

EU- Kazakhstan: Sustainable Energy Days

International Conference

Sustainable Energy in Kazakhstan: Prospects and Challenges

Rixos President Astana Hotel, June 2, 2023

Energy efficiency in Kazakhstan – from policy development to implementation

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ENERGY SAVING AND INCREASED ENERGY EFFICIENCY



ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ИНДУСТРИЯ ЖӘНЕ
ИНФРАҚҰРЫЛЫМДЫҚ ДАМУ МИНИСТРЛІГІ

МИНИСТЕРСТВО ИНДУСТРИИ И
ИНФРАСТРУКТУРНОГО РАЗВИТИЯ РЕСПУБЛИКИ КАЗАХСТАН

Astana, 2023

ENERGY INTENSITY

GDP Energy Intensity Targets*

30%

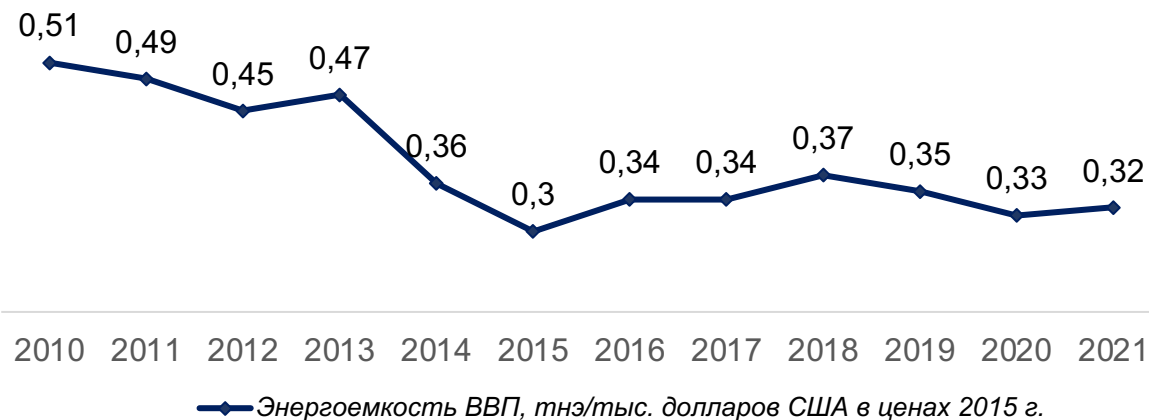
by 2030

50%

by 2050

**from the level of 2008*

Dynamics of energy intensity of GDP for 2010-2021gg.



Actual decline

38.5%

reduction in energy intensity of GDP by 2021 year from the level of 2008.

Comparison with EAEU and OECD countries*



**data from the International Energy Agency for 2020*

STATE ENERGY REGISTER

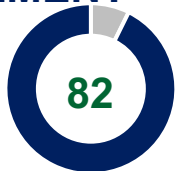
20 152 Total GER subjects

81 638 GER subjects from 2013 y.

ENERGY AUDIT

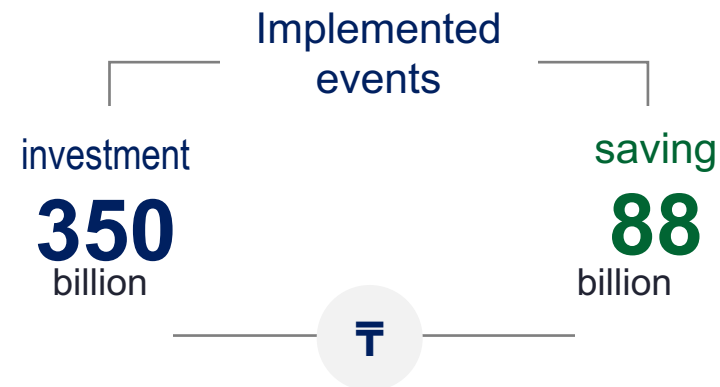
2117 GER subjects conducted energy audit

ENERGY MANAGEMENT



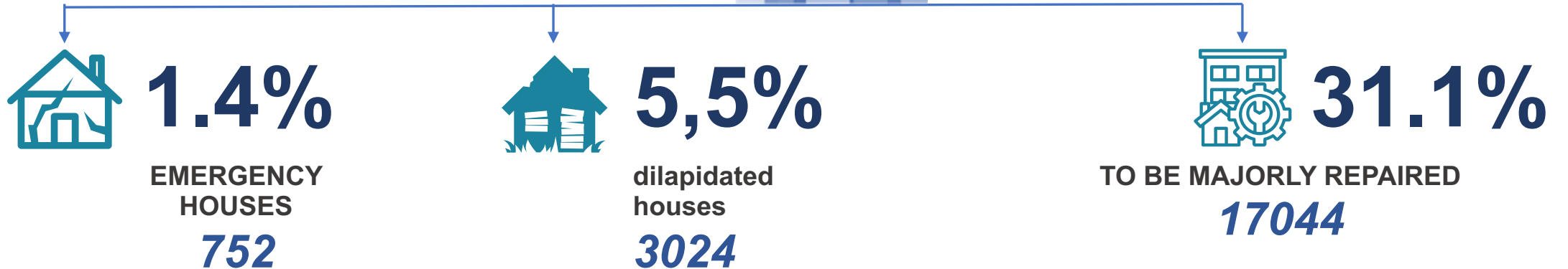
POTENTIAL

- Energy -8%
- Transport -5%
- Industry -10%
- Budget sector -40%



STATE OF THE HOUSING FUND OF THE REPUBLIC OF KAZAKHSTAN

MZD RK **54 731**



Established by
31 940

Established
27 604

The need for PMO
8487

The need for the OCW
10 219

The current level of
equipment of the
operating facility

76%

Target
by instrumentation level

2025ye
or

100%

WORLD BANK PROJECT "INCREASING ENERGY EFFICIENCY IN KAZAKHSTAN"



21.7 million\$



1 June 2015 -
10 June 2022



PROJECT IMPLEMENTATION

TOTAL MODERNIZED **96** OBJECTS

PROJECT BENEFITS



Energy Savings up to **25 %** And **500** million tenge



Creation of **more than 2 thousand** work places



The share of local content materials and services amounted to **85%**



Installing more than **4 thousand** LED street lights



Emission reduction of **259 010 tons of CO2**

LAW OF RK "On introducing ammendments and additions to some legislative acts of RK on energy saving and increasing energy efficiency»

BASE	Adress of the Head of State to the people of Kazakhstan January 10, 2018 "New Development Opportunities in the Conditions of the Fourth Industrial Revolution"
STATUS	adopted June 30, 2022

THE LAW INCLUDES

- reforming the system of energy audit
- implementation of the **"energy efficient» public procurement**
- establishing individual **indicators for TOP-100** enterprises
- full coverage of public sector with **energy monitoring**
- implementation of heat consumption standards for budget organizations
- appointment of energy managers on large enterprises



THE CONCEPT OF THE DEVELOPMENT OF THE SPHERE OF ENERGY SAVING AND INCREASING ENERGY EFFICIENCY

TARGET

REDUCTION IN ENERGY INTENSITY OF GDP PER **10%**

2021*

$$\frac{68 \text{ million tons of oil equivalent (toe)}}{214 \text{ billion \$GDP}} = 0.32 \text{ toe./thousand \$}$$

2029

0,29
toe./thousand\$

* data IEA and Bureau of National Statistics

TASKS for 2023 - 2029gg

share of consumption	SECTOR	INDICATOR
38%	INDUSTRY	↓ 10% energy intensity of industry (tonne of oil equivalent/thousand US dollars)
29%	BUILDING	↓ 10% consumption of energy to the area of premises (GJ/m ²)
21%	POPULATION	↓ 5% power consumption per capita (GJ/person)
21%	ENERGY	↓ 5% energy intensity of energy (tonne of oil equivalent/thousand US dollars)
12%	TRANSPORT	