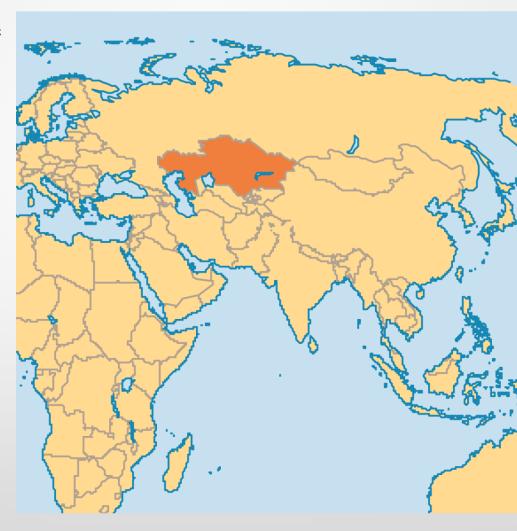
# Multilateral Assessment UNFCCC SBI43 Kazakhstan



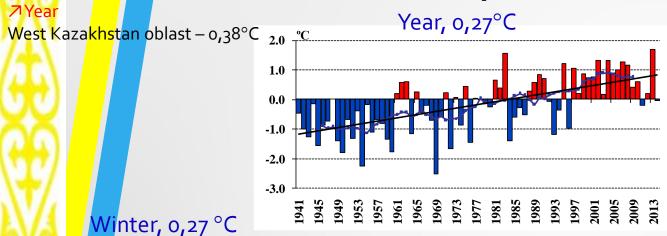
## Kazakhstan basic overview

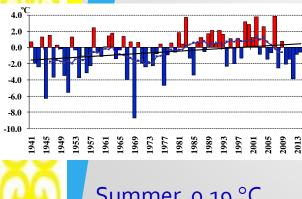
### Geographical and economic information

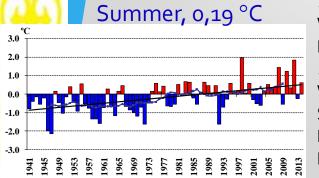
- Middle of Eurasia
- Landlocked
- Population (2015): 17,6 million
- GDP (2015): USD 190 billion
- GDP per capita (2015): USD 10,830
- Industry share in GDP: Around 36% (2014)
- GDP growth 1.2% (projected for 2015)
- Kazakhstan is a major producer and net exporter of energy
  - Around 90% of energy is generated from fossil fuels, and dominated by coal-fired power
  - Overall energy self-sufficiency: 207% (Source IEA)
- Carbon intensity (kCO2/\$2005 PPP): 0.72 (source IEA)



# Dynamic of temperature changes 1941-2014., °C/10 years







#### **⊿**Winter:

West Kazakhstan-o,46°C Atyrauskaya - o,38°C

#### → Spring:

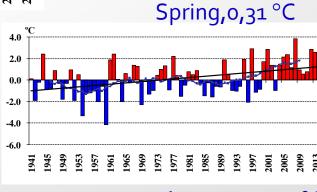
West Kazakhstan–o,43°C Akmolinskaya – o,38°C Kostanayskaya, North- Kazakhstan– o,37°C

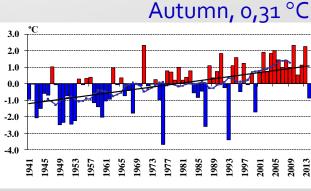
#### **⊅**Summer:

West Kazakhstan, Zhambylskaya, Kyzylordinskaya — 0,27 °C

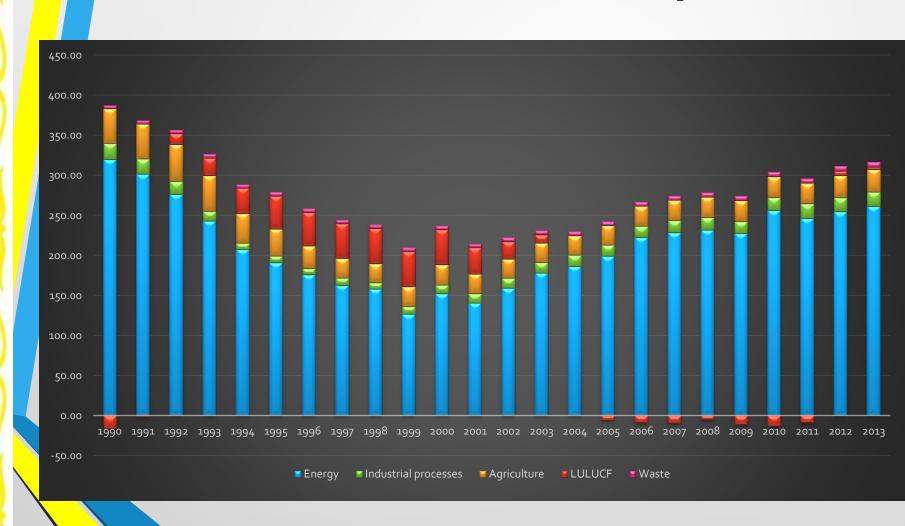
#### **⊿** Autumn:

West Kazakhstan – 0,34°C South Kazakhstan, North Kazakhstan, Kostanayskaya, Akmolinskaya, Karagandinskaya – 0,32°C

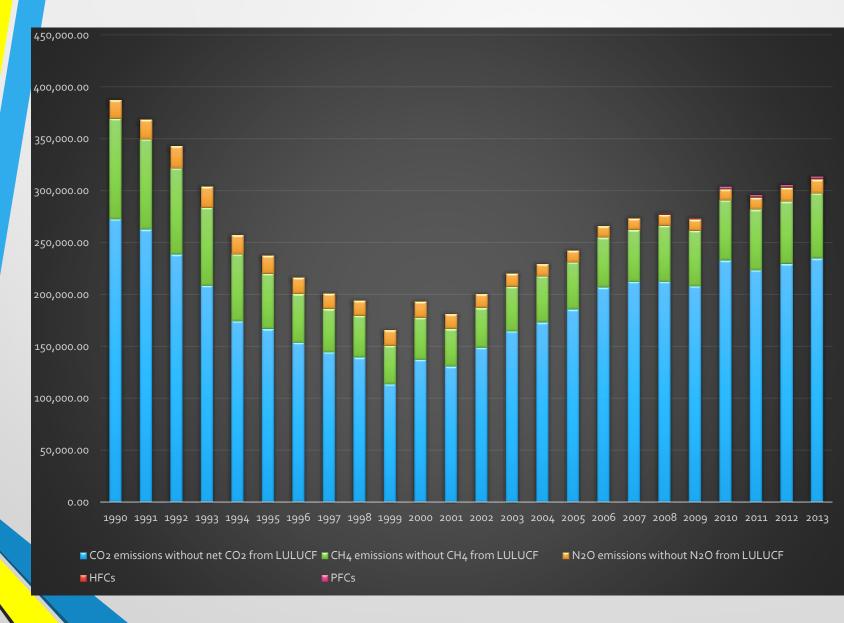




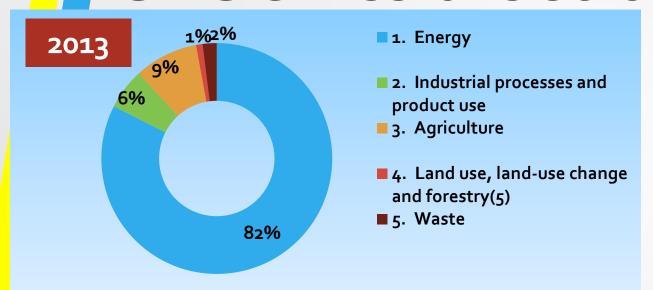
# GHG emissions, mln tons of CO2-eq



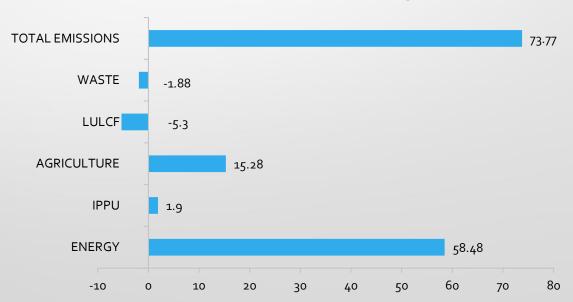
## Structure of GHG emissions



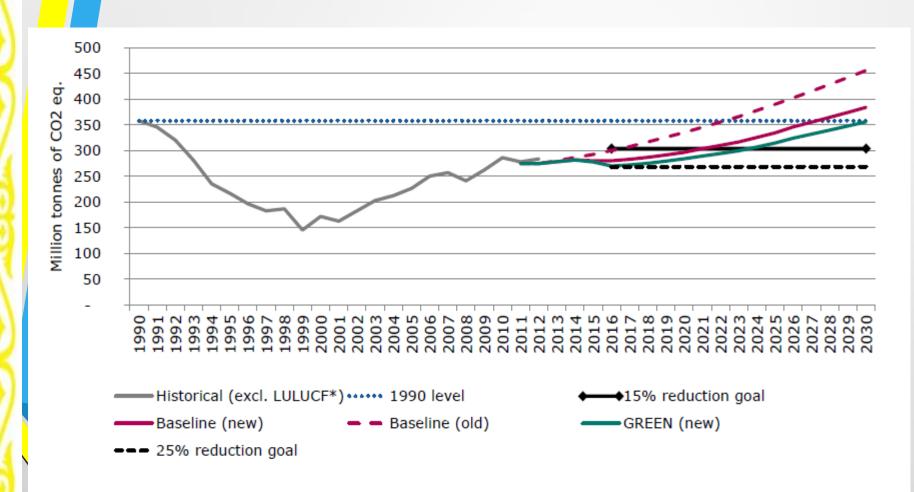
# **GHG** emissions structure



#### 1990-2013 (mln t CO2 eq)

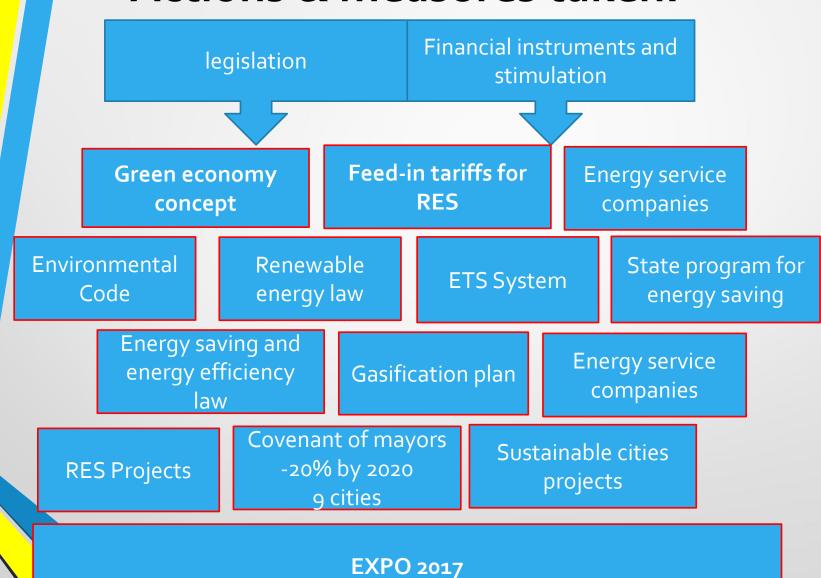


# Pledge by 2030: -15% compared to 1990 level



Source: DIW Econ, model results

## **Actions & measures taken:**



# Mid- and long-term strategies

Strategic document	Activity	Numerical indicator
Concept of the Republic of Kazakhstan for the transition to a "Green" Economy	Reduction of GDP energy intensity	25% by 2020 30% by 2030 50% by 2050
Concept of the Republic of Kazakhstan for the transition to a "Green" Economy	Reduction of current CO2 emissions in electricity production	Levels of 2012 by 2020 -15% by 2030 -40% by 2050
Concept of the Republic of Kazakhstan for the transition to a "Green" Economy	Development of renewable energy through the construction of wind and solar power	3% by 2020 10% by 2030 50% by 2050
The "Kazakhstan-2050" Strategy for development	Alternative and renewable source of energy	By 2050 in country the sources should be no less than half of overall energy consumption

## **EXPO2017**



The key concepts of Astana EXPO 2017 – socio-economic and environmental – derive from the contemplation of energy use in a context linked with sustainable development.

#### In regard to the socio-economic aspects:

- Promoting renewable energy and other energy alternatives
- Energy efficiency and responsible consumption
- Electrification of transport
- Universal access to clean energy
- Energy security
- The inseparability of energy and matter, life, and human beings

#### In regard to the environmental issues:

- Fossil energy resources, limited and highly polluting in their use as the primary source of electric energy
- Global warming and climate change
- Pollution and its health risks
  - Reduction in fossil fuel consumption and CO2 emissions

# Thank you for your attention! g.sergazina@energo.gov.kz