

INOGATE Technical Secretariat Country Work Plan: Kazakhstan

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Contents

Abbreviations and acronyms	4
Section 1 Introduction	5
Section 2 Energy policy of Kazakhstan	5
Section 3 Achievements of the Kazakhstan-ITS cooperation.....	6
Section 4 Work Plan for Kazakhstan-ITS cooperation.....	8
Table 1: Priorities of the Kazakhstan-ITS cooperation for 2015-2016	6
<u>Table 2: Completed and ongoing activities of the Kazakhstan-ITS cooperation in 2011-2014</u>	<u>6</u>
Table 3: Top priority planned activities for the Kazakhstan-ITS cooperation in 2015-2016	8
Table 4: Secondary priority planned activities for the Kazakhstan-ITS cooperation in 2015-2016.....	9

Abbreviations and acronyms

AA	Association Agreement
AHEF	Ad Hoc Expert Facility
AP	Action Plan
CSRK	Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan
KZ	Kazakhstan
CA	Central Asia
CWP	Country Work Plan
E & G	Electricity and Gas
ECT	Energy Community Treaty
ECU	Eurasian Customs Union
EE	Energy Efficiency
EnC	Energy Community
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSO-G	European Network of Transmission System Operators for Gas
ESAP	Energy Statistics Action Plan
EU	European Union
INO GATE	Energy Cooperation between the EU, the Littoral States of the Black & Caspian Seas and their Neighbouring Countries
ITS	Inogate Technical Secretariat
JSC	Joint Stock Company
LIE	Local Information Event
NSI	National Statistical Institute
PC	Partner Country
RES	Renewable Energy Sources
RM	Road Map
SE	Sustainable Energy
TA	Technical Assistance
TA - ESS	Technical Assistance – Support to the development of the Energy Statistics System
TSO	Transmission System Operator
WTO	World Trade Organisation

Section 1 Introduction

The overall purpose of the Country Work Plan (CWP) for the project period February 2015 – April 2016 is to define the INOGATE activities to be carried out based on the experience of experts and the explicit requests of the Partner Country. This document outlines the ITS analysis of the needs and priorities of the countries and the proposed ITS strategy and rationale for intervention.

The proposed activities presented here take into account the bilateral and trade agreements of the EC and the PC as well as other EU projects and the activities of other donors in a PC.

This country work plan has been drafted by ITS in consultation with the Partner Country and the European Commission.

INOGATE is an EU regional cooperation instrument, that is based on inter and intra-regional cooperation of Partner Countries and capacity building, focusing on the following areas:

- Technical and regulatory advice on energy security, energy markets efficiency and development;
- Implementation of energy efficiency and renewable energy policies;
- Energy and economic planning through the use of improved energy statistics;
- Facilitating energy efficiency and renewable energy investments.

The ITS provides short or medium-term technical assistance in these areas at regional and country level.

Section 2 Energy policy of Kazakhstan

The policy directions in the energy sphere in Kazakhstan, based on analysis by ITS experts, are:

- The main problem in the sector currently is lack of investment in the energy infrastructure which is very old and needs replacement;
- In terms of regional market development – recent agreement to create a Eurasian Union presumes development of common electricity market with Russia and Belarus. The challenge here is to find a common ground between different systems - Belarus (monopoly) – Russia (central pool) and Kazakhstan (bilateral agreements). Priority is to develop a capacity market. Strong interest also to develop the regional market in CA, the main challenge here is the political disputes over water usage (UZ-KG-TJ);
- Optimization of the Cost reflective energy tariff system;
- Regional and national markets principles and new model for Kazakhstan;
- Grid connections regulations (EU best practice);
- Gasification and internal gas satisfaction is a national priority;
- EU practice in pipeline integrity management;
- Use of Compressed Natural Gas (CNG) in public transport has been included in the governmental discussion documents.

The policy and regulatory framework, as identified by ITS experts, includes:

- The Strategic Development Plan to 2020 which covers an overall plan for the economy and all sectors, including a “provision of the economy’s sustained growth by means of accelerated diversification through industrialization and infrastructure development”. Specific to energy,

the government has set a target of 3% of alternative energy sources in the energy mix by 2020.

- Kazakhstan is also a member of the Customs Union (CU) since December 2012 and is actively seeking to become a member of the World Trade Organisation (WTO).

The relationship with the EU on energy is based on a Memorandum of Understanding, signed in December 2006.

The priorities for the cooperation between Kazakhstan and INOGATE for the period 2015-2016 reflect the national priorities stipulated in the above strategic documents and are shown in Table 1¹.

Table 1: Priorities of the Kazakhstan-ITS cooperation for 2015-2016

Priorities
Improvement of market rules
Cross-border trade
Energy data collection
Energy balances
Energy indicators

Section 3 Achievements of the Kazakhstan-ITS cooperation

Representatives from Kazakhstan have participated in the regional seminars and study tours, listed in Table 2: Completed regional activities in 2011-2014 of the Regional Work Plan, as well as in national INOGATE activities, listed in Table 2. In addition to completed activities, Table 2 also contains ongoing activities, to which the INOGATE project is already committed.

Table 2: Completed and ongoing activities of the Kazakhstan-ITS cooperation in 2011-2014

Implemented/ongoing Activities	Results	Impacts	Areas
ELECTRICITY AND GAS			
Assistance on adoption of interstate gas standards (identical to European gas standards) as national standards.	Adoption of interstate gas standards (identical to European gas standards) in Kazakhstan's national standardization system.	National gas standards are harmonised with European gas standards. Reduction of existing technical barriers between European and Kazakhstan natural	Harmonisation of electricity and gas standards and Codes.

¹ To the best knowledge of the ITS Project there are no overlaps with other donors.

Implemented/ongoing Activities	Results	Impacts	Areas
		gas infrastructure.	
Assistance in transfer to Kazakhstan of 100 European oil and gas standards.	European oil and gas standards have been transferred.	Kazakhstan standards on oil and gas are harmonised with European standards.	Harmonisation of electricity and gas standards and Codes.
Study and analysis of experience in development of power exchange trade(AHEF.089.KZ, ongoing).Study and analysis of the existing models of electricity market (AHEF.107.KZ, ongoing) .Study and analysis of tariff setting in the area of electricity: production, transmission, supply (AHEF.108.KZ, ongoing).	Recommendations provided for legal, economic and technical issues with respect to cross-border trading in Central Asia. Software solutions assessed.	Increased trade of electricity trade between Kazakhstan and neighbouring countries.	Cross-border Trade of Electricity and Gas.
ENERGY STATISTICS			
Developing an Energy Statistics Action Plan (ESAP 2012 - 2014).	ESAP developed and endorsed through signing of a Memorandum of Understanding.	Improved data collection and analysis.	Energy statistics system improvement.
1st TA missions to initiate and support the activities defined in the ESAP. Conducted meetings with main data providers (energy companies) to check data availability requested by a new concept for energy data collection.	Questionnaires for different data providers adjusted to the circumstances in Kazakhstan.	Increased capacity of energy stakeholders to compile official energy statistics. Improved institutional framework for energy statistics.	Energy statistics system improvement.
Developing energy statistics system and model for energy data collection.	Prepared procedures for collection of energy data from coal, natural gas, crude oil and petroleum products, electricity and heat and renewable sources.	Increased capacity of ARKS to collect and compile energy statistics harmonised with European and international standards.	Energy statistics system improvement.
Developing methodology and structure of energy balance compilation. Revised IEA questionnaires for 2013.	Prepared structure and methodology for energy balance compilation.	Increased capacity of ARKS to collect and compile energy balance harmonised with European and international standards.	Energy statistics system improvement.
2nd TA mission to support	Agreed concept and	Increased capacity	Energy statistics

Implemented/ongoing Activities	Results	Impacts	Areas
preparation of the methodologies and procedures for development of the tailor-made model for EEI compilation and compilation of 5 joint IEA questionnaires.	plan for disaggregated EEI compilation.	of ARKS to collect and compile energy statistics harmonised with European and international standards.	system development.

Section 4 Work Plan for Kazakhstan-ITS cooperation

As an overall strategic approach ITS intends to support the national policy, programmes and priorities set out in section 2 (see above) as well as the priorities identified during the consultations with the stakeholders throughout the project implementation (e.g LIE). Due attention is also paid to ongoing technical assistance.

Emphasis will be given to those areas of intervention which are in line with the scope of work of the ITS project and those that bring tangible impact and results and have no duplication with other EU programmes and bilateral donors and are in line with the new INOGATE strategy.

The top priority planned national activities for the extension period Jan 2015-Jan 2016 are listed in Table 3, and the secondary activities are listed in Table 4.

Table 3: Top priority planned activities for the Kazakhstan-ITS cooperation in 2015-2016

Reference numbers	Activities	Expected results	Expected impacts	Areas
ELECTRICITY AND GAS				
CWP.01.KZ	Proposing rules for connection to electricity grid of network users.	Proposals made on regulating access to grid for network users.	Improved access to grid for network users.	Regulatory Issues/Market rules
ENERGY STATISTICS				
CWP.07.KZ	Adjustment and application of tailor made model for energy efficiency indicators compilation (household sector and industry.)	Energy efficiency indicators, based on IEA and EU standards compiled.	Increased use of energy statistics for implementation of energy efficiency policies and for energy system planning.	Improvement of energy statistics system
CWP.10.KZ	Establishment of the institutional framework for energy system planning.	Framework for energy planning agreed and established.	Improved use of energy data for energy system planning.	Support to the use of energy planning tools.

Table 4: Secondary priority planned activities for the Kazakhstan-ITS cooperation in 2015-2016

Reference numbers	Activities	Expected results	Expected impact	Areas
ELECTRICITY AND GAS				
AHEF.105.KZ combined with AHEF 106KZ, , ToR being drafted.	Study and analysis of differentiated tariffs for day/night zones and volumes of consumption (KZ105). Study and analysis of experience of using benchmarking methodology (KZ106)	Presented and analysed the system of differentiated electricity tariffs (by day zones and consumption volumes) widely used in EU. Proposed recommendations. Presented and analysed the benchmarking system in defining the tariffs used the EU practice. Proposed recommendations.	Improvement in the tariff methodology towards more cost-reflection and incentive based system.	Development of electricity & Gas tariff methodologies.
AHEF.126.KZ, under evaluation	Guidance on metering of gas flow, norm setting and reduction of technological losses of natural gas at CNG filling stations	Proposals on CNG/LPG regulations based on EU practices.	Reduction of gas losses.	Efficiency of Electricity and Gas infrastructure
AHEF.127.KZ, under evaluation	Analysis of international and European practices of application of standards for liquefied natural gas (LNG)	Proposals on LNG regulations based on EU practices	Security of gas supply.	Efficiency of Electricity and Gas infrastructure
AHEF.128.KZ, under evaluation	Selection of EU standards on operation of mobile automobile CNG filling trucks.	Proposed for adoption in KZ EU standards on operation of mobile automobile CNG filling trucks.	Safe transportation of CNG, security of supply.	Harmonisation of Electricity and gas standards
AHEF.129.KZ, under evaluation	Exchange of experience on organisation of the technological process and management at automobile CNG filling stations.	Proposed regulations on using CNG in KZ	Security of gas supply.	Efficiency of Electricity and Gas infrastructure
AHEF.130.KZ, under evaluation	Selection of EU standards for technical operation of installations and equipment for liquefied natural gas	Proposed for adoption in KZ EU standards on technical operation of installations and	Security of gas supply.	Harmonisation of Electricity and gas standards

Reference numbers	Activities	Expected results	Expected impact	Areas
		equipment for liquefied natural gas.		
CWP.02.KZ	A study and comparison with EU practices on the allowable investment recovery margin of the regulated companies. In effect – to determine which proportion of the tariff can be deemed appropriate for future investments and how the investment is monitored by the Regulatory Authority.	Proposals leading to revisions of the secondary regulation governing the inclusion of investments in tariffs.	An increase in investment activity in network infrastructure (being a considerable issue in KZ currently).	Development of electricity & Gas tariff methodologies.
ENERGY STATISTICS				
CWP.06.KZ	Improvement of the methodologies and procedures for energy data collection.	Established integrated system for energy data collection.	Increased capacity of ARKS to collect energy data.	Improvement of energy statistics system
CWP.08.KZ	Technical assistance in the application of the tool for the calculation of the CO ₂ emission from stationary and mobile energy sources (in line with IPCC* methodology developed under UNFCCC).	Model for monitoring and evaluation of the CO ₂ emission reduction; Harmonized calculation of the CO ₂ emission reduction.	Increased use of energy statistics for planning and implementation of CO ₂ mitigation measures.	Energy statistics system improvement. Support to the climate change mitigation policies and strategies.
CWP.09.KZ	Developing short, medium and long term energy demand forecasting to support development of forecasted energy balances.	Short, medium and long term energy demand calculated.	Improved use of energy data for energy system planning.	Support to the use of energy planning tools