

**TRANSFER OF SKILLS AND KNOWLEDGE TO THE
UNF/UNFIP FINANCING ENERGY EFFICIENCY AND
RENEWABLE ENERGY INVESTMENTS FOR
CLIMATE CHANGE MITIGATION**



Renaissance Finance International

Deltcho Vitchev

OBJECTIVES

- **Objective One:** establish a dedicated source of project finance – an Investment Fund - with the participation of public and private sector investors;
- **Objective Two:** enhance the skills of the private and public sector experts at the local level to identify, develop and submit bankable projects for financing to the fund and/or other sources of finance;
- **Objective Three:** provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support these investment projects.

TOOLS DEVELOPED BY THE ONGOING PROJECT SELECTION CRITERIA

UNITED
NATIONS

E



Economic and Social
Council

Distr.
GENERAL

ENERGY/WP.4/2000/8
6 June 2000

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

Steering Committee of the Energy Efficiency 21 Project

UNF/UNFIP Energy Efficiency Investments for Climate Change Mitigation

CRITERIA FOR THE SELECTION OF INVESTMENT PROJECT PROPOSALS

1. This programme is to assist experts from participating countries in the private and public sectors at the local level to identify, develop, facilitate financing and implement energy efficiency projects, including those in municipal lighting, hospitals and district heating, that meet environmental priorities in accordance with the goals of the programme. The programme will include the development of investment project proposals which meet the agreed project selection criteria identified through the following three sources:

- the training courses conducted in the framework of the project;
- the Demonstration Zone municipalities included in the project;
- National Coordination teams and Co-financing partners.

2. Promising project proposals will be presented for consideration to a wide range of financing institutions and facilities. The financial mechanisms which may be employed include, but are not limited to: environmental funds, loans by international financial institutions, energy efficiency funds and financing facilities, local banks, energy service companies (ESCOs), equity funds and capital market based instruments. Each of these sources of finance have their own criteria for the size of project, type of financing, geographical location, internal rate of return or other ratios among their principal requirements. Nevertheless, all sources of finance have certain basic criteria that any investment project and its sponsor must meet to qualify for financing.

GE.00-51747

TOOLS DEVELOPED BY THE ONGOING PROJECT PROJECT IDENTIFICATION FORMS

UNITED NATIONS FOUNDATION INC.
UNITED NATIONS FUND FOR INTERNATIONAL PARTNERSHIPS
UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Energy Efficiency Investment Project Development
for Climate Change Mitigation
Project Number ECE-CIS-99-043

Project Identification Form

This Form is intended for early identification of technically and financially viable projects in the field of energy efficiency. It is designed to help the specialists reviewing it to understand the context, key issues and requirements of your project. Please give a special care and attention to every item of the Form. Missing essential elements may cause unnecessary delays in the process or lead to misinterpretation of the merits of your project.

There is one special page 1 for each of the four project categories:

- Heat production and distribution
- Street lighting
- Buildings
- Industry

The rest of the forms are identical for all project categories.

Definition "Owner/Project Sponsor": a person or entity that initiates, owns and promotes the project and has decision making power on borrowing or equity distribution.

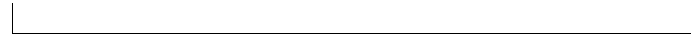
TOOLS DEVELOPED BY THE ONGOING PROJECT BUSINESS PLAN PRESENTATION

AGREED
Chief Doctor of the clinic hospital №4

S.K. Romanov

APPROVED
Head of Fuel and Energy Department of
the Moscow City Government

M.A. Lapir



BUSINESS PLAN

**“Energy Efficiency Project for the Moscow City Clinic
Hospital No.4”**

PROJECT PIPELINE AND DATABASE

EE Investment Project Development for Climate Change Mitigation

UNITED NATIONS FOUNDATION INC.

UNITED NATIONS FUND FOR INTERNATIONAL PARTNERSHIPS

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Project of the Governments of:

Belarus, Bulgaria, Kazakhstan, Russian Federation and Ukraine

The project is to promote a self-sustaining investment environment for cost-effective energy efficiency projects advancing local city-scale participation in the objectives of UN FCCC and UN ECE environmental accords. It aims to accelerate energy efficiency market formation activities for the greater participation of private sector investments, products and services in three key areas: municipal lighting, hospitals and district heating.

It has established a new network of selected municipalities linked by advanced Internet communications with international partners for value added information transfers on policy reforms, financing and energy management.

Status of the projects developed under EE Investment Project Development:

Total Investment Cost (USD)	Investment Required (USD)	CO ₂ savings(t/y)	Financed projects (USD)	CO ₂ savings by financed projects(t/y)
60,749,897	31,095,927	368,778	14,809,120	52,446

The project:

- developed the skills of the private and public sectors at the local level to identify, develop and implement energy efficiency investment projects;
- provided assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support investment projects; and
- provide opportunities for the commercial banks and companies to invest in these projects through existing investment funds, or if warranted, through a new fund managed by an international financial services company, assisted by commercial banks in the region.

PROJECT PIPELINE AND DATABASE

Belarus						
Name	Total Cost (USD)	Investment Requirement (USD)	Expected IRR	CO₂ savings (t/y)	Project Contact	Notes
Baranovichy Automatic Lines Plant Reconstruction of Heat Supply System and construction of own boiler house	983,000	580,000	20.0%	3,200	S. A.Tauroginsky, 3 Promyshlennaya St., Baranovichy, 225320, +375 0163 401221, +375 0163 460403	
Kedyshko boiler-house Reconstruction of boiler-house and main thermal networks	2,600,953	850,000	29.8%	25,000	Andrew A. Garanin, 220023, Belarus, Minsk, Opanskogo 24 phone: +3-017-227-36-41: fax: +3-017-227-21-11	
DZ Kedyshko Reconstruction of street lighting	302,000	188,000	25.0%	1,445	Municipal Unitary Enterprise 'Mingorsvet' Paduto Vasilij Gurskogo str. 38, 220015, Minsk, Belarus phone: +375 – 017 - 252 21 60 fax: +375 – 017 - 252 00 87	
Lesnoy Reconstruction of Heat Units and Central Heat Unit of boiler-house	590,000	180,000	44.0%	2,380	Mr Tchelovsky Franz Scientific Centre of Energysaving «Energotechno» 220012, Minsk, Tchernyshevsky street, 10Ph./fax (017) 232-86-00	

PROJECT PIPELINE AND DATABASE

Bulgaria						
Name	Total Cost	Investment Requirement	Expected IRR	CO₂ savings (t/y)	Project Contact	Notes
Blagoevgrad schools heating Heating system improvement for 5 communal schools	825,000	75,000	n/a	n/a	1, T.Izmirliiev sq.. Telephone:073-2-31-61 City: Blagoevgrad fax: 073-2-52-78 Country: Bulgaria e-mail:enefet@blgmun.com	n/a
Blagoevgrad school lighting Energy efficient lighting in 5 schools buildings in	90,000	8,000	n/a	n/a	1, T.Izmirliiev sq.. Tel:073-2-31-61 City: Blagoevgrad fax: 073-2-52-78 Bulgaria e-mail:enefet@blgmun.com	n/a
Blagoevgrad shool refurbishment Energy efficient lamps installation in 5 schools	297,000	27,000	n/a	n/a	1, T.Izmirliiev sq.. Telephone:073-2-31-61 City: Blagoevgrad telefax: 073-2-52-78 Country: Bulgaria E-mail:enefet@blgmun.com	n/a
Blagoevgrad street lighting Energy efficient street lighting for the	400,000	62,320	Energy Performance Contract		1, T.Izmirliiev sq.. Telephone:073-2-31-61 City: Blagoevgrad telefax: 073-2-52-78 Country: Bulgaria E-mail:enefet@blgmun.com	Performance contract under negotiations.

PROJECT PIPELINE AND DATABASE

Kazakhstan						
Name	Total Cost (USD)	Investment Requirement (USD)	Expected IRR	CO₂ savings (t/y)	Project Contact	Notes
Alma Ata Street Lighting Reconstruction of Street Lighting	52,640	41,060	23%	300	PF Electroservis, Kazakhstan, Alma Ata, Aiteke bi str. 200, phone/fax: +7 3272 682860, 682865	n/a
Alma Ata Energetik district Reconstruction of District Heating in	110,533	n/a	155%	593	Kazakhstan, Alama Ata 480079, Lavreneva str 7 phone/fax: +7(3272) 527815, 527900, V.I. Mihailov, Director	n/a
Alma Ata Mamir district Construction of Pumping/Heating Station	545,455	327,273	112%	9,515	Alma Ata Power Consolidated	n/a
Alma Ata TEZ 1&2 Conversion to coal of TEZ1 and 2 power plants	3,100,000	2,333,000	n/a	71,515	n/a	n/a
Alma Ata South East Boiler House Reconstruction of Yogo Vostochnaya	3,608	3,160	52%	1,313	Almaatateplokommunenergo 480012 Alma Ata Masanchi str. 48a, Mr Y.E. Airih, President	n/a

PROJECT PIPELINE AND DATABASE

Russia						
Name	Total Cost (USD)	Investment Requirement (USD)	Expected IRR	CO₂ savings (t/y)	Project Contact	Notes
Buryatia Hospital for War Veterans Thermal insulation of walls and window frames substitution	240,000	118,800	12.0%	1,362	Bazaron Dmitry Vladimirovich tel . (301-2) 37-25-56, e-mail: bazarond@mail.ru	n/a
Moscow Medical Academy Retrofit of Heat Supply System	405,000	255,000	48.5%	4,069	Pavel Morozov, Director of Central Clinic of the MMA 6, Bolshaya Pirogovskaya, Moscow phone 7 (095) 248 54 35 fax 7(095)248 70 65 e-mail Negawatt@energy.ru	n/a
Moscow Hospital No.4 Modernisation of the hospital energy supply system.	410,600	270,000	34.3%	853	Popel Oleg Sergeevich Nirsha Taisiya Mefodieвна IVTAN, 13/19, Izhorskaya str., Moscow, Russia phone (+7 095)484-23-74, 209-51-93 fax (+7-095) 485-79-36	n/a
Moscow Hospital №1 Modernisation of Heat Supply	113,000	70,000	75.8%	1,731	Rutkovskiy Oleg, Chief Medical Officer 8, Leninskiy prospect, Moscow phone 7(095) 236-60-69 fax 7(095) 236-65-28 e-mail Negawatt@energy.ru	n/a

PROJECT PIPELINE AND DATABASE

Ukraine						
Name	Total Cost (USD)	Investment Requirement (USD)	Expected IRR	CO₂ savings (t/y)	Project Contact	Notes
Zaporizhzhya lighting systems Efficient and energy saving exterior lighting system	342,800	239,900	26.0%	665	"Zaporizhmisksvitlo": Vasyl N.Baranchuk 69032, Zaporizhzhya, 7, Pivdenne shosse Phone: + 038 (0612) 15-46-79 Fax: + 038 (0612) 32-11-74 E-mail: zrices@rassvet.zp.ua	The project is being partly implemented through municipal funding
Ivano-Frankivsk Budget Institutions Installation of automated temperature controllers in heating systems	283,000	188,700	31.0%	1,435	Zinoviy Shkutyak, Mayor, 21, Grushevskogo Str.,Ivano-Frankivsk, Tel: (03422) 2-51-46, 55-21-50, Fax: (03422) 3-25-54 e-mail: mvk@il.if.ua	The project is being partly implemented through municipal funding
Fed'kovich st, Ivano Frankivsk boiler plant Installation of a modern energy efficient co-generation unit	668,800	468,160	52.9%	3.4	"Ivano-Frankivsk teplokomunenergo" – Bogdan Chukhniy 59-A, B. Khmelnitsky St., Ivano-Frankivsk city, 76006, Tel: (03422) 6-35-11, 6-04-83, fax: (03422) 6-35-11	The project was implemented in 2004, cogeneration unit is being operated

LESSONS LEARNED

Use of defined Selection Criteria

- + simplified the preliminary selection and identification of projects
- + helped project proponents in modification of their own business models
- - some projects not fitting exactly the criteria were not considered, but use of other financial instruments could have made them possible

LESSONS LEARNED

Use of Project Identification Forms

- + simplified the identification of broadly feasible projects
- + convenient way of presenting projects to potential investors
- + saved time of the project proponents, developers and investors

- - some project proponents believed that Project Identification Form is a Business Plan
- - forms not always suitable for every project

LESSONS LEARNED

Use of Formalised Business Plan

- + simplify the project presentation for both proponents and investors
- + designed to comply with the requirements of most of the financial institutions
- - not so easy and require training to complete
- - a number of similar, but differing formats were used

PROPOSED ACTIONS

Agreement among the stakeholders:

- I stage : for selection criteria for the Fund Manager
- II stage: with the Fund Manager for use of unified set of terms, definitions, units of measurement and
 - for the use of unified criteria for selection
 - for the use of standardised identification forms
 - for the use of standardised form for presentation of projects

PROPOSED ACTIONS

Working Group to be established:

to discuss and draft the documents

to present them to the project parties

to finalise, translate and distribute them

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