UZBEKISTAN

CLIMATE FACTS AND POLICY

200 MILLION tCO_2e

6.5 TONNES PER CAPITA

Sources: latest national GHG inventory data (2010-2014) or estimates based on INDCs (2014-2015); population, energy and economic data (2012-2014) from the World Development Indicators of the World Bank http://data.worldbank.org/indicator

POLICIES AND PROCESSES

Policy framework

Vision 2030: Resource-efficient growth
National sustainable development strategy (under consideration)
Low carbon development strategy (under consideration)
Targets for the reduction of energy use and GHG emissions in key economic sectors (under consideration)
Programmes on industry modernization and energy efficient technologies
Revised building code
Strong interest in expansion of solar and wind energy
Growing natural gas share of road transport
Extensive environmental legislation covering clean air
Standardized baseline (SBL) for the national power sector under CDM

2020 targets

Increase natural gas power generation capacity
Install 100-200 MW of solar- and wind-powered generation capacity
First solar station (100 MW) to be launched in Samarkand in 2016; more planned
Modernize existing hydropower stations to increase capacity by 120 MW

2030 targets

Mitigation

Preliminary national targets under review and discussion
Modernization in the energy and industry sectors leading to a reduction of 20 million tonnes of CO_2
At least 20 per cent of renewable energies, including sun and wind, in country's energy mix

Adaptation priorities

Water, agriculture, health and ecosystems

GHG inventory and projections

Third national communication to the UNFCCC to include updated time series of GHG emissions 1990-2012
In 2010-2012 total emissions were 200 million tonnes of CO_2-eqv and 6.5 tonnes per capita
Almost 90 per cent of GHG emissions originate in the energy sector
Non-CO_2 gases contribute about half of the total emissions

CLIMATE ACTIONS

Industrial and agricultural sector modernization

Lower per capita and per hectare water use, energy use and GHG emissions
Reduction of energy-intensity of GDP by 50 per cent between 2000 and 2013
NAMA on solar energy development (2015-2030) with a potential for CO_2 emission reductions of 10 million tonnes

Regional actions

Host of the regional centre on renewable energy
Regional and CIS leader in CDM projects: 65 projects developed and 15 registered. Ongoing CDM projects led to mitigation of 6.6 million tonnes of CO_2-eqv

CLIMATE FINANCE

Climate-relevant EU projects

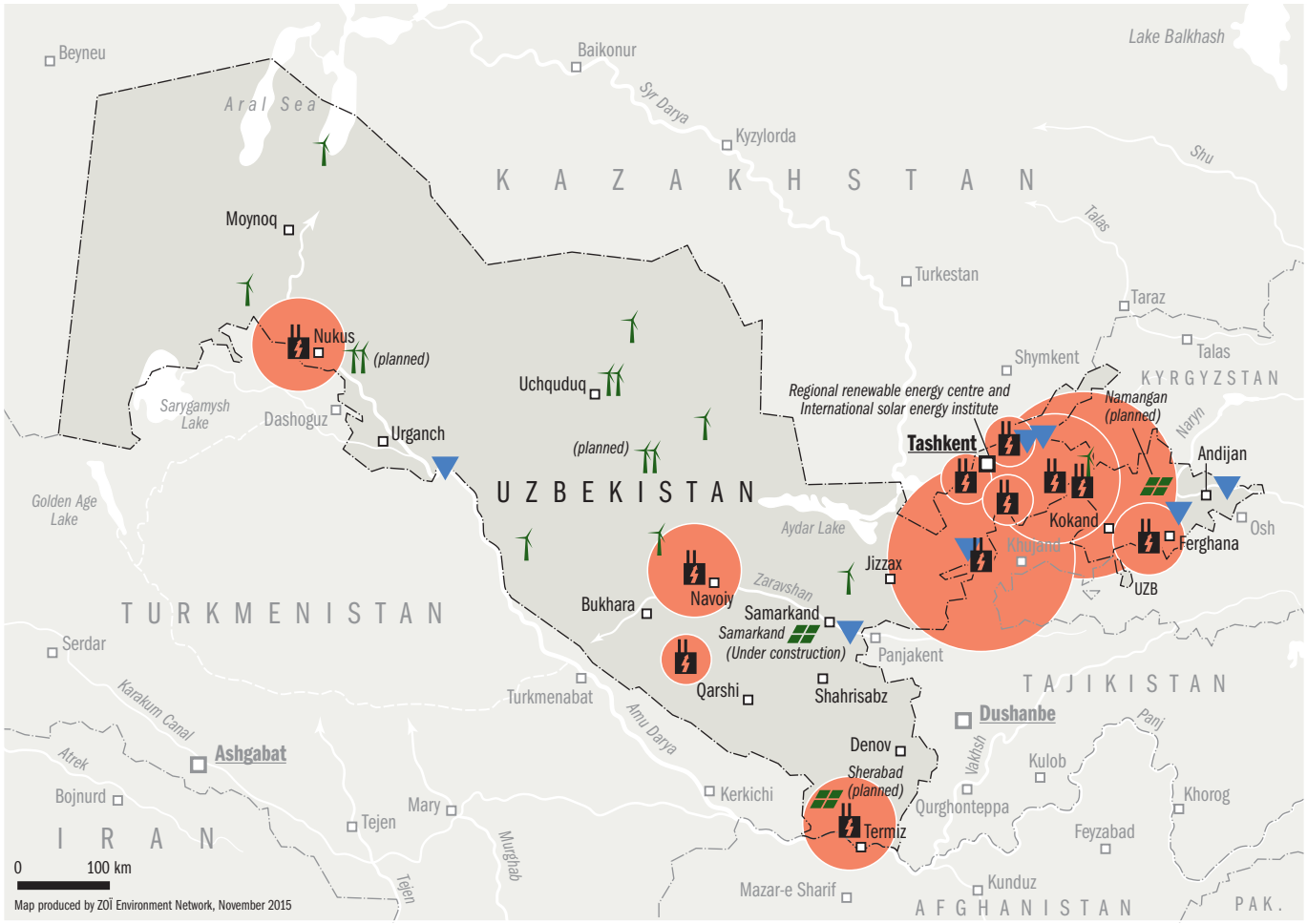
Sustainable development in rural areas
FLERMONECA, INOGATE and CASEP

UNDP-GEF project on energy efficiency in buildings

Revisions to building standards
Plans to build more energy-efficient urban and rural housing
Plans to develop incentives for energy savings in residential sector

Other international sources

Support to solar and wind energy projects
Investments to energy-efficient water and transport systems and improvements in water and land use
Aral Sea conservation efforts and drought risk reduction
Modernization of hydrometeorological service



Energy and emissions

Fossil fuel energy installations and carbon emissions

CO_2 emissions from thermal power plants, million tons per year:

more than 5
2 - 5
1 - 2
0.5 - 1
less than 0.5

Thermal power-plant (coal/oil/gas)

Renewable energy installations and plans

Wind farms
Solar power stations
Hydropower stations

Large (50 MW -100 MW)
Medium (Less than 50 MW)

Policies and institutions

Uzbekistan has extensive environmental legislation, which marginally covers protection of the climate system and mainly focuses on clean air. While the country does not have specific climate action plans or legislative acts, climate-related concerns are covered in energy, construction, transport, water and forest development programmes and investments as well as in the country's vision 2030. This vision sets provisional goals for the reduction of the energy-intensity of GDP and for increasing the share and use of renewables, primarily solar power. Currently, Uzbekistan is drafting legislation on renewable energy sources taking into account the experience of developed countries and the growing domestic needs for energy. Uzbekistan has also revised building codes to meet higher energy efficiency standards.

The Hydrometeorological Service is the UNFCCC, GEF and GCF focal point, and is the key climate policy agency in Uzbekistan. While UzHydromet is formally in charge of international climate matters, the Ministry of Foreign Affairs is a key player when it comes to international negotiations and decisions. The Ministry of Economy is the CDM focal point and is responsible for climate investment projects and coordinating the financial means of implementation. The State Committee on Nature Protection is the key player in domestic enforcement of clean air legislation, including actions on industrial and mobile source emissions and waste recycling and minimization. The inter-agency council on climate change chaired by the Deputy Prime Minister enables high-level discussions and coordination on climate change and CDM projects. Uzbekistan hosts relevant international and regional centres – such as International institute of solar energy, Central Asia regional centre on renewable energies, the Executive Secretariat of the International Fund for Saving the Aral Sea (IFAS), and regional scientific, research and training centres on agriculture, water resources and hydrometeorology.

Impacts of climate change

Rivers with intense water use and increased stress from climatic and hydrological changes

Impact of regional climate change and dust storms due to shrinkage of the Aral Sea

Increased risk of climate-related hazards in the mountains and impacts on populated areas and infrastructure

Densely populated and agriculturally important areas with increased environmental stress and projected impacts of climate change

Reduction of ice cover and risk of glacial lakes outburst floods

Uzbekistan scorecard

Country's share of global emissions

Country's emissions per capita

General climate action ambition

Mitigation commitment:

Emissions reduction

Decoupling from population growth

Decoupling from economic growth

Renewable energy prospects

Adaptation action

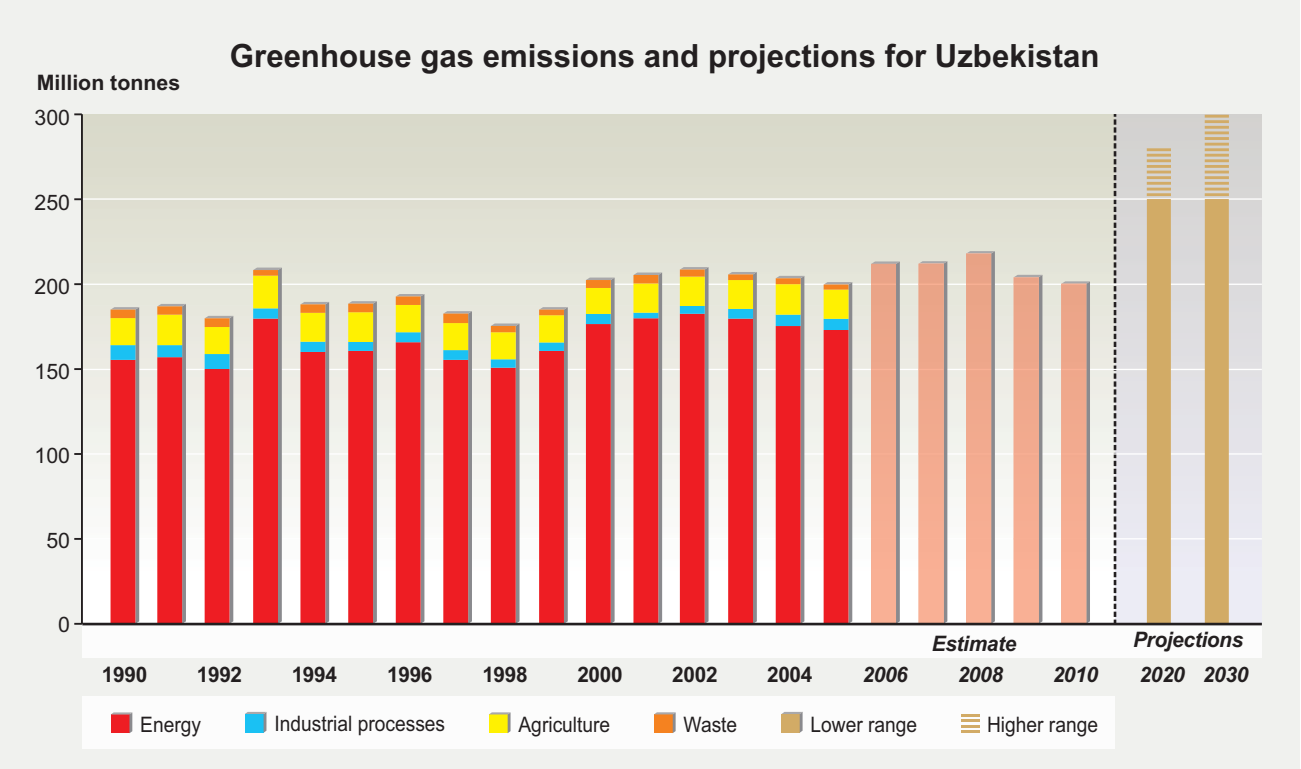
National climate policy actors

Policy leadership: shared responsibilities between the Uzbek Hydrometeorological Service, Ministry of Economy and the Uzbek State Committee for Nature Protection

UNFCCC focal point: Hydrometeorological Service

GHG inventory and projections: Hydrometeorological Service

GEF and GCF focal point: Hydrometeorological Service



Climate actions

Uzbekistan is the only country in Central Asia where emissions have remained relatively stable since 1990 and slightly increased towards 2012. This increase is attributable to a more stable economic situation after the dissolution of the Soviet Union; diversified industries; the growing use of natural gas as a fuel in the power and transport sectors; agricultural and forestry sector dynamics; and population growth. Among greenhouse gases, emissions of CO_2 remained stable and then declined slightly by 2012 compared to 1990 or 2000. Emissions of N_2O also declined as a result of decreases in the use of mineral fertilizers and increases in the application of the organic fertilizers. Methane emissions increased almost constantly due to growth in the agricultural sector (emissions from livestock, manure) and in the population (waste). Almost 90 per cent of all GHG emissions originate in the energy sector.

In Samarkand province, with ADB support, Uzbekistan is building the largest (100 MW) solar power plant in Central Asia, to be completed by 2016. Two more stations of similar capacity are planned for Surkhandarya and Namangan provinces by 2020. Nearby, in the industrial city of Navoi, a PV panel plant will be built to serve the growing energy needs of the country. A wind power survey was completed in 2015 and several priority sites proposed. Laser levelling of agricultural fields is becoming one of the leading tools to reduce water use in agriculture, and is expected to reduce the energy needed for water pumping by 30 per cent. Large investments are going into fruit and nut orchards and tree plantations, and the forest cover is constantly growing.

Since 2005, Uzbekistan has invested heavily in modernization of the industrial and agricultural sectors. These investments have helped the country lower per capita and per hectare water use, energy use and GHG emissions. Air pollution levels have decreased, including in Tashkent and other industrialized and vehicle-packed cities. The energy intensity of GDP declined by 50 per cent between 2000 and 2013.

Still, Uzbekistan remains one of the most energy inefficient countries in Eastern Europe and Central Asia region. Industry and agriculture are among the largest power consumers in the country and also the largest sources of energy inefficiencies due to outdated technologies and high reliance on water pumping. On the other hand, inspired by the success of its UNDP-GEF project on energy efficiency in the construction sector, Uzbekistan undertook revisions to its building standards, and plans to build more energy-efficient urban and rural housing as well as develop incentives for energy savings in residential sector. The Uzbek government and its international development partners are actively promoting both small-scale biogas and hydropower and large-scale solar power and solar water heating.

Climate finance

The European Union supports several climate-relevant projects in Uzbekistan. A sustainable development project in rural areas, implemented by GIZ, will share the experiences of food production and sustainability from EU rural and farming areas, and enhance living standards in six provinces. Uzbekistan also participates in several regional EU-sponsored projects and initiatives: FLERMONECA, INOGATE and CASEP. EBRD is supporting solid waste management and water reforms in Tashkent.

Other climate-active international donors in Uzbekistan include UNDP, mainly medium-sized projects and small grants through GEF and the Adaptation Fund. FAO supports projects on forests, agriculture and climate, and the World Bank and ADB cover – energy efficiency, renewable energy, rural housing, sustainable agriculture, climate mitigation, water supply, transportation and modernization of hydrometeorology services.

Sources of information for the scorecard

Uzbekistan's strategies and legislation

National climate-related assessments and reports: the second national communication to UNFCCC (2008); Uzbek MDG 2015 implementation assessment

Zoï expertise and interviews with stakeholders in Uzbekistan

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