



Before the war Ukraine was on the green transition track

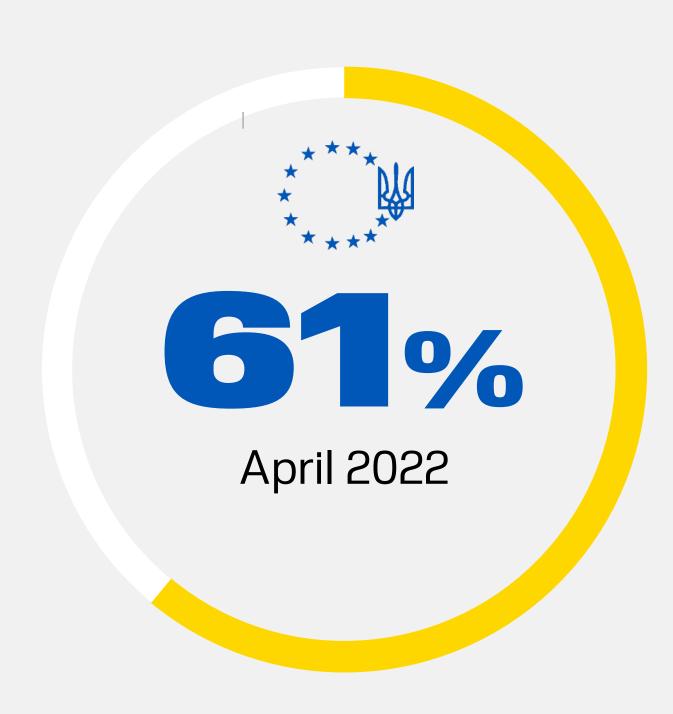
Ukraine sees opportunities in green recovery:

**Build back better** 

Build back green

Green projects are the driving force of growth

# PROGRESS MADE BEFORE THE WAR



Implementation of the EU - Ukraine Association Agreement (Environment and Civil Protection)

- Second Nationally Determined Contribution of Ukraine under the Paris Agreement approved
- Waste management reform launched
- The Marine and Forest Strategies approved, and the Water Strategy is being finalized
- Green Country Program of the President of Ukraine launched
- MRV system launched as prerequisite for future national ETS
- Regulation of ozone-depleting substances and fluorinated greenhouse gases introduced

# IMPACT OF RUSSIAN MILITARY AGGRESSION

#### >2500

Russian missiles: environmental pollution

#### **15**

operating nuclear reactors are under threat

#### 143 000

explosives cleared: soil and air pollution

#### >40

oil depots and storages were attacked: emissions of toxic substances

#### >225

industrial facilities were destroyed or damaged

#### >300

sewage and water treatment systems were destroyed

#### 812

protected areas are damaged/under threat of destruction



# >200 bln UAH

total damages to the Ukrainian environment

#### 260

recorded facts of ecocide

#### >2000

crimes against the environment committed by Russia



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# PRIORITY TASKS OF THE MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE DURING THE WAR



Documentation of crimes against environment



Development of guidelines to assess environmental damages



Raising awareness of the state of the environment and risks for the population



Attracting green financing and investments (signed the EU LIFE Association Agreement)

**DEVELOPMENT OF THE "ENVIRONMENTAL SAFETY"** segment of

#### **UKRAINE RECOVERY PLAN**

211

leading national and international experts joined the working group



thematic subgroups

32

meetings of thematic subgroups and crosssectoral consultations

76

environmental protection projects in Ukraine Recovery Plan

25,5 bln EURO

preliminary assessment of necessary investments to implement projects

# THE STRATEGIC OBJECTIVE OF POST-WAR RECOVERY:

### **CLEAN AND SAFE ENVIRONMENT**

#### 9 TIMELY ENVIRONMENTAL REFORMS

Integrated climate policy

Directive 2003/87/EC; Regulations 842/2006/EC, 2037/2000/EC, 2018/1999/EC; UNFCCC, Paris Agreement, Montreal Protocol

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Effective waste management

Directives 2008/98/EC, 1999/31/EC, 2006/21/EC, 2004/35/EC, 2019/904/EC, 2002/96/EC, 94/62/EC, 2006/66/EC

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Reform of regulation of industrial pollution

Directive 2010/75/EC

(2)

Complex system of environmental monitoring

Directive 2000/60/EC, 2008/50/EC, 2004/107/EC, 2001/18/EC, 2008/98/EC

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Environmental control and liability

Directive 2004/35/EC

8

Sustainable use of natural resources

Directive 2008/56/EC, 2007/60/EC, 2000/60/EC, 94/22/EC, 2003/4/EC, 2006/21/EC, 2006/118/EC, 2014/87/Euratom, 2003/35/EC, 2001/42/EC, 2009/147/EC, 92/43/EC, Regulation No 995/2010

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Environmental safety (chemical and radiation)

Regulation EC Nº1907/2006, Directive 2011/70/Euratom

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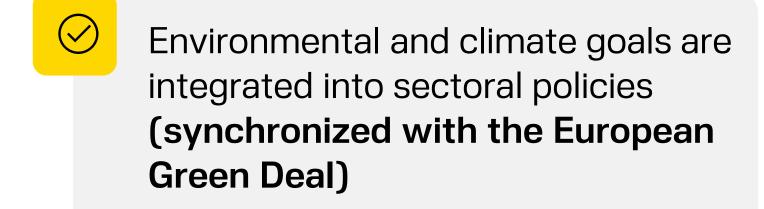
Effective state management in the field of environmental protection

Directives 2011/92/EU, 2001/42/EC, 2003/4/EC, 2003/35/EC

Reform of the management of nature protected areas for the conservation of landscape and biological diversity

Directive 2009/147/EC, 92/43/EU

# **EXPECTED RESULTS OF REFORMS AND PROJECTS IMPLEMENTATION**



Damage caused by harmful effects of floods is **reduced by** 20%

15 wildlife crossings (ecoducts)
are built on animal migration
routes

Industrial pollution is reduced (quantification will be carried out after the end of hostilities)

Share of forest cover is 18% (by 2035)

Public administration is aligned with the SIGMA/OECD principles, its digitalization

Level of chemical, radiation and nuclear safety is increased

170 recreational nature features are established

>60% increase in trust to environmental control system is achieved

142 waste management facilities are operational

Complex system of environmental monitoring in line with European standards is established

10 protected areas following European best practices are organized



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#### **TOP PROJECTS**



#### **WASTE MANAGEMENT**

- facilities for mechanical and biological processing of solid household waste
- 27 waste-to-energy facilities
- 27 landfills aligned with EU best practices
- hazardous waste disposal plants
- plants for processing used oil products
- vehicle recycling plants
- batteries recycling plants
- 12 plants for processing wastes of the war



# GREEN MODERNIZATION OF INDUSTRIAL INSTALLATIONS:

10 times less greenhouse gas emissions



# PRESERVATION OF LANDSCAPE AND BIOLOGICAL DIVERSITY

- centers for growing forest tree seedlings
- **7.5** kilometers of forest roads
  - protected areas following European best practices
  - wildlife crossings (ecoducts) on animal migration routes
  - rehabilitation centers for wild animals

### **WASTE MANAGEMENT**

(20/06/2022 the Law of Ukraine "On Waste Management" was adopted)

#### **EXPECTED RESULTS:**

- the construction of waste processing plants and waste-toenergy facilities will contribute to the creation of a network of waste sorting stations
- \_\_\_\_ creation of new jobs
- solving the problem of waste management, ensuring compliance with environmental safety standards



#### **INVESTMENT OPPORTUNITIES**

62	facilities for mechanical and biological processing of
	solid household waste

waste-to-energy facilities

27 landfills aligned with EU best practices

4 hazardous waste disposal plants

4 plants for processing used oil products

4 vehicle recycling plants

2 batteries recycling plants

plants for processing wastes of the war

**1.61** bln €

**3.78** bln €

**1.35** bln €

> **80** mln €

**300** mln €

**100** mln €

**100** mln €

**50** mln €

# GREEN MODERNIZATION OF INDUSTRIAL INSTALLATIONS

Import of innovative technologies

10 times less greenhouse gas emissions

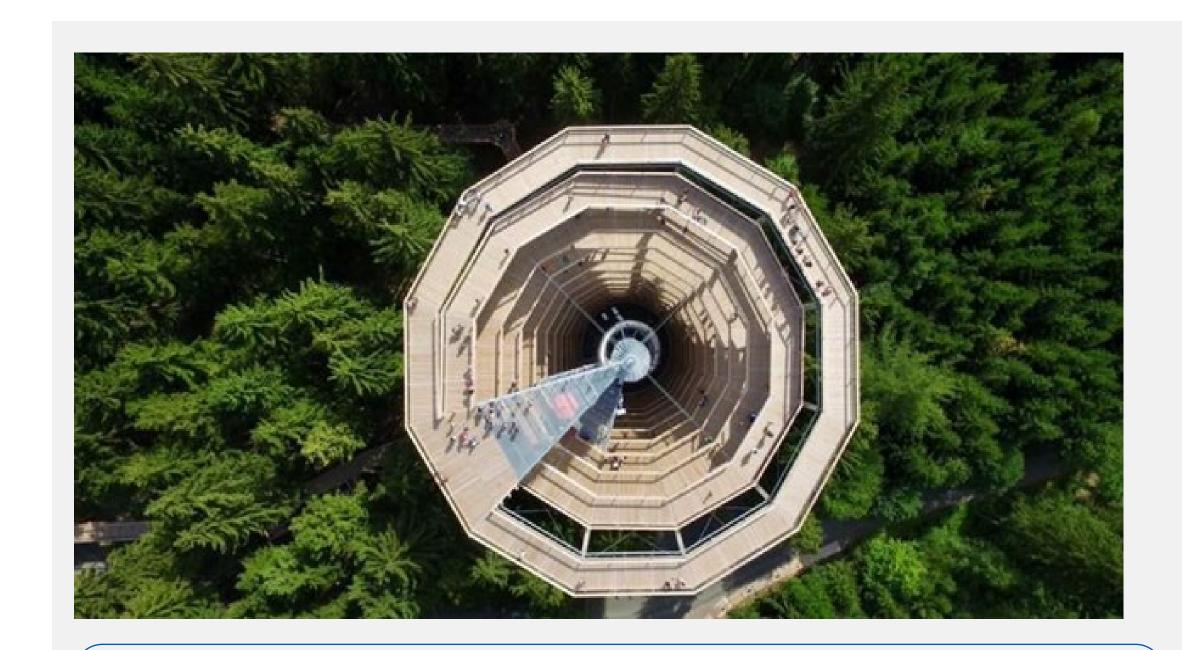
**10** bln €



# **EXPECTED RESULTS:**

- 10 times less greenhouse gas emissions
- Implementation of the Directive 2010/75/EU on industrial emissions (BATC and BREFs)
- improvement of environmental and energy indicators
- demonstration of successful reconstruction
- products will not be subject to the carbon border adjustment mechanism (CBAM)
- reduction of production costs, consumption of resources and energy, improvement of working conditions

# CONSERVATION OF LANDSCAPE AND BIOLOGICAL DIVERSITY



10

**protected areas** aligned with EU standards

**576** mln €

#### **EXPECTED RESULTS:**

- recognition of one Ukrainian national park as the best in Europe
- 3X increase in revenues of NPF territories
- meeting the needs of citizens in domestic tourism in time of war and COVID-19 pandemic
- about 1 000 new jobs



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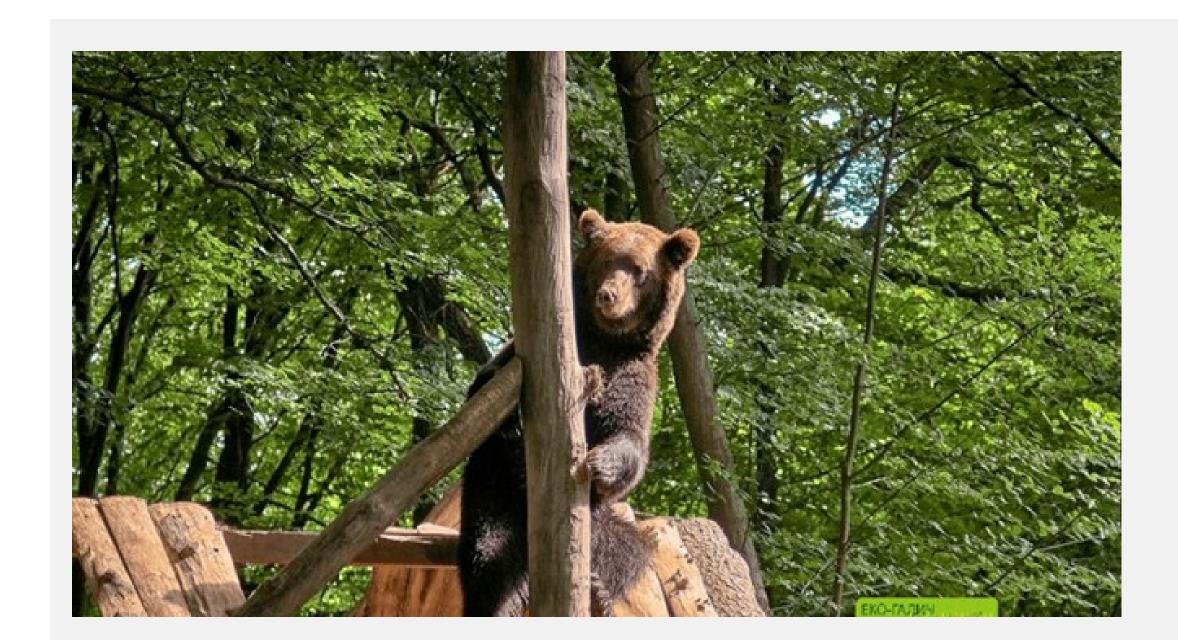
forest seed centers

**16** mln €

#### **EXPECTED RESULTS:**

- 9 new forest seed centers and expansion of 2 existing ones for growing seedlings with closed root system
- up to 30 mln pieces of planting material per year
- 6.7 thousands hectares of afforestation area annually
- 150 new jobs

# BIODIVERSITY CONSERVATION PROJECTS HAVE BOTH ECONOMIC AND ENVIRONMENTAL BENEFITS



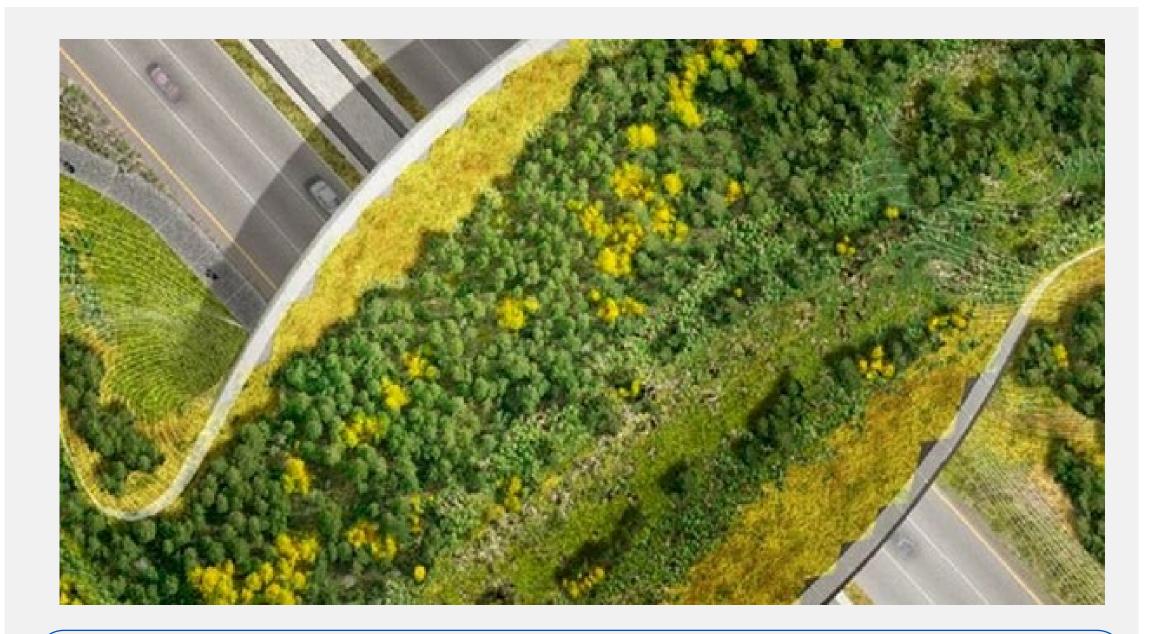
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rehabilitation centers for wild animals

**1.3** mln €

#### **EXPECTED RESULTS:**

- new facilities for green tourism and environmental education
- cooperation with scientific institutions of the EU regarding the rehabilitation of living nature
- Ukraine's international image improved
- 300 new jobs



15

15 wildlife crossings (ecoducts) on animal migration routes

**64** mln €

#### **EXPECTED RESULTS:**

- conservation of wildlife populations and prevention of defragmentation of ecosystems
- increasing road safety
- Ukraine's fulfillment of international environmental protection obligations
- practical implementation of environmentally friendly technologies

#### HOW INTERNATIONAL PARTNERS CAN SUPPORT

**Provide technical support** to the Government of Ukraine in building a climate governance architecture to help Ukraine achieve a green and just transition.

**Invest in environmental recovery projects** and help boost the green economy of Ukraine to contribute towards Ukraine's swift reconstruction.



**Financial and in-kind support** in overcoming the consequences of military actions on the territory of Ukraine - demining of natural territories, forests, marine waters, fighting environmental pollution, cleaning up war waste.





