

# Norwegian – Ukrainian Programme on Climate Mitigation Projects

**Achieving environmental and energy efficiency, leading to CO<sub>2</sub> emissions reduction is critical for Ukraine. To attain long-term improvements an increasing number of projects should be developed and financed. The Norwegian-Ukrainian co-operation is established to promote climate projects development and financing based on modern energy technologies.**

## The Norwegian – Ukrainian Climate Programme

The climate change issues have been high in political agenda in Norway for many years and a lot of experience have been gained. To promote the climate mitigations in Ukraine, the Norwegian Ministry of Foreign Affairs supported in 2008-09 a capacity building programme for CO<sub>2</sub> mitigation projects. The Norwegian Association of Energy Suppliers and Users (Norsk Energi) initiated and managed the Programme in co-operation with the National Agency of Ecological Investments of Ukraine.

## The need for assistance

Various energy efficiency, renewable energy and environmental projects lead to CO<sub>2</sub> emission reductions. The newly established dedicated loan facilities and carbon financing have made now more funds available for projects financing. While the potential is enormous, only few climate projects have been approved for financing. The problem is that local project developers often have good technical skills, but their knowledge of innovative technical solutions and specific international procedures is limited. While many projects are technically promising, they need assistance in preparation of bankable feasibility studies and business plans, evaluating various project components.



*Workshop with the National Agency Ecological Investments*



## Main directions for the Co-operation

- Co-operation with Authorities and project developers
- Transfer of know-how and capacity building
- Assistance to Climate Projects

## Co-operation with Authorities

The National Agency Ecological Investments of Ukraine seeks opportunities to facilitate climate projects through carbon financing.

The Agency stated the need in internal capacity building and environmental awareness. The Programme arranged a 1 day Information seminar on the ‘Norwegian Experiences, Methods and Tools for Climate Projects’ for the Agency staff.

The Agency takes part in all Programme’s events.



Norsk Energi, The Norwegian Association of Energy Users and Suppliers is an independent competence centre within the following areas: ENERGY - ENVIRONMENT – SAFETY. Our goal is to contribute to the effective, environmentally friendly and safe utilisation of energy. Our local partners are the Ukrainian Cleaner Technologies Centre and Centre of Applied Ecological Researches of Sumy State University.

## Capacity Building

Norsk Energi and its local partners have arranged information seminars on climate projects in Sumy, Kiev, Zaporozhje, Donetsk, Ivano-Frankovsk and Dnepropetrovsk.

Thus, co-operation has been established with local authorities, carbon intensive industries, experts and consultants. The latter were trained on various aspects of projects development and modern energy technologies.

## Combined Training and Projects Development

3 training seminars were arranged for more than 20 participants. Various tailor-made tools were prepared:

- Manual and business plan template for climate project developers
- Specific CO<sub>2</sub> calculation tools
- Package of methodological presentations

As a part of the training, our participants have developed real projects, tailored to terms of the financing facilities and carbon credits buyers. Norsk Energi and its local partners have guided this process.

The results of their work were presented at the Dissemination Seminar to the Agency and international financiers (more than 60 participants).

## Projects Developed

A package of energy efficiency and renewable energy projects with potential for CO<sub>2</sub> emission reduction was prepared. A summary of these projects is below.



*Location of the projects developed as a part of the Programme*

Name of projects	Invest. (EURO)	Payback (yrs)	CO <sub>2</sub> reduction, (t.CO <sub>2</sub> e)
Recycling of waste water effluents at a distillery «Kobukovolockiy»	2,5 mln	4	24 000
Co-generation of heat and power (6 MW) at a poultry farm near Lugansk	6 mln	4	40 000
Refurbishment of gas fired oven at Kharkov Tractor Plant	0,3 mln	2	2 000
Co-generation of electricity and heat from landfill gas, Dnepropetrovsk	0,9 mln	1,7	22 300
Replacement of 6 inefficient open-hearth steel mill with an efficient electro-arc furnace at Donetsksteel – MZ	105 mln	6	290 000
Introduction of coal-dust mix blasting technology to reduce coal coke and natural gas use and generation of flare gas at Donetsksteel – MZ	23 mln	4	61 000
1 MW energy generation facility at a pig farm in Zaporozhje region	4,3 mln	3,5	To be verified
Energy Efficiency retrofit of a brick-oven at Zimogoryevsky brickworks	0,7 mln	3	1 500
New 10 MWt small hydropower plant at Dneestr river in Ternopol oblast	20,7 mln	3,5	70 000
New electricity turbine to use the excess of steam at Kremenchuk TPP	23 mln	7	40 000
Recycling of waste heat from the coal power plant in Tripolje district	Project formulation		
Biomass based 1,5 MW co-generation facility in a town of Slavatich	0,5 mln	4	1 600
New process for co-generation of sulphuric acid and energy in Sumy	74 mln	5	150 000

## More information

For more information on this and other related climate mitigation projects, please contact Norsk Energi:

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