



# **CLIMATE CHANGE MITIGATION AND ADAPTATION - PROBLEMS AND POSSIBLE SOLUTIONS FOR UKRAINIAN FORESTS**

*Liubov Poliakova,  
Senior officer of State Forest Resources Agency of  
Ukraine*





# IMPROVING CAPACITY OF FOREST IN CLIMATE CHANGE MITIGATION



- ◎ Enlarging forest area
- ◎ Strengthening forest protection against fires, pest and diseases
- ◎ Improving forest productivity and sustainability
- ◎ Strengthening forest protection against illegal logging – introduction of state unified system of electronic timber tracking
- ◎ Promoting the use of biomass as alternative energy source - involvement of wood and its waste to Ukrainian energy balance



# ENLARGING FOREST AREA

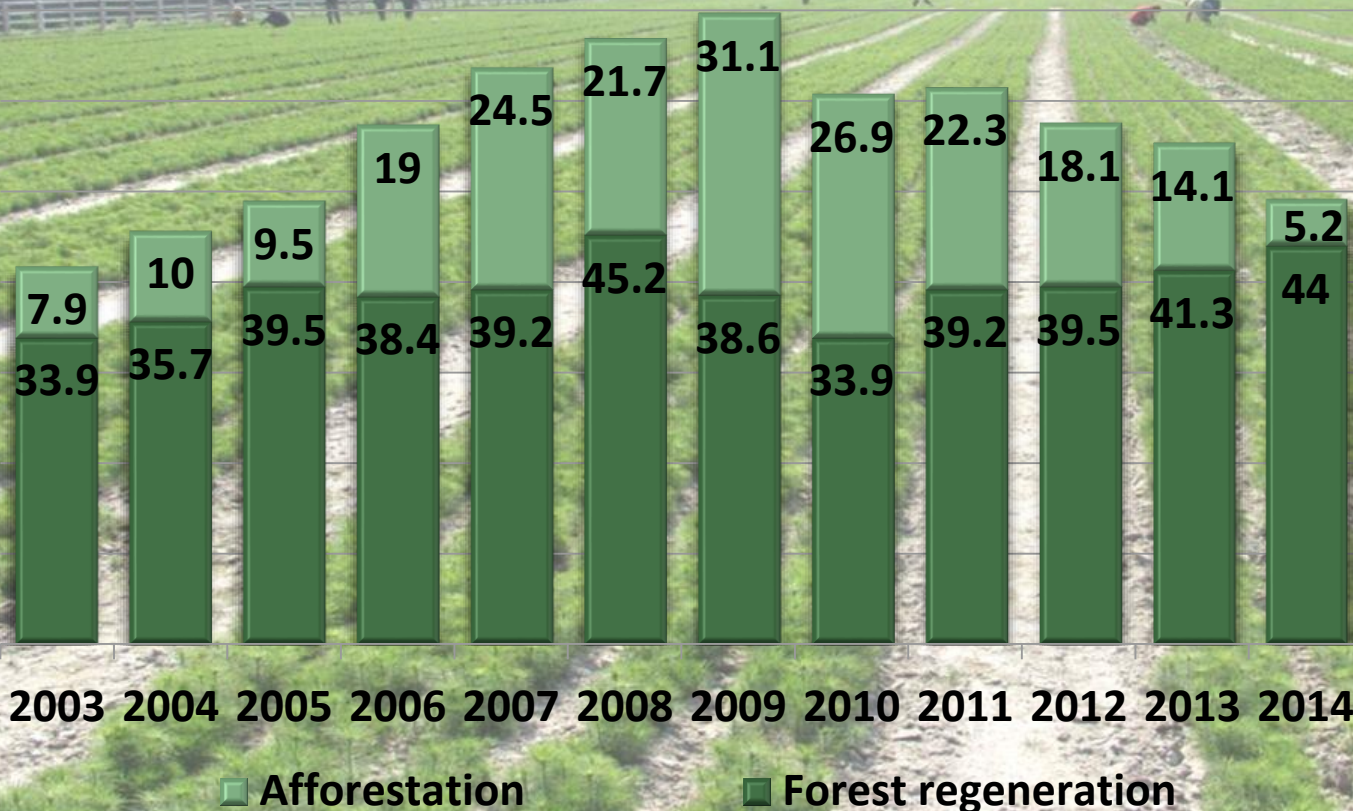
Besides of forest regeneration each year new forests are established.

For providing large-scale afforestation it is created sufficient facilities.

Thus forested area and its growing stock are constantly increasing in Ukraine

*Dynamics of forest regeneration and afforestation  
(State Forest Resources Agency of Ukraine)*

thou ha





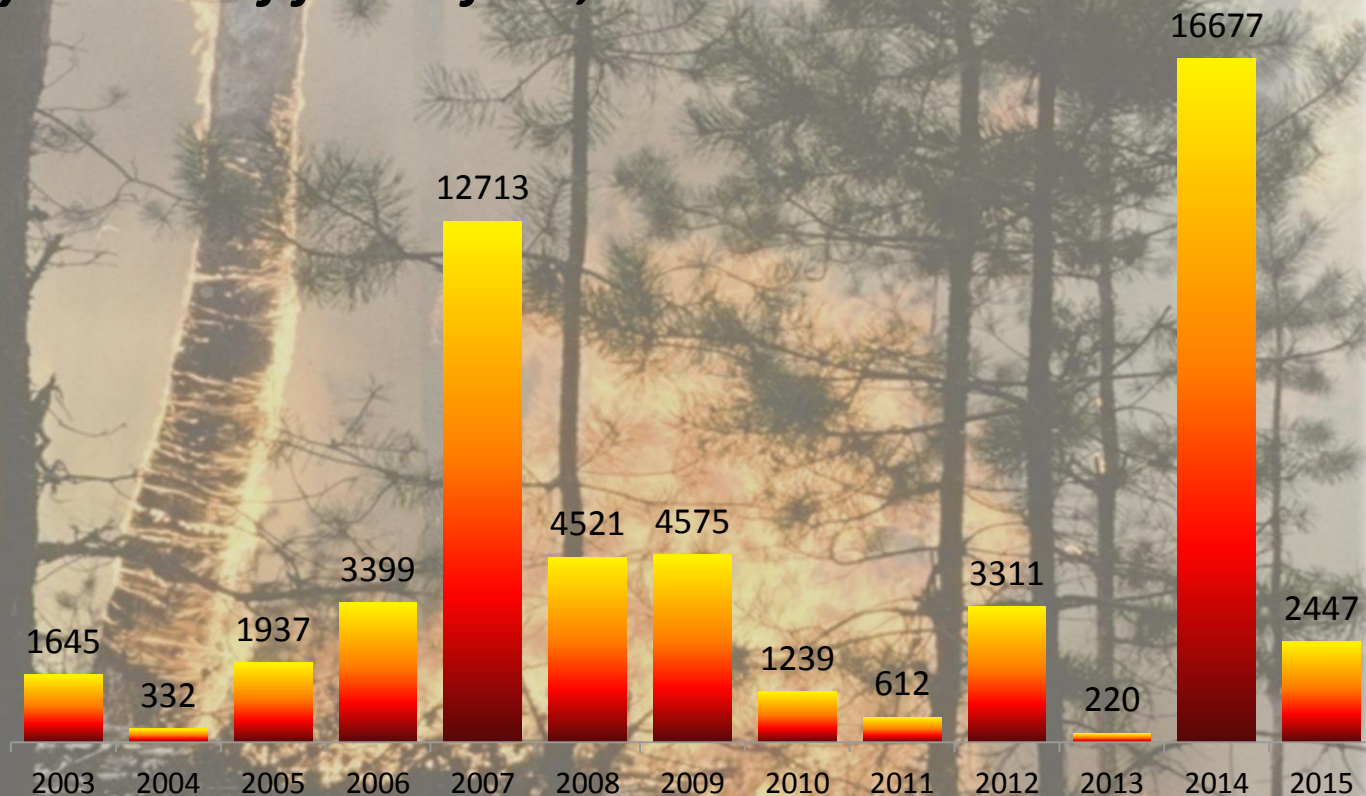


# STRENGTHENING FOREST PROTECTION AGAINST FIRES, PEST AND DISEASES

In State Forest Resources Agency forests there is created network of 442 towers aimed to observation of forest area, 224 of them with television surveillance system.

3,6 mio ha are covered by air patrol.

*Dynamics of forest fires, ha*





# IMPROVING FOREST PRODUCTIVITY AND SUSTAINABILITY



- ◎ Rehabilitation of degraded forest stands
- ◎ Reconstruction of secondary and low productive forests

Additional carbon sequestration caused by forest stands after reconstruction may be about 0.5 t / ha / year.

- ◎ Introduction of modern harvesting technology
- ◎ More efficient utilization of harvested wood.





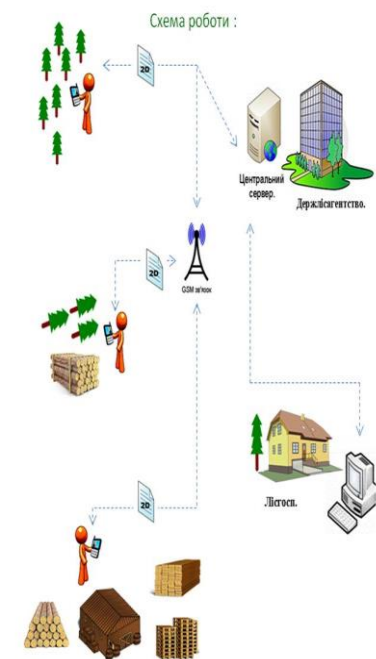
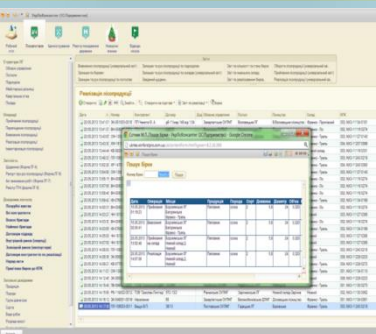
# INTRODUCTION OF STATE UNIFIED SYSTEM OF ELECTRONIC TIMBER TRACKING

Since 2013 unified state system of electronic timber accounting is implemented.

The state system of electronic timber accounting provides:

- ✓ Individually labeled timber at harvest areas and depots.
- ✓ Automation of timber acceptance and inventory.
- ✓ Automation of preparation of primary documentation.
- ✓ Using methods of electronic inspection for the timber movement from harvesting to the final consumer or export for the customs border of Ukraine.

The system provides accurate accounting of forest resources in the online mode and is based on marking timber by special barcode tags and use of mobile electronic devices for accounting operations in forest conditions.



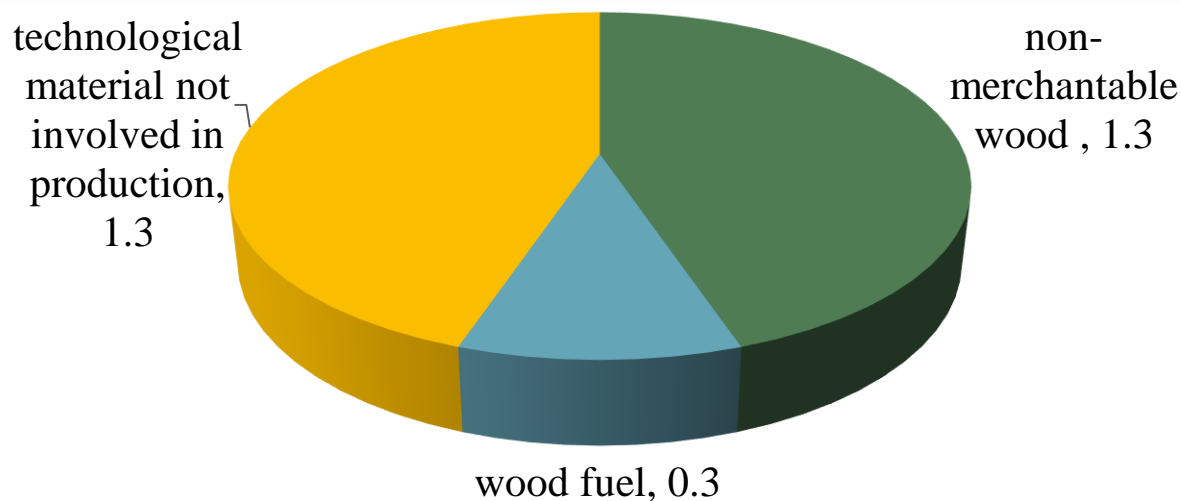


# PROMOTING THE USE OF BIOMASS AS ALTERNATIVE ENERGY SOURCE

IMPROVING ENERGY EFFICIENCY AND REDUCING  
ENERGY CONSUMPTION

For heat assistance of production and administrative offices state forest enterprises have 1.4 thou boilers that using solid biofuel for energy production  
Overall reduction in power consumption is 10% from starting year.

*Wood resource for energy production, mio m3*



In its calorific value available today wood energy resource potential can replace about 0.7 billion m3 of natural gas



# IMPACT OF CLIMATE CHANGE

- ⊙ Increased frequency of forest fires
- ⊙ Increased frequency of pest and diseases outbreaks
- ⊙ Decreasing productivity of forest stands

Changes of border of natural zones caused

- ⊙ Lowered level of ground water
- ⊙ Competition between native species and introducents







# FOREST ADAPTATION TO CLIMATE CHANGE - PROBLEMS

- ◎ Absence of national strategy and action plan on climate change adaptation.
- ◎ Absence of solid research on forest adaptation to climate change and absence of financial support in this regards.
- ◎ Necessity of capacity building





# FOREST ADAPTATION TO CLIMATE CHANGE - SOLUTIONS

- ◎ To receive financial support for elaborating adaptation strategy for Ukrainian forestry to climate change:
  - ◎ Assessing vulnerability of forest in different natural zones
  - ◎ Improving methodology and normative base of forest management
- ◎ To conduct capacity building





A photograph of a forest path. The path is made of dirt and fallen leaves, leading into a dense forest. The trees are tall and thin, with green foliage. The ground is covered with green grass and small plants.

**Thank you for your attention**

***Lpolyakova@ukr.net***