instance polluting substances in waste water (BOD, COD, suspended solids, heavy metals. Additive information on waste reduction and/or on waste collection and removal)

** Fugitive Organic Substances

5. Operating costs [EUR/year]	Present costs	After measures	Annual net savings
Fuel (oil / coal)			EUR
Electricity			EUR
Raw material			EUR
Environmental payments			EUR
Operation&Maintenance			EUR
Other			EUR
Total net saving			EUR
Pay back			Year

Tariffs EURO

MUNICIPAL HEATING REFORM

Oil		EUR/t
Gas		EUR/m3
Raw material		EUR/t
Electricity		EUR/kWh
Other		

6. Investments	Contribution of the Borrower (a minimum of 10% of the total investment (possibly in the form of works and services under the project))	Contribution of NEFCO	
Design and planning			EUR
Project management			EUR
Equipment			EUR
Installation			EUR
Other			EUR
Total investment			EUR

7. Non-quantifiable benefits efits that are difficult to present in numbers (environmental, social effects, etc.)

8. Financing	
<i>The NEFCO normally requires that a minimum of 10 % of the total investment is financed by the enterprise itself (possibly in the form of work and services under the project). The maximum Cleaner Production program loan amount is 350.000EUR. The maximum Energy Saving program loan amount is 400.000EUR.</i>	
The enterprise is aware of the conditions of the NEFCO Facility, and can arrange the required co-financing of the project. Yes/No:	

9. Form filled in by			
Organisation			
Contact person		Date	