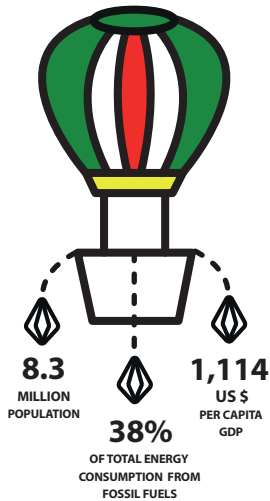


TAJIKISTAN

CLIMATE FACTS AND POLICY

POLICIES AND PROCESSES

8 MILLION tCO₂e
1 TONNE 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>

Policy framework

National climate change action plan (2003, requires update)
National climate change and health strategy (2011)
National adaptation strategy 2016-2030 (under development)
National strategies and programmes on glaciers, energy efficiency, small-scale hydropower, disaster risk reduction, forests
Participant of the Pilot Program for Climate Resilience since 2009
Limited consideration of climate change concerns in legislation and sub-laws

2020 targets

NAMAs on energy and forestry

2030 targets and INDC

Mitigation

Base year and GHG emissions level: 1990, 25.5 million tonnes
Unconditional target 2030: not to exceed 80-90 per cent of 1990 level, 1.7-2.2 tonnes CO₂-eqv per capita
Conditional target 2030: not to exceed 65-75 per cent of 1990 level, 1.2-1.7 tonnes CO₂-eqv per capita

Adaptation priorities

Agriculture, irrigation and water systems
Power engineering and industrial facilities
Transport and residential infrastructure
Economy-wide climate resilience and disaster risk reduction
Adaptation of globally significant biodiversity to climate change
Monitoring and conservation of glaciers and water resources
Occupational safety, maternity and childhood protection in a warming climate

GHG inventory and projections

Historical time series (1990-2010) and projections in the third national communication to UNFCCC
GHG emissions from coal power, cement production and agriculture expected to grow
No advanced MRV and GHG scenario modelling established yet

CLIMATE ACTIONS

Low GHG emissions

1 tonne CO₂-eqv per person, total 2010 emissions (8 million tonnes): one third of the 1990 level
Strong decline in the energy-use sector, growth in the share of non-CO₂ emissions
Plans for large and small hydropower and coal-power development
Significant role of land use and forests in GHG balance

Considerable action on adaptation at various levels

Major international investments to agriculture and hydropower climate resiliency and disaster risk reduction
Local adaptation actions, climate-proofing of the new infrastructure built with international donor support

Regional actions

Contributor to the Aral Sea Basin Program
Promoter of global and regional freshwater initiatives
Environment, climate change and hydrology cooperation with Afghanistan

CLIMATE FINANCE

Limited national resources

Sufficient for soft measures (legal, institutional) but inadequate for tangible action

Significant role of international climate investments

About US \$150-200 million in loans and grants for climate-relevant actions

EBRD and EIB funding

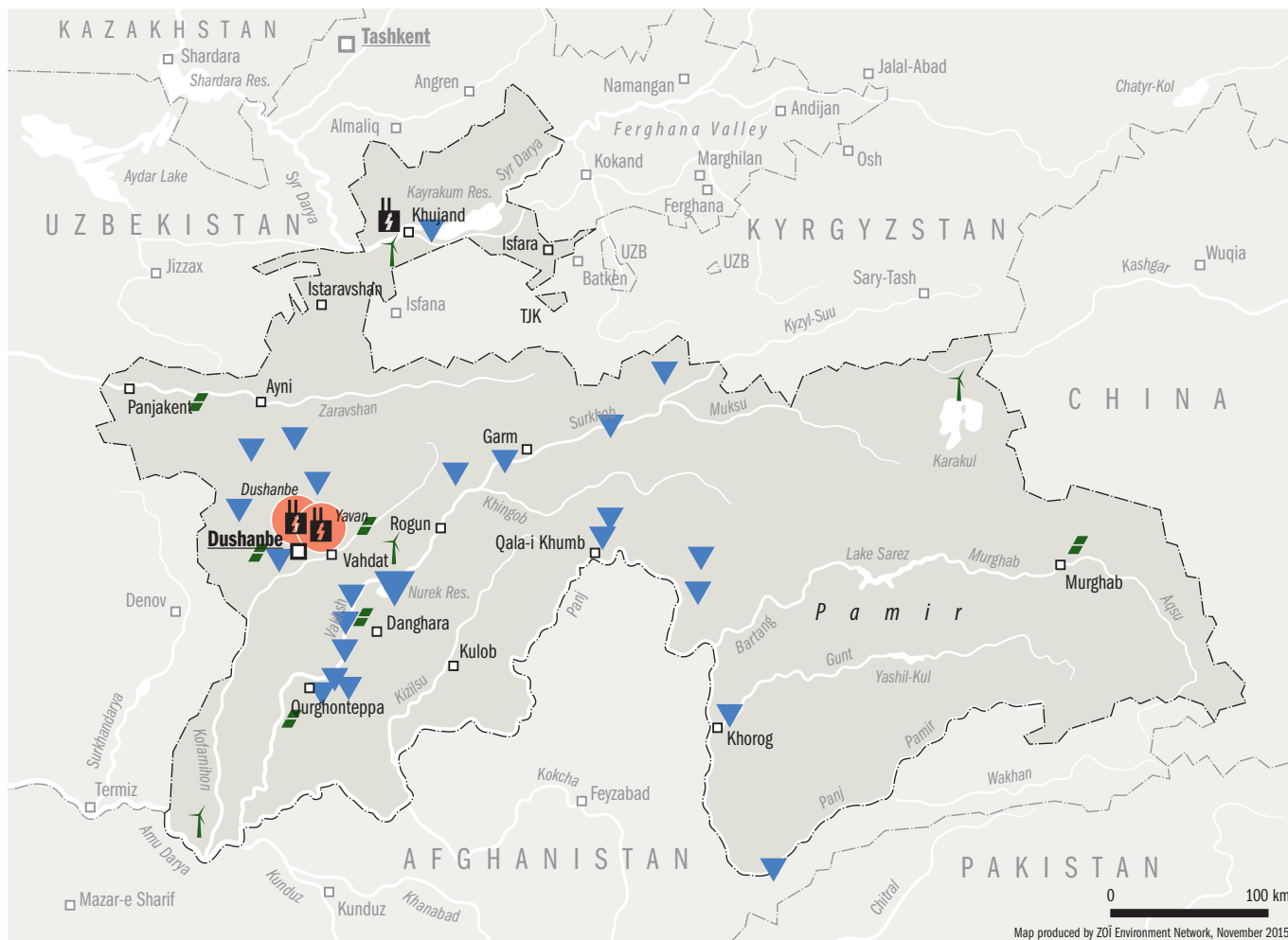
Kairakkum hydropower station rehabilitation and climate-proofing
Solid waste management in the main cities of Tajikistan
Public transport and improved water supply
Rehabilitation of power network

Global Environment Facility

Sustainable urban transport, development of small-scale hydropower, sustainable watershed management and agro-biodiversity adaptation to climate change (UNDP, World Bank)

Other sources and channels

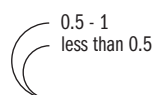
Climate Investments Funds, World Bank, ADB, bilateral (Germany, Finland, Switzerland)



Energy and emissions

Fossil fuel energy installations and carbon emissions

● CO₂ emissions from thermal power plants, million tons per year:



⚡ Thermal power-plant (coal/oil/gas)

Renewable energy installations and plans

🌬️ Wind park ☀️ Solar park ▼ Hydropower plant

Installed capacity:

🌬️ ☀️ Less than 50 MW

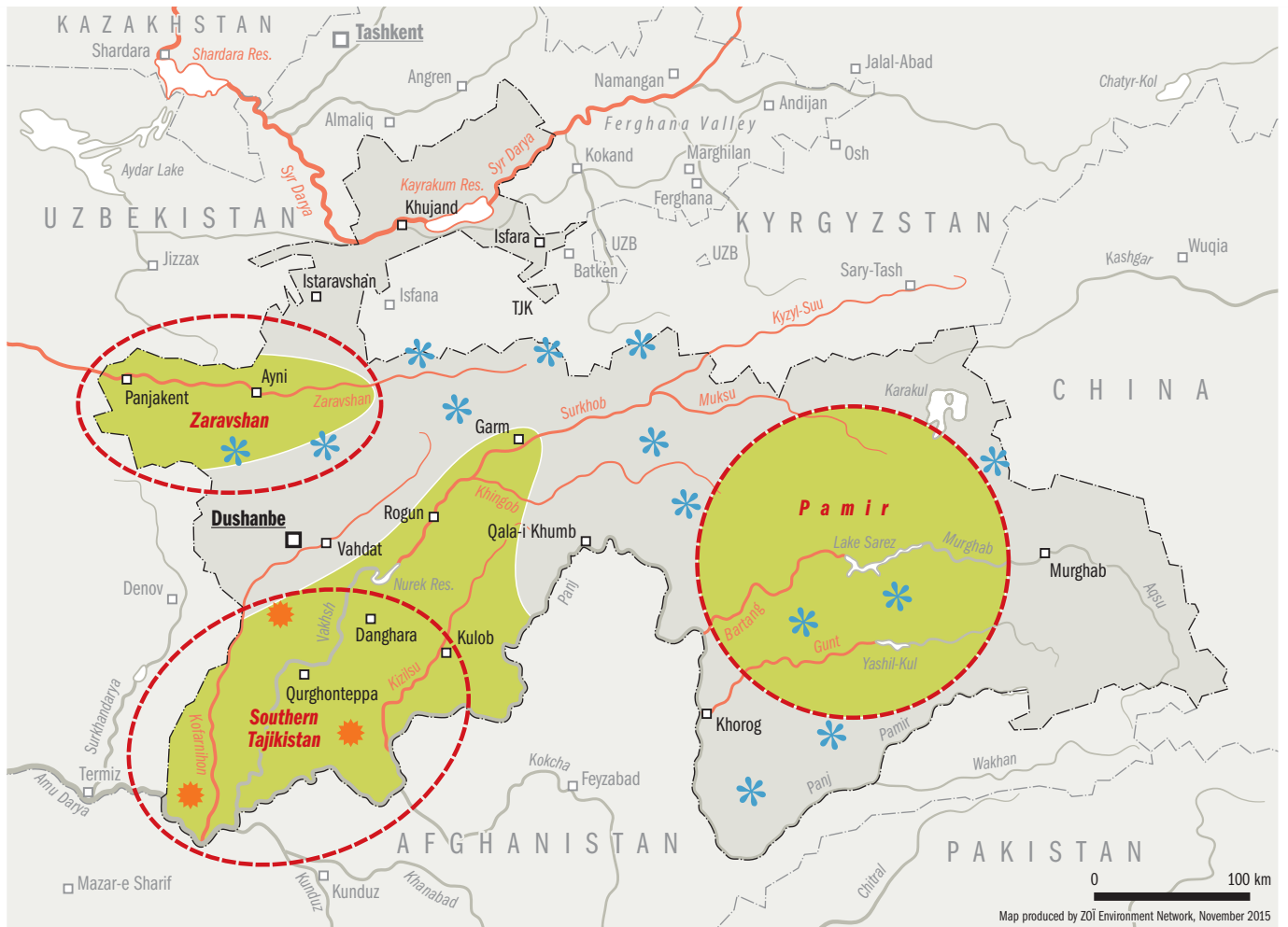
Policies and institutions

Tajikistan has not yet developed comprehensive legislation on climate protection and in general climate is not yet reflected in environmental, air pollution or energy laws. The country is nevertheless one of the regional pioneers in adaptation planning, and has produced a national climate change action plan (2003) and a national climate and health strategy (2011). Currently, a national climate adaptation strategy is in the final stages of development. The country is implementing diverse project-based climate actions at various levels with donor support, focusing on climate resiliency.

Tajikistan consistently expresses the importance of hydropower and energy security and the need to overcome an energy crisis in its public statements, including at the United Nations Climate Summits in September 2014 and September 2015. In order to respond more effectively to the energy crisis, UNDP has established information and an institutional system of energy crisis early warning.






As a landlocked and impoverished mountain country acting as a water tower and possessing large potential hydropower resources, Tajikistan shares interests with similar mountain countries, especially its closest neighbours - Afghanistan and Kyrgyzstan - and sees itself as part of an interest group with respect to international climate change processes. The promotion of a global fund for the preservation of glaciers is one particular high-level interest in the country.

The leading authorities with climate decision-making responsibilities include the Executive Office of the President (responsible for monitoring, coordination and supervision of line ministries), the Committee for Environmental Protection (focal point to GEF and GCF) and its Agency on Hydrometeorology (focal point to the UNFCCC). The Ministry of Energy and Water Resources is one of the key players in climate investments. NGOs are active promoters of innovations and international developments in domestic climate actions and policy through the climate change network - TajCCN. They often work on practical local activities, education and awareness.






Map produced by ZOI Environment Network, November 2015





Impacts of climate change

-  Projected shifts in seasonal hydrology and growing uncertainties of water availability
-  Areas most exposed to weather and climate risks
-  Environmentally sensitive and stressed regions
-  Severe drought impacts
-  Reduction of ice cover

Tajikistan 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

-  **Adaptation action**

National climate policy actors

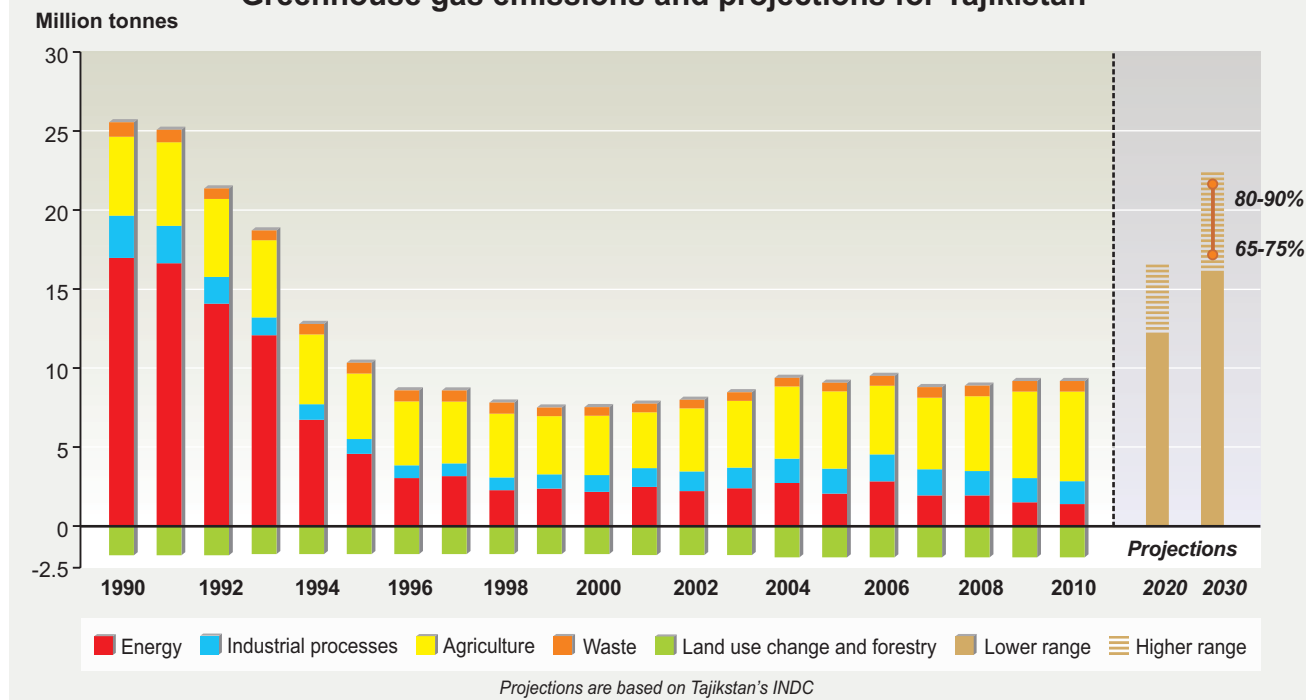
Policy leadership: Executive Office of the President, Committee for Environmental Protection

UNFCCC focal point: Agency on Hydrometeorology

GHG inventory: Project based, Climate Change Centre

GCF focal point: Committee for Environmental Protection

Greenhouse gas emissions and projections for Tajikistan



© Zoi Environment Network (2015)

Climate actions

Hydropower accounts for more than 95 per cent of the electricity generated in the country, which in combination with a low fossil fuel use makes Tajikistan a low-emission leader of Central Asia. Over the last decade, GHG emissions remained stable, but are expected to increase in the current decade. Recommendations and a scope for mitigation and adaptation activities are reflected in the national climate change action plan (2003).

According to the most recent inventory of GHG emissions (2004-2010), the level of absolute and per capita emissions in Tajikistan remains the lowest in Central Asia (about 1 tonne CO₂-eqv per person). The current level of emissions as compared to 1990 (25 million tonnes of CO₂-eqv) has declined by two thirds (to 8 million tonnes of CO₂-eqv), due to the collapse of the former Soviet Union economy and to structural changes resulting from the transition to a market economy and independence. The most dramatic decline in GHG emissions occurred in the energy sector - a staggering reduction of more than 80 per cent - but not without socioeconomic and environmental consequences: high reliance on imported fossil fuels and their unsecure supply creates major difficulties for businesses and the population at large. Coal mining and use, negligible in Tajikistan for 20 years, is starting to grow in the residential, industrial and power sectors with current levels estimated at 0.5 million tonnes/year.

Tajikistan's emissions profile differs from other Central Asian countries. In 1990, the energy sector dominated GHG emissions (almost 70 per cent of the total). From the late 1990s to the present, agriculture has been the main source of GHG emissions (60 per cent). Road transport is extensively using a low-emission fuel (more than 50 per cent of cars are run on natural gas).

While Tajikistan has only 3 per cent forest cover, forests and grasslands play a significant role in the regulation of climate and the reduction of extreme event impacts.

Despite the country's efforts to ensure a reliable emissions inventory, calculations vary from sector to sector, and the available statistical data are not comprehensive.

Tajikistan's INDC sets a 2030 target of a reduction to 80 - 90 per cent of 1990 emissions levels without external assistance, and a reduction to 65 - 75 per cent subject to substantial international funding. On the adaptation side, the INDC outlines an ambitious set of initiatives the country is pursuing, but reports that national funding is insufficient to implement all the programmes.

Climate finance

As a result of its high vulnerability to climate change and its low adaptive capacity, Tajikistan was invited to participate in the Pilot Program for Climate Resilience (PPCR). The budget of PPCR and other climate projects in Tajikistan grew to an estimated US \$150 million in loans and grants, and funded activities in hydropower, agriculture, watershed management and other sectors.

Climate-related funding from the Global Environmental Facility (GEF) has supported preparation of the national communications to UNFCCC, sustainable urban transport, development of small-scale hydropower, sustainable watershed management and agrobiodiversity adaptation. Climate actions in agriculture that qualify under the climate mechanisms could have a major development impact in the country.

Cooperation with the EU is an important priority for Tajikistan. Regional programmes such as INOGATE, CASEP and FLERMONECA cover climate, forest and energy issues.

The EBRD has diverse portfolio of projects in Tajikistan with a value of US \$350 million. Ongoing EBRD projects include solid waste management in the main cities, the Kairakkum hydropower plant rehabilitation, public transport and water supply.

Sources of information for the scorecard

Tajikistan's strategies and legislation

National climate-related assessments and reports: National climate change action plan (2003), the third national communication to UNFCCC (2014), climate change and security national stakeholder consultations (2014), INDC (2015)

Publications and information materials of Tajikistan's Agency on Hydro-meteorology, Tajik PPCR Secretariat, World Bank, CIFs, EBRD, UNECE

Zoi expertise and interviews with stakeholders in Tajikistan



This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union.