



# Overview of Ukrainian Efforts under PMR Activities

**Country: Ukraine**

**Responsible official: State Environmental  
Investment Agency**

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# Policy context: Domestic mitigation objectives and role of market instruments

## Policy context, objectives and envisioned role for new market instruments

- ◆ Ukraine belongs to a group of countries with economies in transition. Ukraine is obliged to keep the GHG emissions on the level of 1990 in the first commitment period of the Kyoto Protocol
- ◆ Long-term voluntary commitments of Ukraine are
  - -20% by 2020
  - -50% by 2050
- ◆ Other Ukrainian targets are energy efficiency:
  - Energy strategy for the period till 2030:
    - Reducing of the energy intensity of GDP by 50%;
    - Increasing of the renewable energy share from 3% to 19%
  - State mandated economic program of energy efficiency for 2010-15:
    - To reduce the energy intensity of GDP by 20% in 2016 compared to 2008

# Previous activities at the governmental and society level

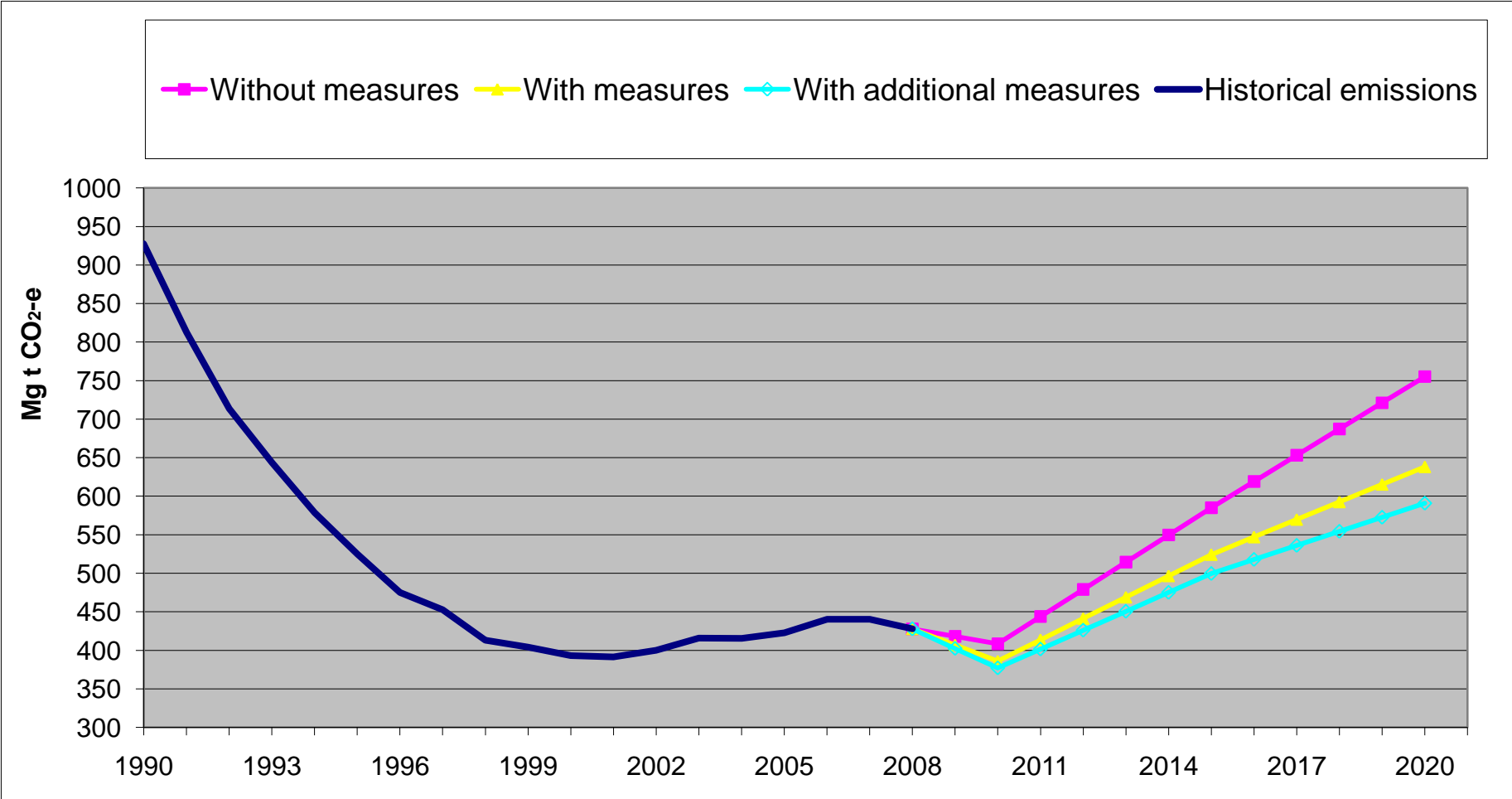
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- ◆ In May 2007 an international conference “Carbon Market of Ukraine” was held in Ukraine. The outcome of the conference was an understanding of the need for the creation of a National Emission Trading System.
- ◆ In May 2010 a round table on climate took place in Ukraine, where the concept of the market creation was discussed.
- ◆ This served as an impulse for Parliament members to develop a draft of the **Ukrainian Law “On the energy efficiency regulation»**
- ◆ In November 2010 this draft law passed the first reading in Verkhovna Rada (Ukrainian Parliament) .
- ◆ In March 2010 Ukrainian President in his communiqué to the Nation defined one of the priority targets of Ukrainian economy development - the low carbon development and one of the elements of this strategy is the National Carbon Market creation.

# Policy context: Domestic mitigation objectives and role of market instruments

## Overview of country's GHG emissions

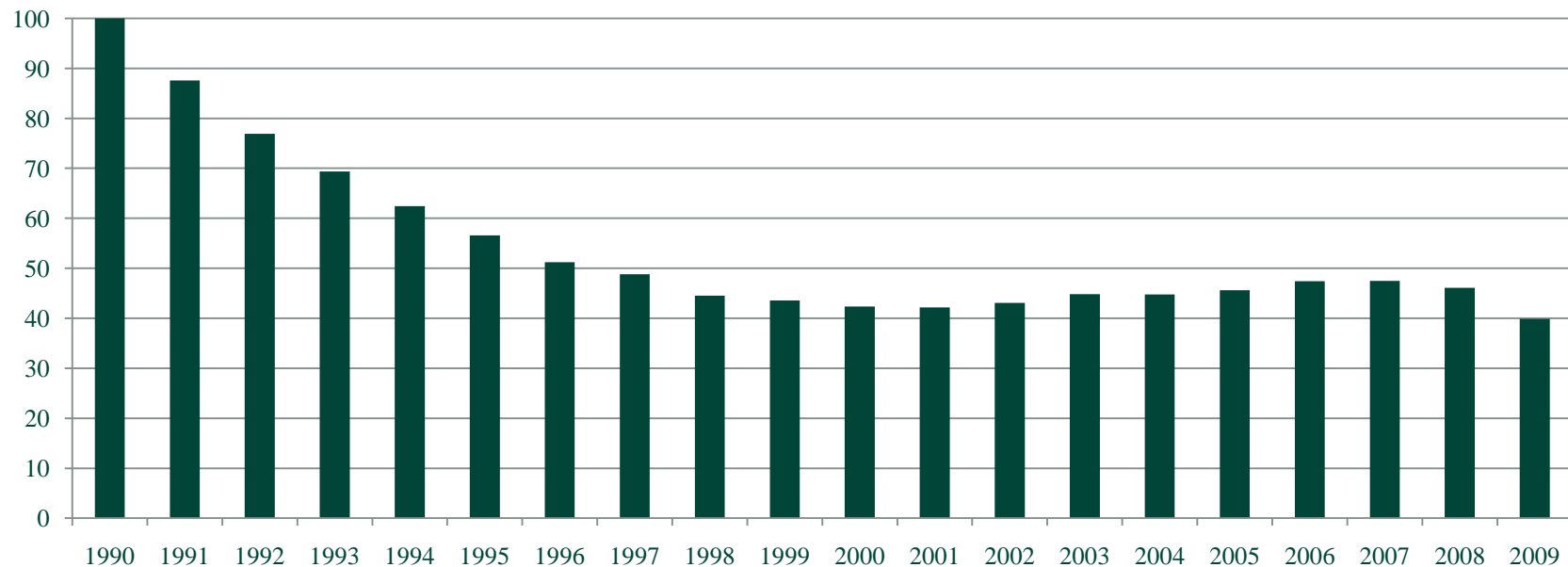
### Prognosis of GHG emission dynamic in Ukraine



# Policy context: Domestic mitigation objectives and role of market instruments

## Overview of country's GHG emissions

### Total GHG emissions in Ukraine in 1990-2009



Despite of the fact that Ukraine did not take quantitative obligations during 2007-2009, it showed about 8% of emissions reduction in this period and has more ambitious plans to reduce even more till the end of 2012

# Policy context: Domestic mitigation objectives and role of market instruments

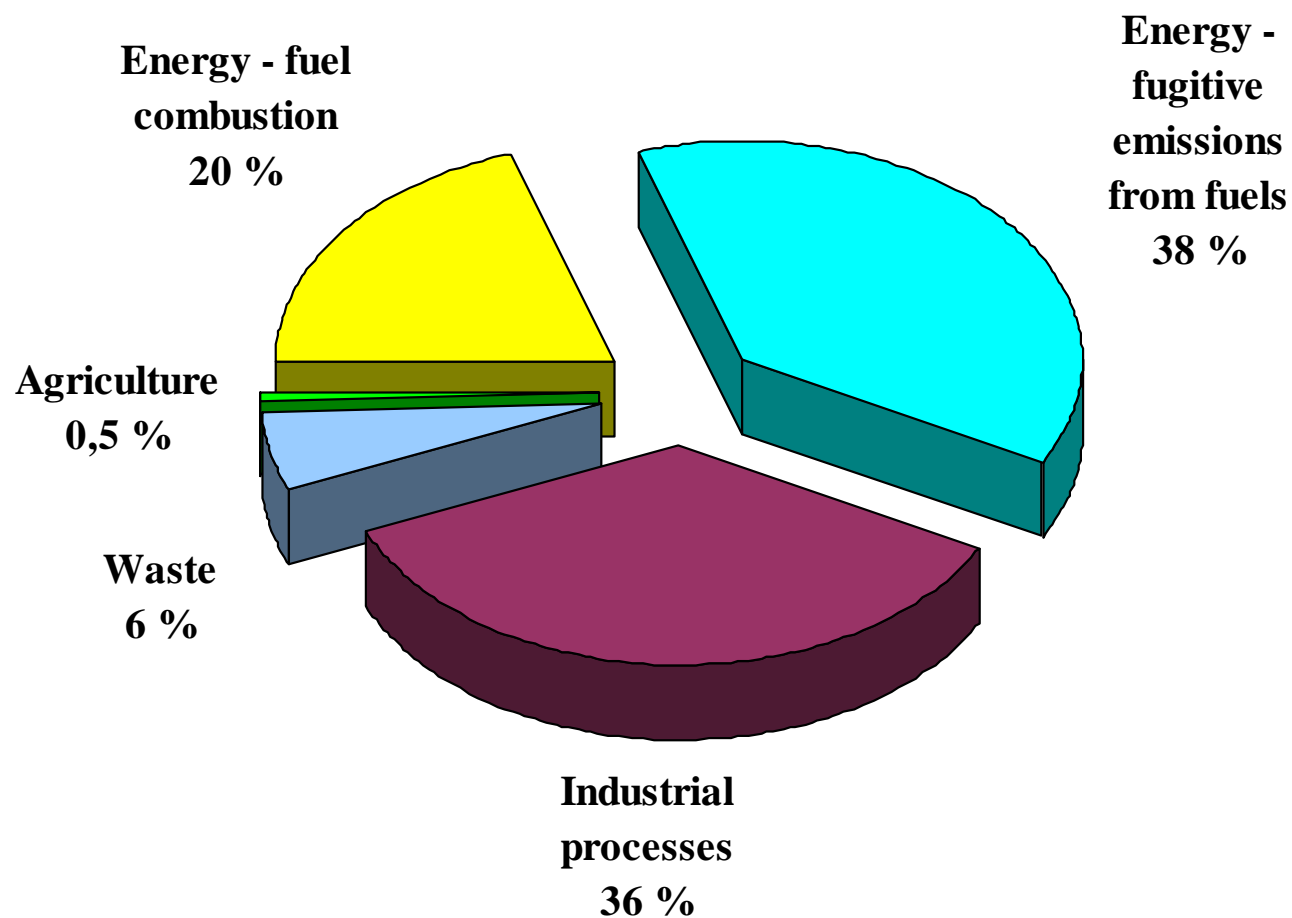
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## Policy context, objectives and envisioned role for new market instruments

- ◆ Two mechanisms of the Kyoto Protocol are applicable in Ukraine: emission trading and joint implementation
- ◆ As of today Ukraine has sold 56 million t CO<sub>2</sub> equivalent under Article 17 of the Kyoto Protocol
- ◆ Ukraine registered 33 JI Projects, which have ensured the reduction of GHG emissions by nearly 25 million t of CO<sub>2</sub>-e., i.e. 40% of ERUs are of Ukrainian origin

# JI projects in the sectors of Ukrainian economy

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# Policy context: Domestic mitigation objectives and role of market instruments

## Policy context, objectives and envisioned role for new market instruments

### **Draft of the Ukrainian Law “On the energy efficiency regulation»**

#### ◆ National allocation plan

- Free allocation on the ground of historical emissions in the base period (grandfathering);
- Establishment of the database of best available technologies for a gradual transition to the standard method of quota allocation (benchmarking);
- Holding of auctions for the allocation of quotas at the initial phase of the market functioning is not provided.

#### ◆ Penalties

- Financial penalty in the amount of 50 nontaxable minimums, or 750 hryvnas (95 \$, 65 €) per 1 t of CO<sub>2</sub>-equivalent;
- Corresponding reduction of greenhouse gas emissions in the next year.

#### ◆ Flexibility in the fulfillment of commitments

- Using of Kyoto carbon credits to meet the commitments;
- Using of carbon credits from other national markets is possible only after linking.



# Policy context: Domestic mitigation objectives and role of market instruments

## Policy context, objectives and envisioned role for new market instruments

- ◆ The draft of Ukrainian Law “On the energy efficiency regulation» approved in the first reading of the Ukrainian Parliament on 21/10/2010 had been developed.
- ◆ According to this law, the establishment of the national market of quotas has three phases:
  - 01.01.2012-31.12.2012 - preparatory phase, which provides for the establishment of market infrastructure, in particular systems of MRV and inventory, as well as the accumulation of data for the development of NAP;
  - 01.01.2013-31.12.2015 - pilot phase of the market, experience accumulation and testing of market mechanisms;
  - 01.01.2016-31.12.2020 - full functioning of the market, linking with the other markets (potentially)

# Policy context: Domestic mitigation objectives and role of market instruments

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## Interest in market-based instruments

- ◆ Other forms of ETS need to be explored
  - Continuation of JI post 2012
  - JI PoA
  - Sectoral crediting
  - Domestic offsets
- ◆ Ukraine has ambitious targets for 2020 and beyond
- ◆ Improving the energy efficiency of the Ukrainian industry is one of the top objectives
- ◆ ET is the most efficient and economically effective instrument to meet the objectives
- ◆ Ukraine has strong economic ties to the EU and wants continued access to carbon finance from EU

# Why new market mechanisms have to be created and linked?

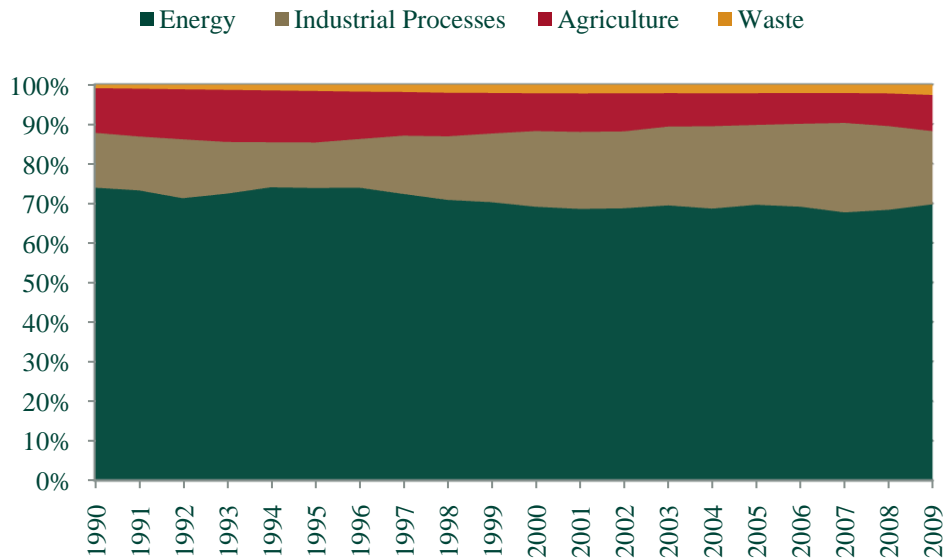
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- ◆ Ukraine 43% of JI reductions
- ◆ JI Market: EU ETS, Japan voluntary system and Kyoto sovereign compliance
- ◆ Post 2012-KP: yes/no?
- ◆ JI post-2012: yes/no?
- ◆ EU ETS aviation coming into force – Ukraine is not isolated
- ◆ Energy efficiency key for Ukraine needs to be financed in an efficient way
- ◆ Post 2012: market for JI products in EU ETS ?
- ◆ Project based approaches best for sectors similar to JI are needed
- ◆ Ukraine GHG market too small for liquidity
- ◆ Role of market mechanisms in Ukraine:
  - Internal: efficiency and price discovery
  - External: financing of mitigation

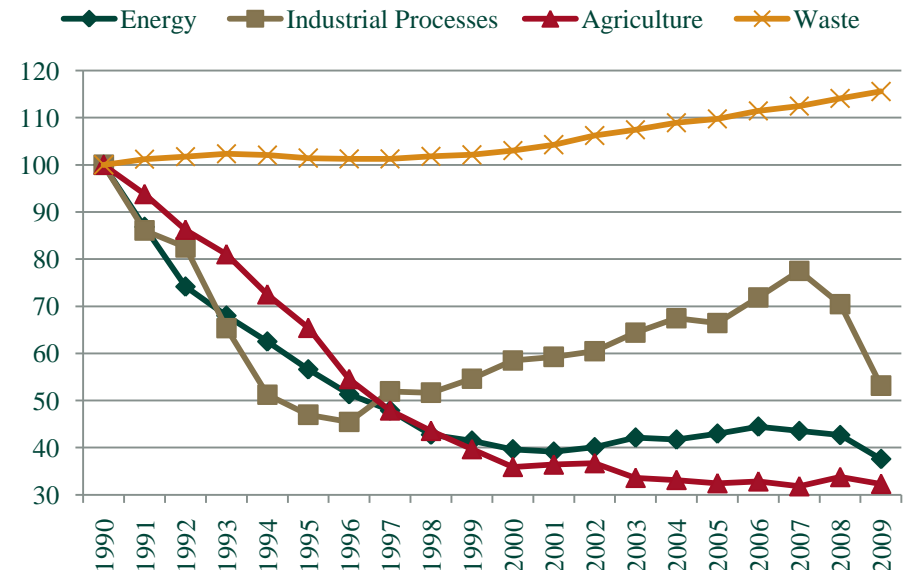
# Policy context: Domestic mitigation objectives and role of market instruments

## Overview of country's GHG emissions

Sectoral structure of GHG emission in Ukraine



Dynamics of GHG emission in certain sectors



Ukraine has identified cap and trade as a preferred option at this stage but substantial amount of work needs to be done to define the building blocks

Key sectors under consideration have been identified

- Energy sector

- Iron and steel

Decisions have yet to be made on a number of options which will impact the which sectors will be covered

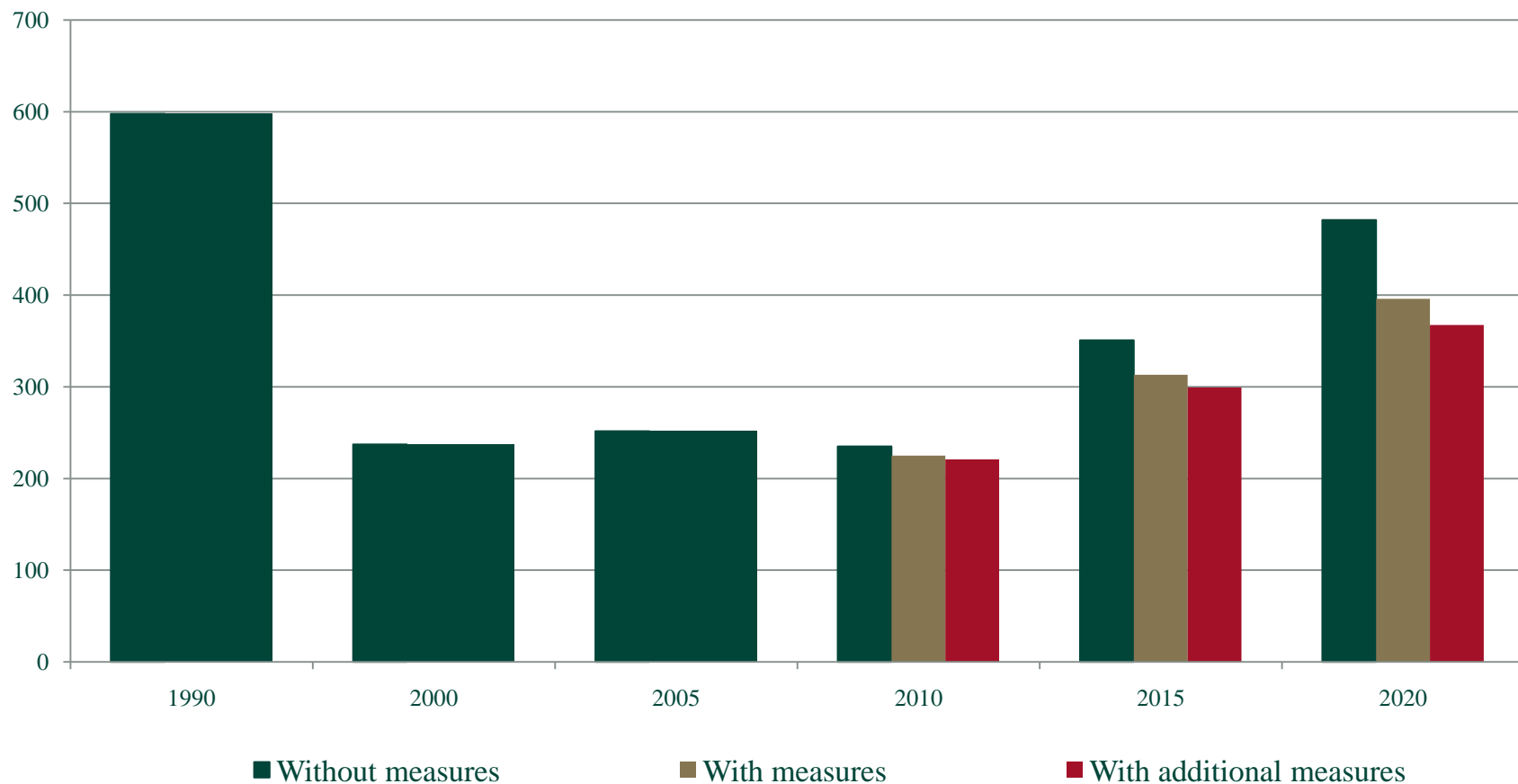
No assessment of sector readiness was carried out at this stage

Assessment of which sectors are best covered by each instrument has yet to be carried out

# Policy context: Domestic mitigation objectives and role of market instruments

## Overview of country's GHG emissions

### Forecast of GHG emission in energy sector



# Technical building blocks of market-readiness

## Taking stock of relevant sectors – Energy sector

- ◆ This sector emits 70% of national GHG emissions;
- ◆ Main branch programs that define the energy development while 3-5 NC preparation
  - Branch program of energy efficiency and energy saving of Ministry of industrial policy till 2017
  - National-wide program of reforming and development of the housing sector for 2009-2014
  - Complex program of coal layer degasification that is a part of the Coal mine security upgrade program
  - The absence of budgeted funds for these tasks leads to the need for the implementation of market mechanisms.

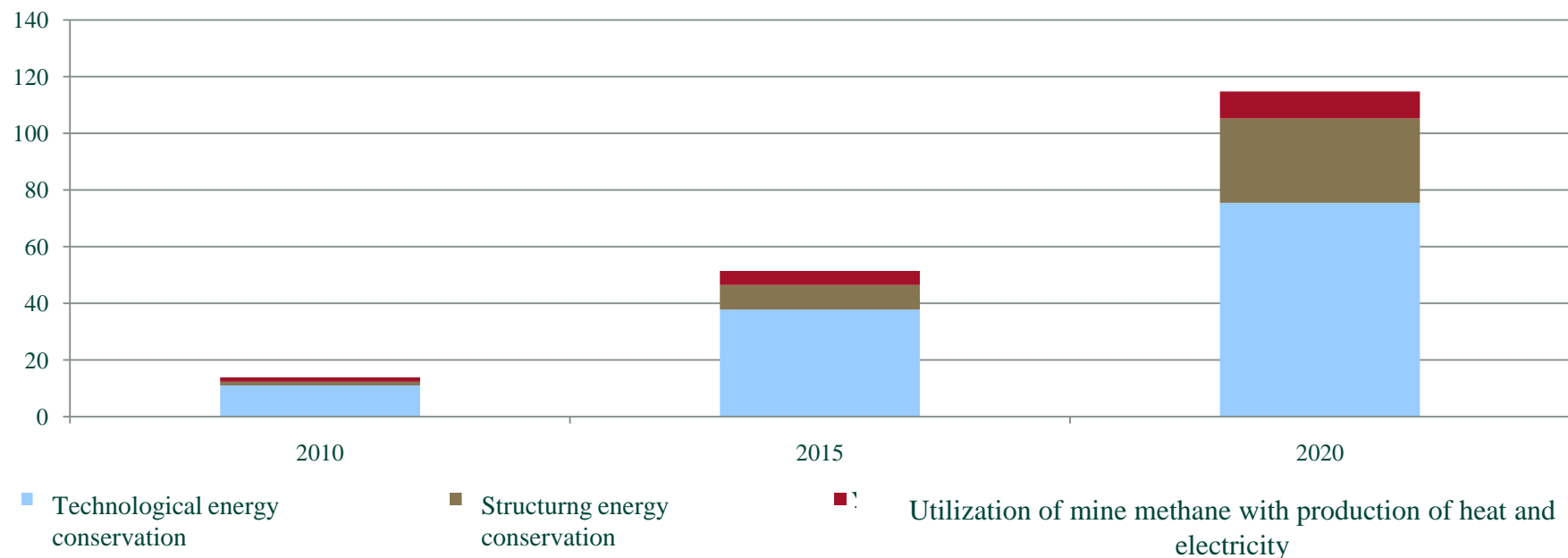
# Technical building blocks of market-readiness

## Taking stock of relevant sectors – Energy sector

### ◆ Main activities in energy sector

- Structural energysaving
- Technological energysaving
- Utilization of mine methane with heat and electricity production

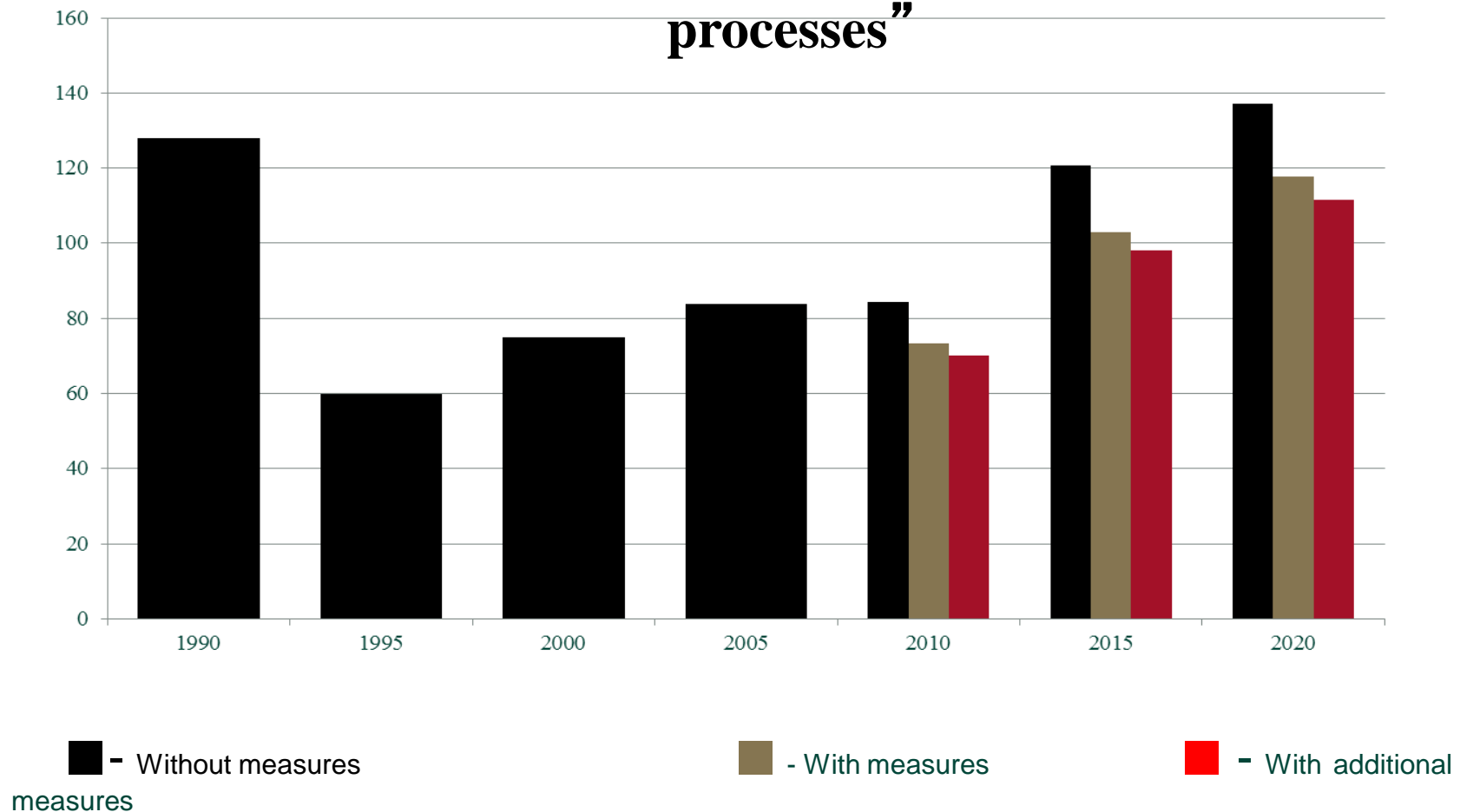
### Evaluation of general potential of activities aimed at emission reduction in energy sector, mln. t CO<sub>2</sub>-eqv.



# Policy context: Domestic mitigation objectives and role of market instruments

## Overview of country's GHG emissions

### Forecast of GHG emission in the sector “Industrial processes”



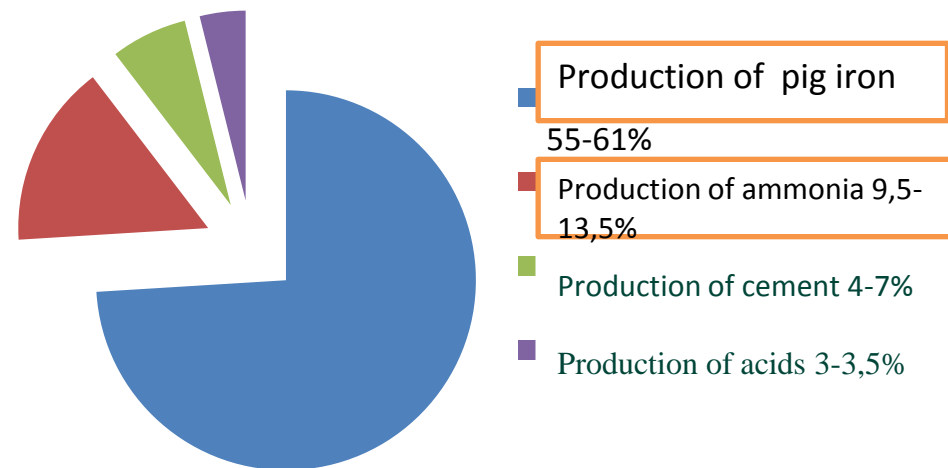
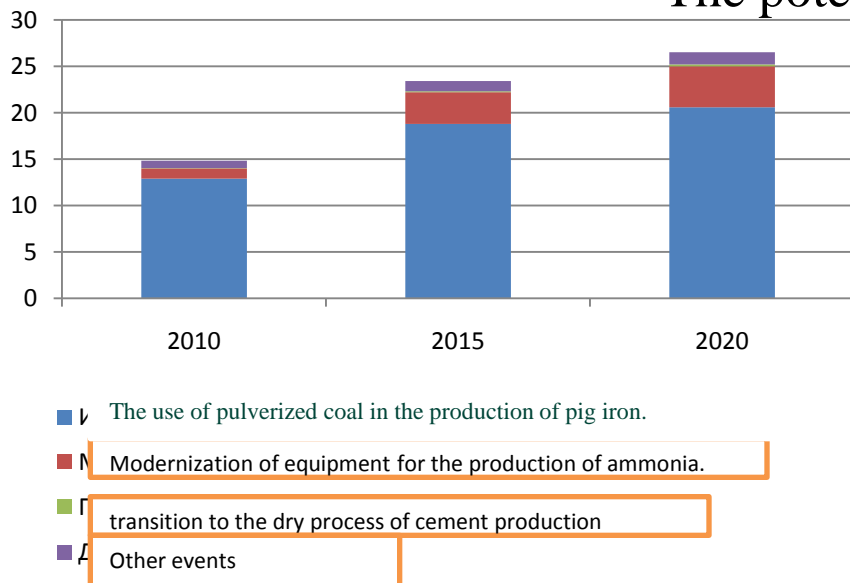


# Technical building blocks of market-readiness

## Taking stock of relevant sectors – Industrial Processes

- ◆ Programs for the Development of Industry
- ◆ State Program for Development of Industry in the years 2003-2011
- ◆ National targeted economic program of industrial development for the period up to 2017
- ◆ State program of development and reforming of mining and smelting complex for a period up to 2011.
  - Industrial energy efficiency and conservation branch program for the period up to 2017

### The potential of emissions reduction

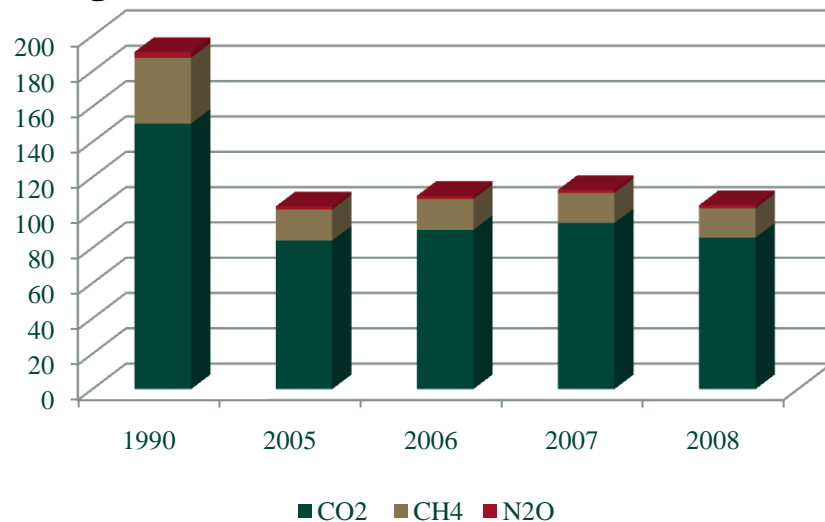


# Policy context: Domestic mitigation objectives and role of market instruments

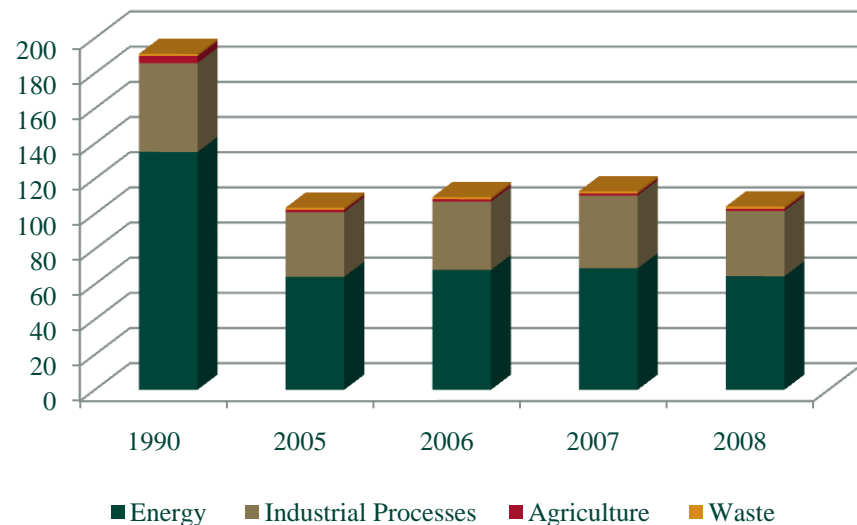
## Overview of country's GHG emissions

### Results of GHG emission inventory in Donetsk region

#### Structure of GHG emissions in Donetsk region



#### Branch structure of GHG emissions in Donetsk region



# Technical building blocks of market-readiness

## Building Blocks of an ETS that need to be Examined within the PMR initiative

- ◆ Ukraine will seek PMR support to
  1. Identify building block elements UkrETS
  2. Learn from existing ETS and development efforts e.g. EU ETS, UK ETS, RGGI, California
  3. Define efforts needed for Market Readiness Proposal
- 3 fundamental building blocks to define for UkrETS
  - Definition of basic policy decisions
  - Infrastructure
  - Governance & Regulation

## Building Blocks of an ETS that need to be Examined within the PMR initiative

### ◆ Basic policy elements

- Efforts of ETS covered sector
- Upstream/downstream
- Assess the readiness stage of the key economic sectors e.g.
  - Number of installation in each sector
  - Share of national GHG emissions
  - Statistical distribution of emissions within sector
- Determine what is the best instrument to cover each economic sector
  - Cap and trade
  - JI
  - Sectoral crediting
  - Domestic offsets
- Determine mitigation potentials and mitigation costs for the sectors under consideration
- Penalties
- Linking to other ETS and international offsets

## Building Blocks of an ETS that need to be Examined within the PMR initiative

### ◆ Infrastructure e.g.

- Registry
- MRV
- Trading & Exchange platforms
- Auctioning platforms

### ◆ Governance & Regulations e.g.

- Who regulates environmental aspects
- Who governs market functioning
- Legal definition of units
- Market oversight regulation
- Auctioning regulations
- Benchmarking
- etc

# Organization of work and estimated timeline

## Overview of organization of work/tasks envisioned for Preparation Phase to conduct the scoping of market readiness activities

- ◆ SEIA is a coordinator of activity in the frames of PMR.
- ◆ The separate stages of works will be performed by scientific institutions, departments of ministries and institutions with attraction of leading national and international experts.

### Preparation stage of creation of national rights for GHG emissions

Activities	06.11	07.11	08.11	09.11	10.11	11.11	12.11	01.12	02.12	03.12	12.11	05.12	06.12	07.12	08.12	09.12	10.12	11.12	12.12	01.13
<b>1. Development of legal basis</b>																				
1.1 Preparation of law «About the regulation in the energy conservation sphere» to the second reading in the parliament	█	█	█	█																
1.2 Adoption of necessary connect to law acts (decrees of CMU, orders of SEIA)					█	█														
<b>2. Creation of market infrastructure</b>																				
2.1 Emissions inventory centre					█	█	█	█	█	█										
2.2 Emissions monitoring system					█	█	█	█	█	█										
<b>3. National plan for quotations distribution</b>																				
3.1 Inventory of GHG emissions at the enterprises in the basic period											█	█	█	█	█	█				
3.2 Development of NAP-I																	█	█	█	
<b>4. Lunch of the market pilot phase</b>																				█

## Other key relevant initiatives

- ◆ **Ukraine is engaged in the following initiatives:**
- ◆ **UNDP, Germany and Eastern European Partnership:** low carbon strategies.
- ◆ **EU:** legislative system adaptation.
- ◆ **EBRD:** Carbon Market Facilitation Programme.
- ◆ **USAID:** MRV methodologies in energy sector

# Organization and consultations

## Partners in the formulation and implementation of the country's Market Readiness Proposal

- **Government:**
  - Cabinet of Ministers of Ukraine**
  - State environmental investment agency of Ukraine**
  - Ministry of ecology and natural resources**
  - Ministry of fuel and coal**
  - Ministry of economy**
  - Ministry of industrial policy**
  - NAER**
- **Administration of the President. Institute of strategy research, Institute of economy and forecasting**
- **National Academy of science**
- **International consulting companies, experts**
- **Ukrainian consulting companies**
- **NGO's**



# Conclusions – Summary of market readiness priority areas for PMR support

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- ◆ Ukraine has strong intentions and clear plans regarding the creation of national market of rights for GHG emissions.
- ◆ National market supposed to stimulate national economy to reduce GHG emissions and to increase energy efficiency of manufacturing.
- ◆ During 2011-2012 it is planned to complete the development and adoption of legal basis of market and also to create necessary infrastructure.
- ◆ We invite the World Bank to the closer cooperation and participation in the creation and functioning of Ukrainian market of rights for GHG emissions.

## Organization and consultations

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### PMR contact point

- The main contact point is the State Environmental Investment Agency (SEIA) of Ukraine, International Cooperation Department
- Under Regulation of Cabinet of Ministers of Ukraine № 977 of June 30, 2007 “On approval of the Statute of the National Environmental Investment Agency of Ukraine” SEIA has the responsibilities to establish and ensure the operation of the national emission trading system.

THANK YOU FOR ATTENTION!

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