National
Environmental Investment
Agency of
Ukraine

Ukraine's activities for energy efficiency under the UNFCCC and KP

2011

Kyoto Protocol

Ukraine signed the Kyoto Protocol on March 15, 1999 in New York City. It was ratified by Ukrainian Parliament on February 4, 2004.

For economic stimulation of GHG emissions reduction the Kyoto Protocol offers flexible mechanisms. Two of them are relevant for Ukraine:

1. ***JOINT IMPLEMENTATION PROJECTS*** (Article 6 of KP);
2. ***EMISSIONS TRADING*** (Article 17 of KP).

Eligibility compliance criteria

- Initial report submitted by Ukraine on December 29, 2006, revised according to the revision procedure of UNFCCC Secretariat.
- Total Assigned Amount Units (AAUs) are calculated. Emissions in the base year 1990 were 920,837 Mt of CO_2-equivalent.
- National system for estimating GHG is in place.
- The Second National communication and the Report on progress achieved are prepared.
- National electronic registry is operational since October 28, 2008 after successful connection with ITL (Go-live process)
- The National Environmental Investment Agency of Ukraine (NEIA) – the only Designated National Authority under Articles 6, 17 of the Kyoto Protocol.

On April 29, 2008 UKRAINE MET ALL ELIGIBILITY CRITERIA UNDER THE KYOTO PROTOCOL

Potential prospects of Ukraine in AAUs trading

Assigned amount for the commitment period

4604,2 Mt CO_2-eqv.

Mandatory reserve for the commitment period

2216,0 Mt CO_2-eqv.

National reserve for the commitment period

1400,0 Mt CO_2-eqv.

AAUs surplus in the commitment period

~ 1000,0 Mt CO_2-eqv.

According to President of Ukraine Victor Yanukovych appeal dated 03.06.2010

Taking into account that the climate change issues in the context of present conditions are the matter of state concern and directly influence on the state of economical and national security of Ukraine in general, this state policy direction will be considerably reinforced.

Among first-priority steps are:

- realization, starting from the current year, of the greenhouse gas emission reduction activities by using the funds from the sale of the AAU`s according to the concluded international agreements;
- insulation of the socialy important objects – schools, hospitals, pre-school institutions;
- creation of the internal emission trading system within the expedient economical sectors;
- active participation of Ukraine in the international climate change talks and in forming of the new approaches regarding international greenhouse gas emission trading in order to save the more acceptable conditions of post-Kyoto's agreements.

General legislation

•The law of Ukraine «On ratification of the UNFCCC»;

•The law of Ukraine «On ratification of the Kyoto Protocol»;

•The order of the Cabinet of Ministers of Ukraine of August 18, 2005 №346-р «On approval of the National plan of measurements for implementation of the Kyoto Protocol to the United Nations Framework Convention on Climate Change»;

•The decree of the President of Ukraine of 12/09/2005 №1239/2005 «On coordinator of the measures for commitments fulfillment under the United Nations Framework Convention on Climate Change and the Kyoto Protocol to the United Nations Framework Convention on Climate Change»;

•Regulation of the Cabinet of Ministers of Ukraine of 22 February 2006 №206, as amended on 20 August 2008 by the Decree of the Cabinet of Ministers of Ukraine №718 «On approval of the procedure of drafting, review, approval and implementation of Projects aimed at reduction of anthropogenic emissions of greenhouse gases»

•Regulations of the Cabinet of Ministers of Ukraine of April 10, 2006 г. №468 «On procedure of the coordination of the measures for the fulfillment of commitments of Ukraine in accordance with the United Nations Framework Convention on Climate Change and the Kyoto Protocol to it»;

General legislation (continued)

- Regulations of the Cabinet of Ministers of Ukraine of April 21, 2006 №554 «On approval of the Procedure of functioning of the national system for estimation of anthropogenic emissions and absorption of greenhouse gases, which are not regulated by the Montreal protocol on substances that deplete the ozone layer»;
- Regulations of the Cabinet of Ministers of Ukraine of July 30, 2007 №977 «On approval of the Statute on the National Environmental Investment Agency of Ukraine»;
- Regulation of the Cabinet of Ministers of Ukraine of 22 February 2008 №221 as amended by Regulation of Cabinet of Ministers of Ukraine, dated 6 September 2010, № 807 «On approval of the procedure of review, approval and implementation of GIS Projects during the period of commitments under Kyoto Protocol to UNFCCC»;
- Regulations of the Cabinet of Ministers of Ukraine of April 17, 2008 №392 «On provision of the fulfillment of the international commitments of Ukraine under the United Nations Framework Convention on Climate Change and the Kyoto Protocol to it»;
- Regulation of the Cabinet of Ministers of Ukraine of 28 May 2008 №504 «On creation and operation of National Electronic Register of Anthropogenic Emissions and Absorption of Greenhouse Gases»;
- Regulation of the Cabinet of Ministers of Ukraine, dated 16 September 2009, № 1036 “On Approval of Plan of Activities on Preparation and Implementation at Educational and Health Institutions of Environmental (Green) Investment Projects aimed at Greenhouse Gas Emission Reduction”;
- Regulation of the Cabinet of Ministers of Ukraine, dated 28 July 2010, № 671 “On Approval of Procedure of Use of Funds in 2010 provided by the State Budget for Government Support Measures aimed at Emission Reduction (Absorption Increase) of Greenhouse Gases and Development of International Cooperation on Climate Change”.

Coordination of the UNFCCC and KP in Ukraine

The National Environmental Investment of Ukraine is the central executive body, established for country-wide coordination of the UNFCCC and the Kyoto Protocol implementation in Ukraine by the order of the Cabinet of Ministers of Ukraine of April 4, 2007 №612 «On creation of the National Environmental Investment Agency of Ukraine».

The main responsibilities of the Agency are:

- to participate in establishing and providing for the execution of the state national investment policy in the environmental protection sector area as well as and the state policy in the field of regulation of anthropogenic negative impact on climate change;
- to execute the provisions set in the United Nations Framework Convention on Climate Change and implement the mechanisms of the Kyoto Protocol including implementation of greenhouse gases (GHG) mitigation projects, attracting investments to the environmental protection;
- to establish and ensure the operation of the national system for the assessment of the GHG emissions and absorption.

International cooperation under UNFCCC and KP

Memorandum of Understanding signed with:

- Japan
- Spain
- Netherlands
- Denmark
- Canada
- France
- Italy
- Portugal

Austrian and German MoUs are on drafting stage

Main national criteria of greening

International compliance requirements :

- Goals and principles of UNFCCC*C compliance;*
- *Aiming at:*

emissions reduction or increasing absorption of GHG;
polluting emissions reduction;
protection or restoration of natural resources.

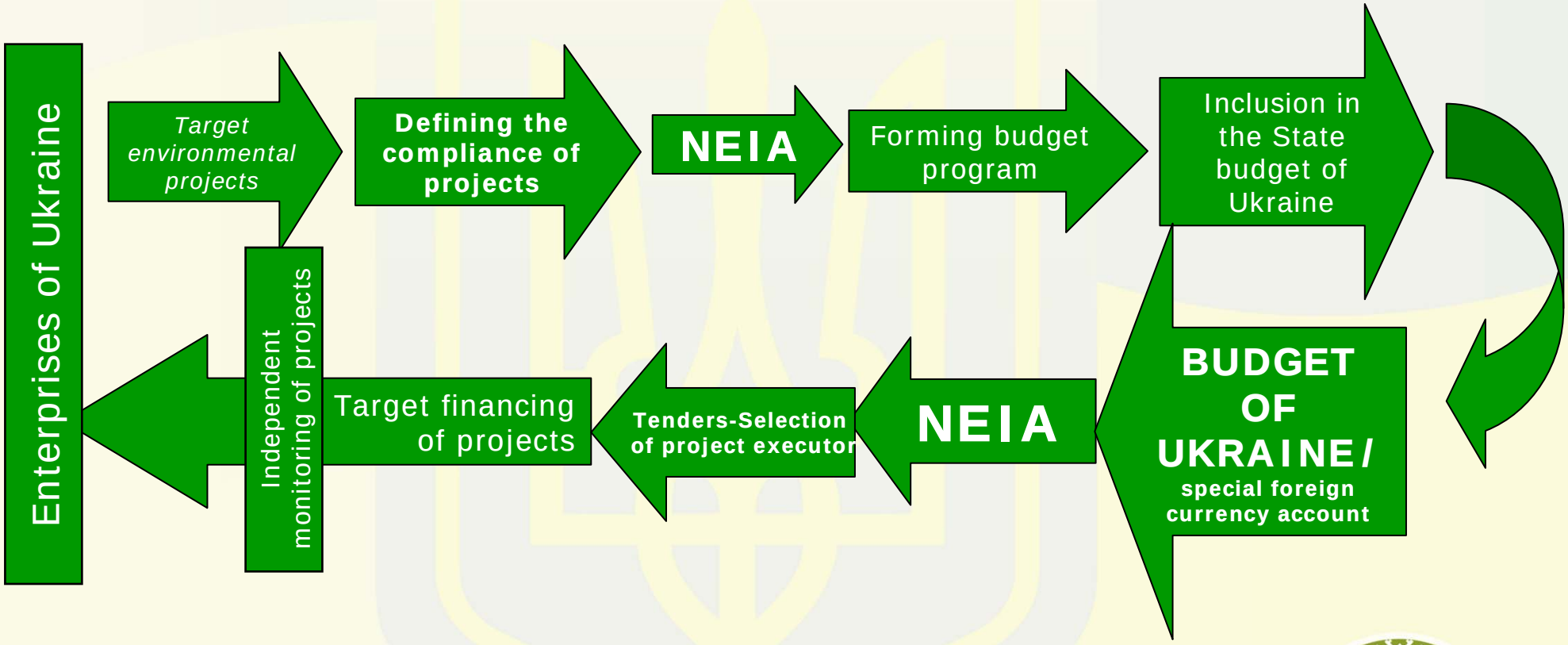
Compliance of the Ukrainian national economy priorities:
energy saving, energy efficiency and water sources recovery.

Compliance of managerial and technical requirements.

National criteria are the basis of the **Green Investment Scheme**

Green Investment Scheme (GIS)

Classic version– procedure of financing projects under GIS in Ukraine



Three levels of GIS control

1. Budget program
2. Independent expert organizations for determination and verification of GIS projects
3. Independent surveyor and financial auditor of the AAUs buyers

Basic types of GIS projects

The funds first of all will be designated for the projects which are very difficult or impossible to implement through the mechanism of joint implementation, for example for the projects in:

- **State (budgetary) entities;**
- **Reconstruction of communal heating systems;**
- **Renewable energy sources;**
- **Energy conservation.**

Basic types of GIS projects (continued)

- **Fuel switching for low environment burden;**
- **Utilization of Coal Bed Methane;**
- **Activities for environmental protection (e.g. pollution reduction activity);**
- **Activities for emission reductions of greenhouse gases other than CO2.**
- **Reconstruction of communal heating systems;**
- **Implementation of heat pumps and cogeneration complex;**
- **Utilization of industrial waste with biogas production and energy saving on the ethanol plant;**
- **Renewable energy sources;**
- **Utilization of biogas from landfills of municipal solid waste**

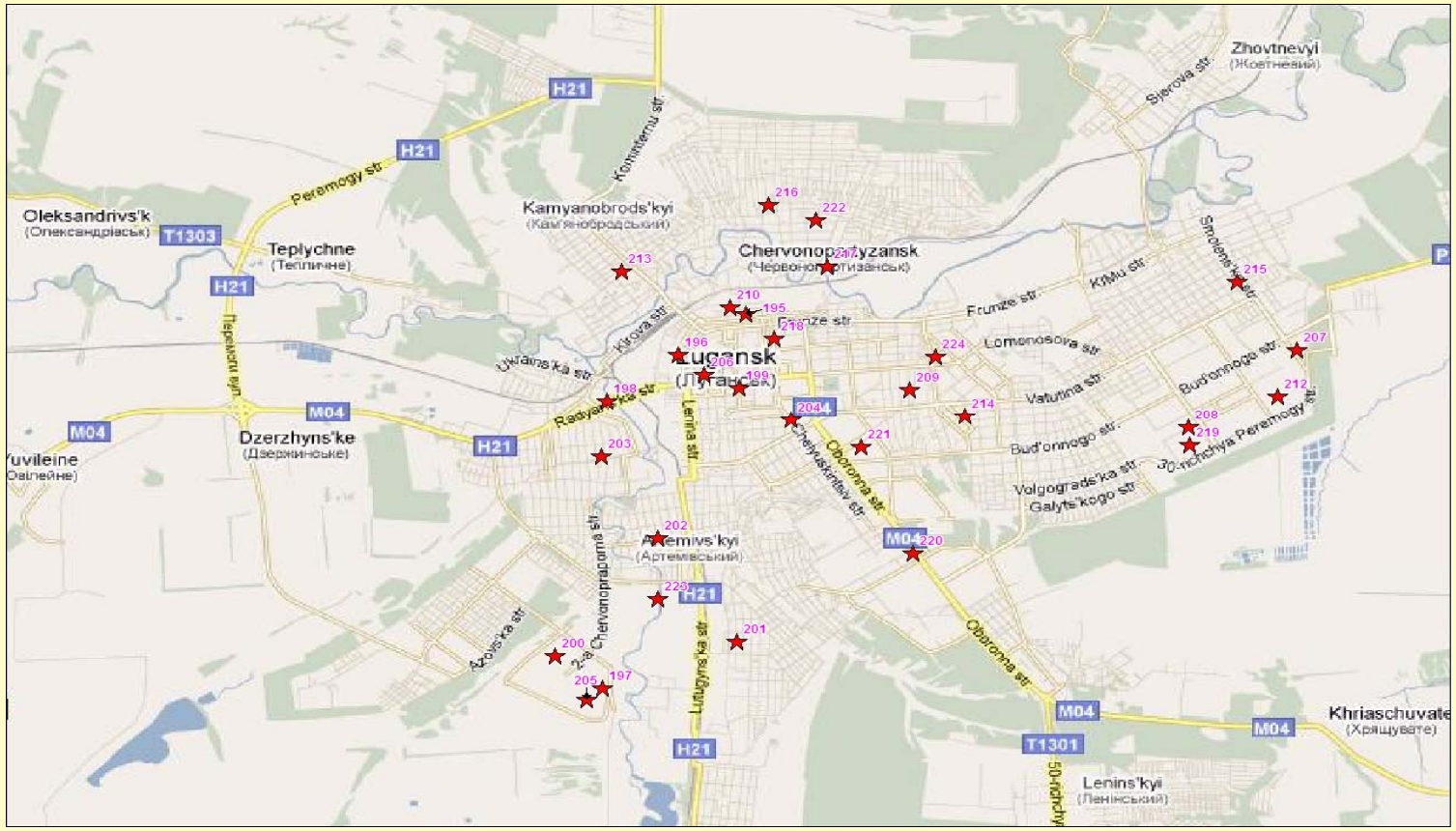
Special attention of GoU is on renewable and alternative energy sources to reduce the consumption of natural gas.

Status of GIS implementation

- **Projects ready for implementation** (Capital repair of community buildings: insulation of facade, replacement of windows and doors in the buildings), total 238 projects:

  In Lugansk region (30 projects);
  In Sumy region (69 projects);
  In AR Crimea (139 projects).

Projects ready for implementation in Lugansk City



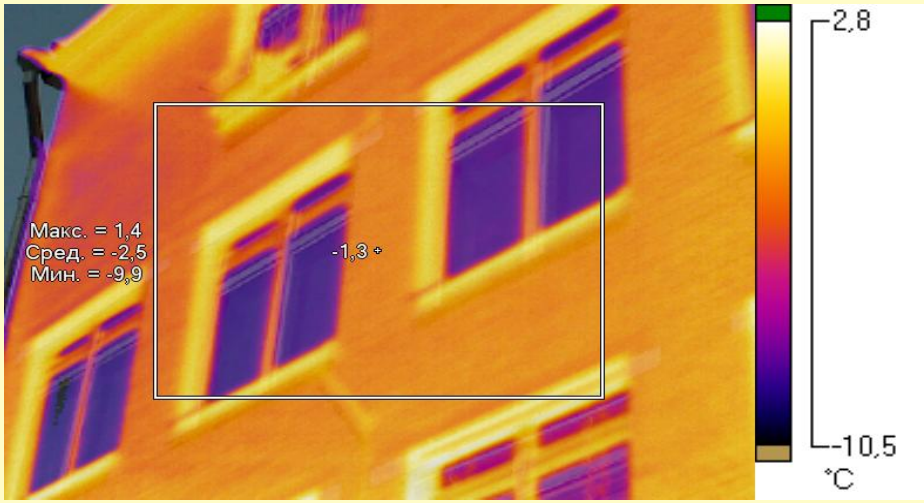
Schools in need of capital repairs in Sumy region

General information regarding the first realized project Clinical hospital for disabled and war-veterans in Simferopol city

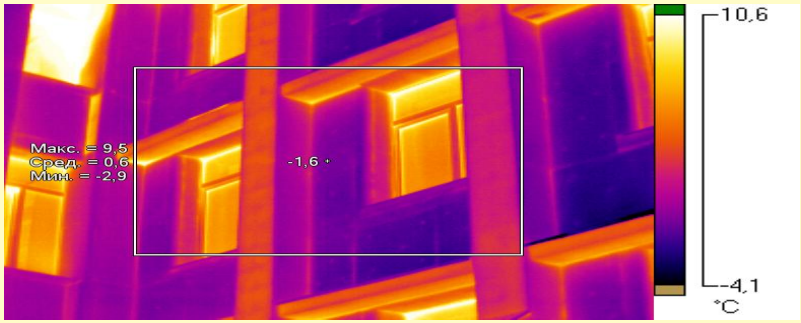
- The total cost of works for the object is **2221,422 thousands UAH.**
- The total area of insulated walls– **4350m^2**.
- The total area of replaced windows– **404,5m^2**.
- Implemented measures can achieve reductions in fuel consumption in the volume of **52.98 tons per year**.
- It is foreseen the reduction in greenhouse gas emissions by **139.34 tons per year**.
- Index of economic efficiency - **147 812 UAH per year**.
- Capacity for treatment can be **200 people** - veterans and disabled veterans.
- Hospital staff is **240 people**.
- The hospital has three medical departments: cardiology, therapeutic and neurological.

Before rehabilitation

After rehabilitation



Thermal view before



- Thermal view after

- Projects ready for implementation (installation of biomass boilers on waste-wood):

  Krolevets District in Sumy region – 6 projects;
  Gluhiv City in Sumy region – 3 projects.

Perspective types of GIS projects

- Reconstruction of communal heating systems;
- Implementation of heat pumps and cogeneration complex;
- Utilization of industrial waste with biogas production and energy saving on the ethanol plant;
- Renewable energy sources;
- Utilization of biogas from landfills of municipal solid waste;
- Activities for environmental protection (e.g. pollution reduction activity)

JI Projects (1)

- According to independent analyst firm "Point Carbon", taking into account the track 2 and track 1, Ukraine ranks first place in the ranking countries that host JI Projects (www.pointcarbon.com).
- Today Ukraine is the leader in the implementation of joint implementation mechanism, namely:
- Occupies the first position by the number of approved and registered by the International Procedure JI Projects (Track 2);
- occupies the first position by the number entered in the circulation of emission reduction units (ERUs);
- occupies the second position by the number of approved and registered under the national procedure JI Projects (Track 2), second only to Czech Republic;
- Summarizing the results of Ukraine on implementation of Article 6 of the Kyoto Protocol during the period of 2004-2010 years, it should be noted that as on April 11, 2011:
  209 JI Projects received letters of support (the planned reduction of greenhouse gas emissions during 2008-2012 is about **187.7 million tons of CO2-eq.**)
  69 JI Projects (of 209 JI Projects, with letters of support) received letters of approval (the planned reduction of greenhouse gas emissions during 2008-2012 is about **90 million tons of CO2-eq**.)

JI Projects (2)

- **32** JI Projects approved and registered by NEIA according to national procedure (Track 1) (23 JI Projects among them have confirmed the reduction of greenhouse gases in the volume of 20.40783 million tons of CO2-eq.);
- **16** JI Projects approved and registered by the Steering Committee of the Joint Implementation Council by the international procedure (Track 2) (9 JI Projects among them have confirmed reduction of greenhouse gases in the volume of 5,873,854 tons of CO2-eq.);
- 26,281,684 carbon units (including 9,061,402 assigned amount units (AAUs) and 17,220,282 ERU) was put into circulation by NEIA following verification of the above mentioned 32 JI Projects);
- **40%** of world market of ERUs (as of December 1, 2010) consists of emission reduction units of greenhouse gases that were introduced into circulation on the basis of verification of Ukrainian JI Projects.
- the amount of investment received by Ukrainian enterprises from foreign investors for AAUs and ERUs is estimated in 280 millions USD.
- By number of JI Projects leads the energy sector (fuel combustion), second place is the industrial processes sector, the third - the energy sector (leakage during production and transportation of fuel), and a fourth – wastes sector.

Examples of operational JI projects

ITL project ID UA1000100: *Ivano-Frankivsk Cement Switch from Wet-to-Dry Cement and Fuel Savings for Coal Drying*

New horizontal rotary dry kiln

New cyclone pre-calciner

Examples of operational JI projects

ITL project ID UA1000130: *Installation of a New Waste Heat Recovery System in Alchevsk Coke Plant*

Old coke wet quenching system

New coke dry quenching system

Examples of operational JI projects

ITL project ID UA1000115: *Reduction of Natural Gas Emissions at OJSC "Odesagas" Gate Stations and Gas Distribution Networks*

Old shut-off and regulating valves

New shut-off and regulating valves

THANK YOU FOR ATTENTION!

National Environmental Investment Agency of Ukraine