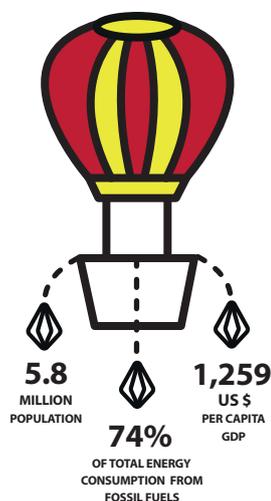


# KYRGYZSTAN

## CLIMATE FACTS AND POLICY

### POLICIES AND PROCESSES

**12 MILLION tCO<sub>2</sub>e**  
**2 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>

#### Multidimensional policy framework

National sustainable development strategy 2013-2017

National programme and laws for improving energy efficiency and renewable energy

Priority directions for adaptation to climate change until 2017 with sectoral action plans

Participant in the Pilot Program for Climate Resilience since 2015

High-level Inter-agency Coordination Commission on Climate Change, intersectoral climate dialogue platform

#### 2020 targets

Reduce GHG emissions by 20 per cent under adequate support for actions

#### 2030 targets and INDC

##### Mitigation

Base year: not considered

Absolute growth of emissions in all scenarios with decoupling from population and economic growth

Unconditional target 2030: 13 per cent economy-wide reduction compared to business as usual

Conditional target 2030: 30 per cent economy-wide reduction compared to business as usual

Long-term 2050 target range: 1.2-1.6 tonnes CO<sub>2</sub>-eqv per person

##### Adaptation priorities

Agriculture and water systems

Energy

Forests and biodiversity

Health care sector

Disaster risk reduction and investments to reduce losses and damage

#### GHG inventory of all sectors & gases

Historical time series and projections will be published in the third national communication to UNFCCC (end 2015)

No advanced MRV and GHG emissions modelling systems established yet

### CLIMATE ACTIONS

#### Low GHG emissions

About 2.2 tonnes CO<sub>2</sub>-eqv per capita in 2010

Absolute emissions: two thirds of 1990 level

Strongest decline in the energy-use sector (still responsible for three quarters of GHGs)

Plans for mass gasification of the country (Gazprom)

Hydropower potential expected to decrease after the 2030s in view of climate impacts on water sources

Significant role of grasslands and forests in GHG balance

#### Considerable attention to adaptation and loss and damage estimates

Adaptation policy framework adopted

Sectoral action plans developed (health, agriculture-water, biodiversity-forests, emergency response)

Evolving domestic approaches to the estimation of losses and damages expressed in monetary terms

Mountains important and highly vulnerable (glaciers, ecosystems, landslides, mining at high elevations)

Climate adaptation initiatives at local level, especially in forest-rich regions

Numerous NGOs active on climate change education and awareness, energy efficiency and adaptation

#### Regional actions

Hosts the Regional Mountain Centre

Hosts the Secretariat of the Global Snow Leopard and Ecosystem Protection Program

Contributes to the Aral Sea Basin programme and the Chu-Talas River basin cooperation (works with Kazakhstan on basin-wide adaptation to climate change)

### CLIMATE FINANCE

#### Very limited own resources

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

#### Strong reliance on Russian energy investments

45 billion rubles (US \$890 million in 2015 prices) in gas distribution network, investment in new hydropower

#### Importance of EBRD loans and grants for energy efficiency

EUR 20 million in 2013-2014 for KyrSEFF project, next phase in preparation EBRD also supports alternative energy, including small hydropower

#### Global Environment Facility

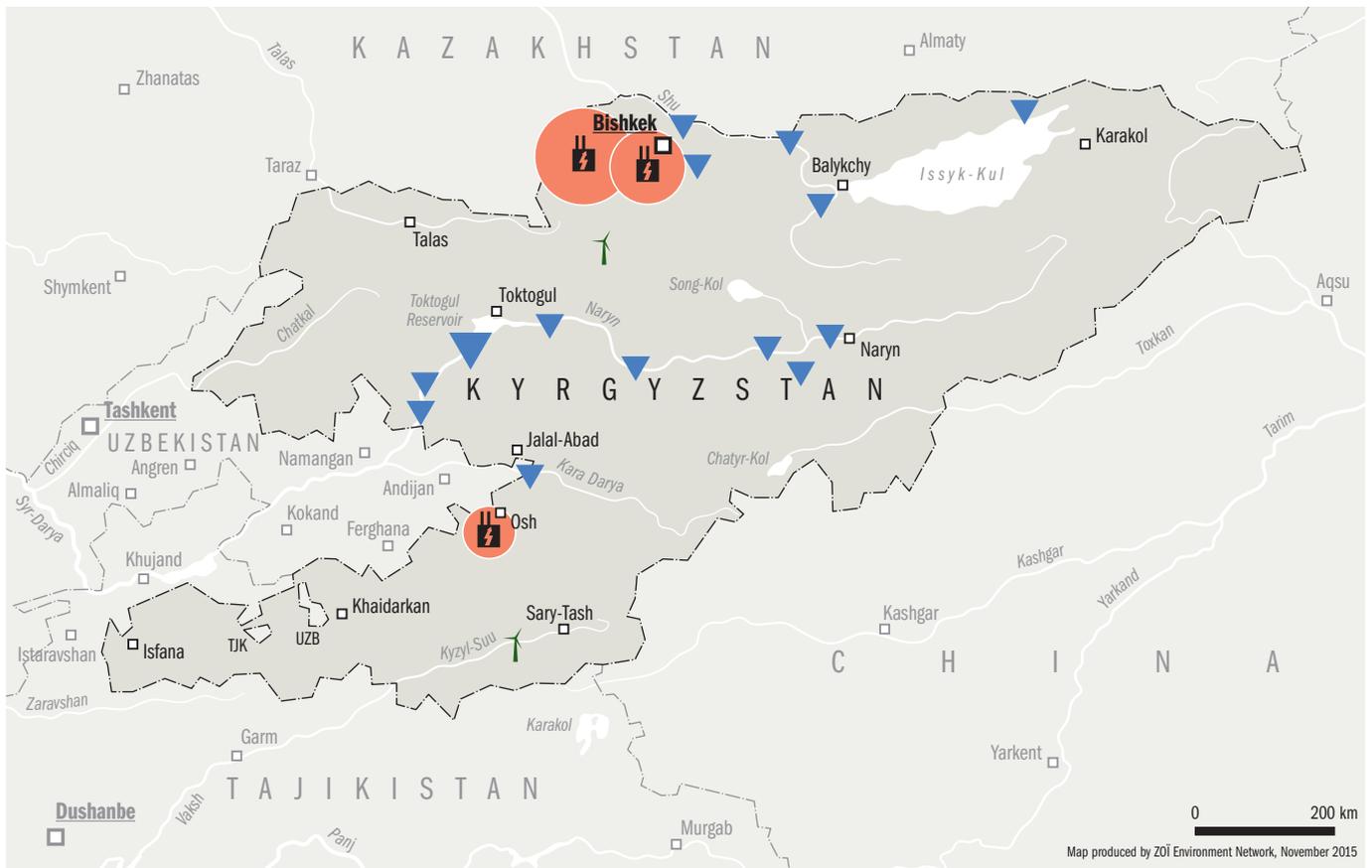
INDC (UNEP-GEF), management of mountains, pasture, protected areas (UNDP and FAO pipelines)

#### NAMAs: Two projects in the pipeline

Small coal-fired boiler plants and the management of riparian forests (both developed with German support), more to come via UNDP in the context of future low-carbon development

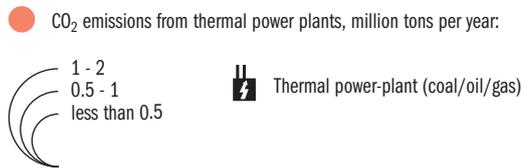
#### Other sources and channels

World Bank, ADB, UNECE, bilateral (Finland, Switzerland, US, China), business



## Energy and emissions

### Fossil fuel energy installations and carbon emissions



### Renewable energy installations and plans



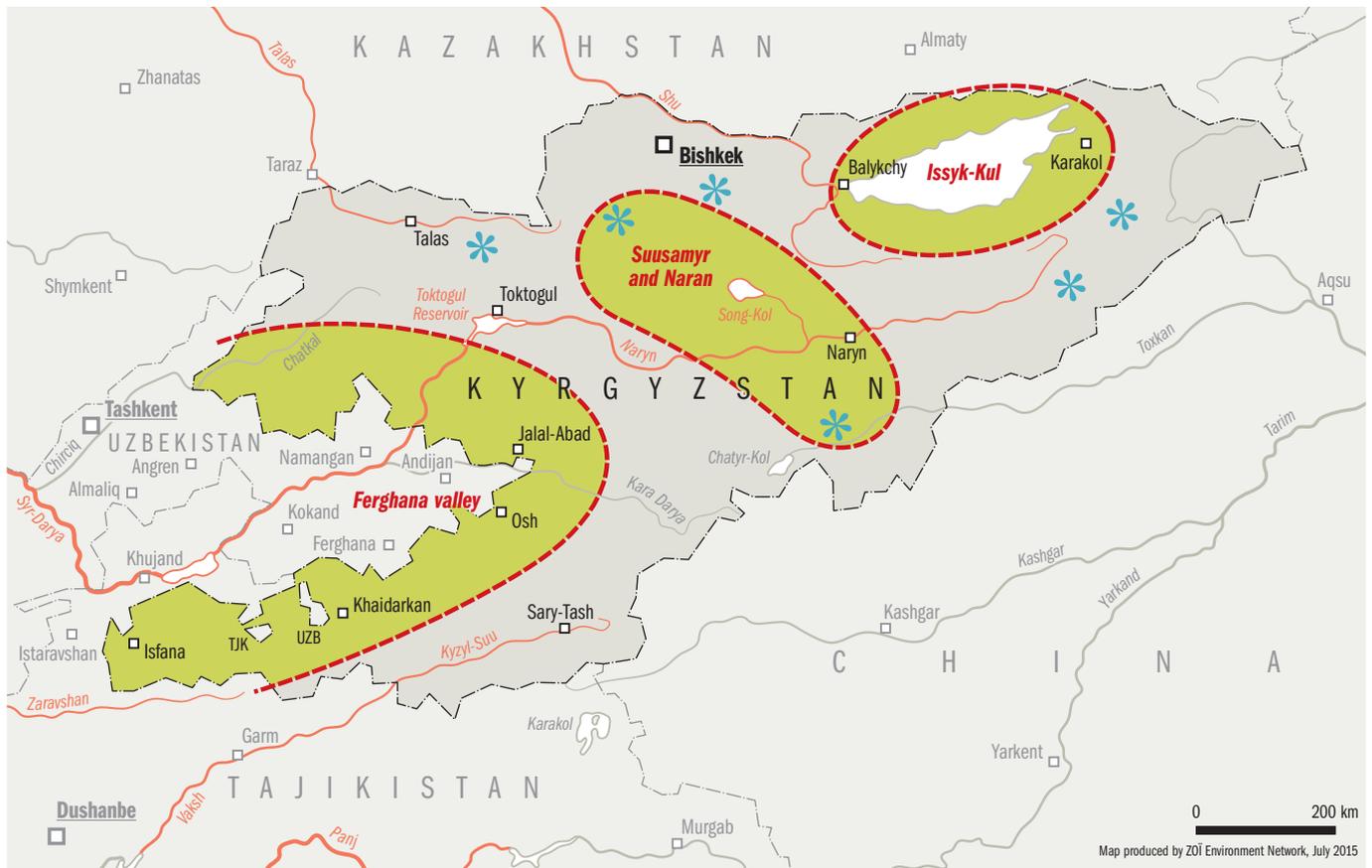
## Policies and institutions

The national sustainable development strategy of the Kyrgyz Republic for 2013-2017 sets the country's overall environmental policy framework. The Vice Prime Minister chairs the high-level Inter-agency Coordination Commission on Climate Change, the members of which include heads of key governmental agencies. The State Agency for Environmental Protection and Forestry, as the lead governmental body for climate change, acts as its secretariat. The non-profit Climate Change Centre works at arm's length to the Agency and provides practical support to the Commission.

A climate dialogue platform facilitated by the Climate Change Centre is unique among Central Asia countries, and serves as a mechanism for intersectoral dialogue among the authorities, the business community, academia and civil society. The Climate Network of Kyrgyzstan, coordinated by the civic foundation UNISON is an NGO-based vehicle for promoting and coordinating climate change actions. The business and academic networks engaged with climate issues include the Renewable Energy Association and the Kyrgyz Institute of Climate and Green Technologies. The cities of Osh and Talas

have signed the Covenant of Mayors. The Kyrgyz-Russian Slavic University and the Kyrgyz National University provide climate-related training.

Kyrgyzstan has not yet adopted comprehensive climate mitigation legislation, and a low-carbon development strategy is seen as the way to operationalize emission targets, which are enumerated in the country's INDC. The energy sector has broader purpose and indirectly climate-related legislation and policies such as the National Energy Programme and the Strategy for Fuel and Energy Sector Development for 2010-2025. The strategy calls for the rapid expansion of renewables, especially hydropower, as a priority for energy sector development. Laws on renewable energy and the energy efficiency of buildings, and the national programme for improving energy efficiency - newly developed with EU-GIZ support - also contribute to regulating the energy sector. In 2013 Kyrgyzstan adopted priority directions for adaptation to climate change until 2017, and is developing action plans for agriculture and water resources; biodiversity and forests; and emergency response. A public health plan was adopted in 2011.



## 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

## Kyrgyzstan 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:** Coordination Commission on Climate Change

UNFCCC focal point: State Agency on Environmental Protection and Forestry

GHG inventory and projections: Climate Change Centre

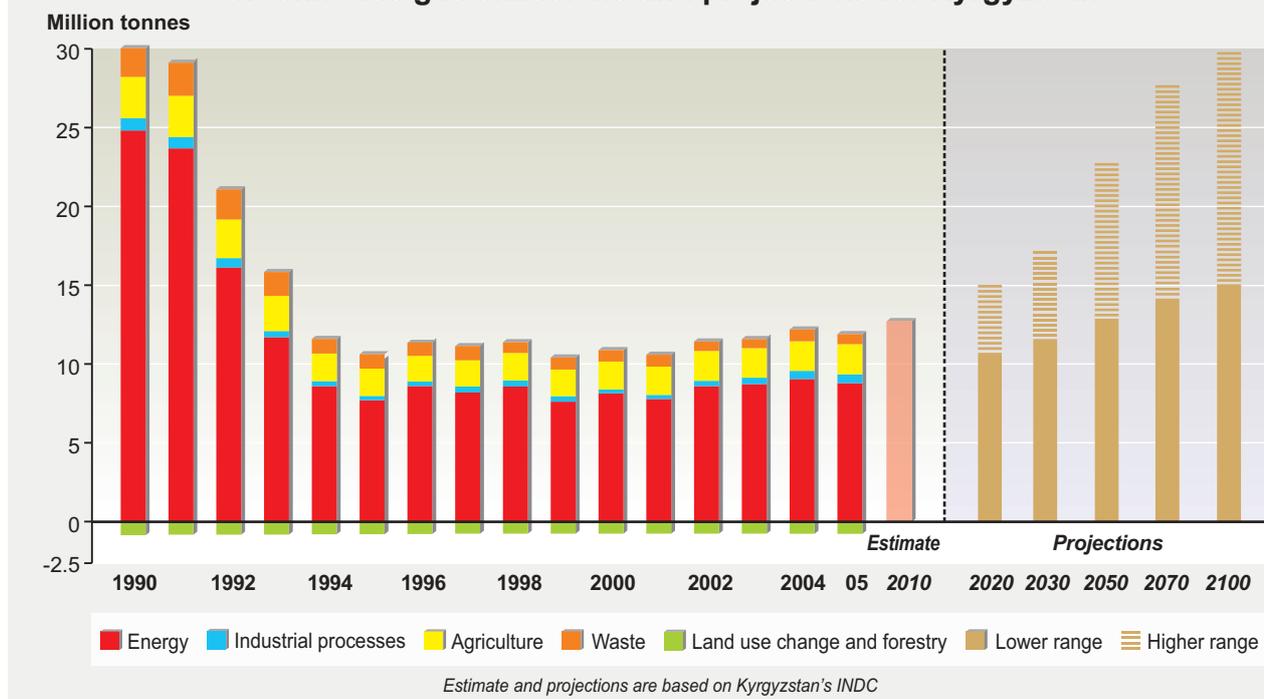
GCF focal point: State Agency on Environmental Protection and Forestry

## Climate actions

Kyrgyzstan is currently preparing its third national communication to UNFCCC, which will be based on revised historical time series of GHG emissions and projections. According to data published in the second national communication (2009), absolute and per capita emissions remained low (about 2.2 tonnes CO<sub>2</sub>-eqv per person) until 2010. Due to the collapse of the former Soviet economy and structural changes resulting from the economic

transition, the 2005-2010 emissions totaled only one third of the 1990 level. The most notable decline occurred in the energy-use sector, which is still responsible for over 70 per cent of the emissions, followed by agriculture. The planned mass gasification of the country by Russia's Gazprom and the entry of Kyrgyzstan in 2015 into the Eurasian Economic Union are also expected change the energy balance.

## Greenhouse gas emissions and projections for Kyrgyzstan



The country has developed only 10 per cent of its hydropower potential, and its energy development strategy calls for the construction of multiple small hydroelectric plants by 2025. Other renewable energy development options include heat supply through solar energy and biogas, and electricity from wind and solar. There are no existing projects using these technologies.

The energy savings potential in buildings is estimated at 15 per cent at least, while modernization and rehabilitation in the energy system can lead to 25 per cent savings.

While Kyrgyzstan has only 6 per cent forest cover, forests and grasslands play a significant role in regulating climate balance, reducing the impact of extreme events, and contributing to carbon sequestration.

Kyrgyzstan sees mitigation as one way to attract much-needed forest investments and aid, and explicitly links its mitigation targets to such aid. Kyrgyzstan is particularly interested in climate change adaptation and in developing approaches to loss and damage estimates and compensation. Given its topography, Kyrgyzstan has traditionally paid high-level political attention to mountain development, ranging from glaciers and endemic biodiversity to mining. Cross-border cooperation is seen as important, and the joint adaptation approach with Kazakhstan in the Chu-Talas River basin is frequently referred to as pioneering.

The Kyrgyz INDC recognizes the damages already inflicted across the country's most vulnerable sectors, particularly to water resources, and adopt an adaptation target of preventing further climate change damage and losses. In keeping with the country's climate change priorities, the mitigation targets are secondary to the adaptation targets.

## Climate finance

Kyrgyzstan's own financial resources for tangible climate action are severely limited. In climate-relevant cooperation, the EU is most visible in energy matters, both through regional programmes (INOGATE, CASEP) and through EBRD operations with EU co-funding. The EBRD promotes efficiency in energy production and use, such as KyrSEFF project for buildings and industrial infrastructure with EUR 20 million spent in loans and grants in 2013-2014 and preparing for a next phase.

The World Bank provides support to hydrometeorological services for accessing, improving and managing climate data. Kyrgyzstan has applied for participation in the Pilot Program for Climate Resilience. In 2015 the World Bank is starting a five-year CAMP4CA of climate investment grants and loans for agriculture, water and other sectors, and climate science. ADB pays strong attention to Kyrgyzstan's energy sector, such as reconstruction of the Toktogul hydropower plant and support to the development plan for the energy sector.

UNDP provides support for national climate reporting, preparation of national adaptation priorities, and climate risk management. UNDP is interested in supporting the preparation of Kyrgyzstan's low-carbon development strategy.

Germany, through GIZ, has implemented a special Central Asia adaptation and mitigation programme that included climate-proofing of nut forest development in southern Kyrgyzstan. GIZ has also supported capacity-building of Kyrgyzstan's Climate Network, and the development of adaptation plans for biodiversity and forests.

## Sources of information for the scorecard

Kyrgyzstan's publications, strategies and information materials, including the National strategy for sustainable development of the Kyrgyz Republic for 2013-17, Priority directions for adaptation to climate change in the Kyrgyz Republic till 2017, materials of the extended meeting of the Coordination Commission for the Issues of Climate Change (Bishkek, March 2015)

National climate-related assessments and reports: second national communication to UNFCCC 2009

Publications and materials of Kyrgyzstan's Climate Change Centre, World Bank, EBRD, GEF, UNECE, OECD-IAE, Environment and Security initiative

Maps by INCOTEC

Zoi expertise, and interviews with stakeholders in Kyrgyzstan



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.