DOCUMENT OF THE EUROPEAN BANK
FOR RECONSTRUCTION AND DEVELOPMENT

Approved by the Board of Directors on 16 September 2020[1]

KAZAKHSTAN

ATYRAU REFINERY SUSTAINABILITY LOAN

[Redacted in line with the EBRD's Access to Information Policy]

[Information considered confidential has been removed from this document in accordance with the EBRD's Access to Information Policy (AIP). Such removed information is considered confidential because it falls under one of the provisions of Section III, paragraph 2 of the AIP]

1 As per section 1.4.8 of EBRD's Directive on Access to Information (2019), the Bank shall disclose Board reports for State Sector Projects within 30 calendar days of approval of the relevant Project by the Board of Directors. Confidential information has been removed from the Board report.

As permitted by paragraph 2.6 of Section III of the Access to Information Policy, disclosure of this Board Report was deferred.

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ABBREVIATIONS / CURRENCY CONVERSIONS

ANPZ	Atyrau Oil Refinery LLP
AML / CTF	Anti-Money Laundering / Counter-Terrorism Financing
AOGU	Atyrau Oil and Gas University
ARTC	Atyrau Refinery Training Center
ARU	Amine Recovery Unit
B	Billion
BAT	Best Available Techniques
BoD	Board of Directors
BREFs	Best Available Techniques reference documents
CAGR	Compound Annual Growth Rate
bd	Barrel per Day
CAPEX	Capital Expenditures
CJSC	Closed Joint Stock Company
CNPC	China National Petroleum Corporation
COGS	Cost of Goods Sold
COOs	Countries of Operations
CP	Condition Precedent
CPI	Consumer Price Index
DBK	Development Bank of Kazakhstan
DSCR	Debt service coverage ratio
E2C2	Energy Efficiency and Climate Change
EBITDA	Earnings before Interest, Tax, Depreciation and Amortisation
EH&S	Environmental Health and Safety
EPG	Economics, Policy and Governance Department
E&S	Environmental & Social
ESAP	Environmental & Social Action Plans
ESD	Environment and Sustainability Social Department
ETI	Expected Transition Impact
EXIM	Export-Import Bank of China
FX	Foreign Exchange
GET	Green Economy Transition
HR	Human Resources
JBIC	Japan Bank for International Cooperation
JSC	Joint Stock Company
KMG	National Company KazMunayGas Joint Stock Company
KREM	Committee on the Regulation of the Natural Monopolies
ktpa	Kilo-tonnes per annum
KTG	KazTransGas JSC (national oil and gas company)
KZT	Kazakhstani Tenge
LCY	Local Currency
LIBOR	London Inter-bank Offered Rate
LLP	Limited Liability Partnership
LT	Long Term
M	Million
mtpa	Million tonnes per annum
NOSS	National Occupational Skills Standards
NQF	National Qualification Framework
OCCO	Office of the Chief Compliance Officer
OECD	Organisation for Economic Co-operation and Development
OGC	Office of the General Council Counsel
O&G	Oil and Gas
OHS	Operational Health & Safety
OPEX	Operating Expenditures
PD	Probability of Default
PO	Petroleum Operating Limited Liability Partnership
PPE	Property, Plant and Equipment (Fixed Assets)

PP&R	Procurement Policies and Rules
PSD	Project Summary Document
RAROC	Risk-Adjusted Return on Capital
SG&A	Selling, General and Administrative
SK	National Welfare Fund Samruk-Kazyna Joint Stock Company
S&P	Standard & Poor's
SRI	Sustainable Resources Initiative
SRU	Sulphur Recovery Unit
STEM	Science, Technology, Engineering and Maths
TC	Technical Cooperation
TCRS	Technical Cooperation Reporting System
VISP	Vital Infrastructure Support Programme
VOCs	Volatile Organic Compounds
URP	Unfunded Risk Participation
USD	United States Dollar
YE	Year End
Y-O-Y	Year on Year

FX rates (as of 19 August 2020)

Current EUR 1.00	=	KZT 498.28
Current EUR 1.00	=	USD 1.1900
Current USD 1.00	=	KZT 418.57

PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of Atyrau Oil Refinery (the "Company"), a limited liability company incorporated in the Republic of Kazakhstan, are submitted for consideration by the Board of Directors.

The facility will consist of a loan to the Company in the amount of up to USD 200 million in Kazakhstani Tenge (EUR 168 million equivalent). The loan will be fully guaranteed by KazMunayGas, the national oil and gas company of Kazakhstan (the "Sponsor").

The operation will enable the Company to: i) improve resource efficiency and reduce emissions by upgrading process water treatment facilities and remediate evaporation ponds adjacent to the City of Atyrau in Western Kazakhstan, and ii) restructure the balance sheet and mitigate the FX risk by partially refinancing the Company's USD-denominated debt into KZT-denominated long-term debt.

The expected *Primary* transition quality of the project is **Green** to be achieved by significant change that the upgrade of the treatment facilities is expected to bring to the local environment. The remediation of the evaporation ponds, which are situated just 3 km from the city limits, will resolve air and soil pollution issues that have persevered for decades. Further, the project will enable significant reuse of water, reducing raw water consumption from the Ural River. The expected *Secondary* transition quality of the project is **Inclusive** to be attained by supporting the development of at least four National Occupational Skills Standards (NOSS). The developed occupational standards will be identified in collaboration with the Ministry of Labour, constitute a building block for the oil and gas sector in the new National Qualification Framework (NQF) and be mapped to the Government's "Atlas of New Professions" project, which defines occupations, technologies and competences needed for the next decade. The Company will also work in partnership with a local technical university to introduce a new and accredited dual-learning programme. Over the initial years of implementation, this will allow [REDACTED] young women and men to gain market relevant technical skills and, over the longer term, it will reach systemic change by introducing sustainable skills development models to be applied on a continuous basis.

I am satisfied that the operation is consistent with the Bank's Strategy for Kazakhstan, the Energy Sector Strategy, Economic Inclusion Strategy, Strategy for the Promotion of Gender Equality, the Bank's Green Economy Transition Approach and with the Agreement Establishing the Bank.

I recommend that the Board approve the proposed loan substantially on the terms of the attached Report.

Jürgen Rigterink
Acting President

BOARD DECISION SHEET

KAZAKHSTAN - ATYRAU REFINERY SUSTAINABILITY LOAN - DTM 51662	
Transaction / Board Decision	Board approval[2] is sought for a corporate loan of up to USD 200 million in Kazakhstani Tenge (EUR 168 million equivalent) in favour of Atyrau Oil Refinery (the "Company" or "ANPZ"), a limited liability company, established under the laws of the Republic of Kazakhstan. The loan will be used to i) upgrade process water treatment facilities in accordance to best available solutions and remediate evaporation ponds adjacent to the City of Atyrau, and ii) partially refinance the Company's USD-denominated debt to restructure the balance sheet and mitigate the FX risk. The loan will be fully guaranteed by KazMunayGas (KMG), the 99.54% shareholder of the Company.
Client	**Client:** Atyrau Oil Refinery is the oldest of the three major refineries in Kazakhstan, operating since 1945. With oil processing capacity of 5,500 ktpa, [REDACTED] it is the largest refinery and the only producer of light, high quality products in Western Kazakhstan. It is fully committed to the principles of sustainable development and complies with ISO 14001:2004 (environmental management systems) and ISO 50001:2011 (energy management systems), among others. **Sponsor:** KMG (BBB-/BB/Baa3), the national O&G company of Kazakhstan, is involved in the exploration, production, processing and transportation of hydrocarbons [REDACTED]. The Sponsor is fully owned by the Kazakh state, with 90.42% held via Samruk-Kazyna and 9.58% via the National Bank of the Republic of Kazakhstan.
Main Elements of the Proposal	<u>**Transition impact**</u> *Primary Quality - Green:* to support to resolve serious environmental issues for the City of Atyrau through upgrade of process water treatment facilities and remediation of evaporation ponds situated 3 km from the city borders. *Secondary Quality – Inclusive:* to support the development of at least 4 National Occupational Skills Standards (NOSS) and develop and implement an accredited dual-learning programme in partnership with Atyrau Oil&Gas University. <u>**Additionality**</u> ***Financing structure****:* Due to the recent economic slowdown caused by the outbreak of COVID-19 [REDACTED] availability of KZT funding [REDACTED] has become [REDACTED] limited. ***Standard-setting:*** The Bank will help the Company to enhance HR policies to include a robust inclusion agenda and develop best practice procurement policies. ***Resource mobilisation:*** The Bank's involvement will attract new investors, leading to a better managed exposure to the Sponsor. <u>**Sound banking**</u> Atyrau Oil Refinery is the main refinery in Western Kazakhstan, where the largest oilfields (Kashagan, Tengiz, Karachaganak) in the region are situated. [REDACTED]
Key Risks	Key risks relate to a longer economic crisis due to the second wave of COVID-19 in the country and depreciation of local currency because of the oil price volatility.
Strategic Fit Summary	The project is consistent with the Bank's Strategy for Kazakhstan, the Energy Sector Strategy, Economic Inclusion Strategy, Strategy for the Promotion of Gender Equality, the Bank's Green Economy Transition Approach and with the Agreement Establishing the Bank.

2 Article 27 of the AEB provides the basis for this decision.

ADDITIONAL SUMMARY TERMS FACTSHEET

EBRD Transaction	Corporate loan of up to USD 200 million in Kazakhstani Tenge (EUR 168 million equivalent) to Atyrau Oil Refinery, a limited liability company, established under the laws of the Republic of Kazakhstan. The loan will be fully guaranteed by KazMunayGas (BBB-/BB/Baa3), the national oil and gas company of Kazakhstan and the refinery's main shareholder.
Existing Exposure	None to the client. [REDACTED]
Maturity / Exit / Repayment	Up to 7-year loan [REDACTED]
Potential AMI eligible financing	[REDACTED]
Use of Proceeds	The loan proceeds will be used to: i) Improve resource efficiency and reduce emissions by upgrading process water treatment facilities to result in increased water reuse and resolve long-standing environmental issues by remediating [REDACTED]evaporation ponds adjacent to the City of Atyrau. ii) Restructure the balance sheet and mitigate the FX risk by partially refinancing the Company's USD-denominated into KZT-denominated long-term debt. The Company will report to EBRD on the use of proceeds via quarterly operations report.
Financing Plan	[REDACTED]
Key Parties Involved	**Borrower:** Atyrau Refinery LLP is one of the three main refineries in Kazakhstan, owned by KazMunayGas, a state-owned O&G company. **Sponsor:** KazMunayGas JSC is a Kazakhstan's national O&G company involved in the exploration, production, processing and transportation of hydrocarbons. It is fully owned by the Kazakh state.
Conditions to subscription / disbursement	Customary for this type of financing, including duly executed originals of Financing Agreements, obtaining all the requisite approvals and authorisations, receipt of satisfactory legal opinions, representation on the use of proceeds.
Key Covenants	[REDACTED] [C]ompliance with EBRD Environmental and Social Policy, compliance with EBRD Procurement Policies and Rules, Environmental and Social Action Plan implementation, including implementation of gender and inclusion related undertakings.
Security / Guarantees	[REDACTED].
Other material agreements	Deed of the Guarantee and Share Retention between the Sponsor and the Bank providing a full life-of-loan corporate financial guarantee from the Sponsor.

[REDACTED]

INVESTMENT PROPOSAL SUMMARY

1. STRATEGIC FIT AND KEY ISSUES

1.1 STRATEGIC CONTEXT

I. Process/waste water treatment: environmental impact and need for change

Modern Kazakhstan is a country with a constantly developing economy, with the oil industry being a key sector and generating a considerable share of the state budget revenue. It is the second biggest oil producer after Russia among the CIS countries and one of the key suppliers of hydrocarbon raw material in the region. As for the refining sector, it is represented by three large oil refineries, which were built during the Soviet period in different parts of the country.

Water is an important element in petroleum and petrochemical production. Distillation, preparation of solutions, cooling systems and washing processes are some examples of industrial water use. Typically, the water for industrial needs is taken from natural sources such as lakes and rivers, and the refinery industry in Kazakhstan is not an exception. The technological developments and increased water recycling make the industrial users to exploit more sustainable ways of water utilisation, increased water reuse being the most practicable solution. In addition, the refining industry has been associated with groundwater and air pollution. Effluents from refineries contain numerous hazardous toxic pollutants, which can reach groundwater as a result of discharge to surface water reservoirs or evaporation ponds. The quality of air in Atyrau is one of the poorest in Kazakhstan due to the emissions generated by industry, power generation, heating, vehicle use as well as open surfaces of operating treatment facilities at the refinery and nearby evaporation ponds.

Current situation: Built in 1945, ANPZ is the oldest refinery in Kazakhstan and is the only major refinery in the western part of the country. The extensive modernisation, which was completed in 2018, aimed at increasing process and energy efficiency, optimising the output of higher added value products and reducing emissions. The modernisation programme included amongst others: installation of hydro-treating, isomerisation, continuous catalytic reforming, in addition to other environmental improvements (SRU, ARU, etc.) to better-align with the EU-BAT standards and to be able to produce a full range product to Euro-5 specifications.

However, the upgrade focused on the key technological equipment and left out the final stage of the production process – waste/process water treatment. Given the age and obsolete condition of the relevant facilities, the issues of underground water pollution, soil and air contamination became even more relevant. The dialogue with the EBRD and willingness of the Bank to provide long-term financing in the local currency for the environmental expenditures prompted ANPZ to move the upgrade of the treatment facilities to the forefront of its strategic agenda. Currently, the refinery does traditional two stage mechanical and biological treatment through facilities built in 1973 and 2006 respectively. After the biological treatment, the water flows through a 3.5 km open ditch and is discharged into [REDACTED] evaporation ponds located just 3 km away from the city borders.

Proposed mitigation measures: Therefore, ANPZ initiated a project "TAZALYQ" (means "Purity" in Kazakh) in 2019 to address the substantial environmental issues that the refinery and city have been facing for many decades. The goal of the project is to:

i) replace mechanical and modernise biological treatment facilities,
ii) construct a closed 3.5km long effluent pipeline (vs current unlined canal) to newly constructed city wastewater treatment plant, and
iii) dewater/remediate [REDACTED] evaporation ponds utilising natural based solutions.

The implementation of the above measures will result in the following impact:

i) Achieve resources efficiency by **increasing the water reuse** rate [REDACTED], and as a result **decreasing raw water withdrawal** from the Ural River, the main water supplier in the region, [REDACTED] and saving [REDACTED] water [REDACTED];

ii) **Significantly improve** treated waste **water quality**;

iii) **Minimise the impact** on underground water, flora and fauna by dewatering/remediating the evaporation ponds;

iv) **Reduce emissions of GHG and volatile organic compounds,** as well as odours associated with current open to air treatment facility and canals, and

v) **Remediate existing evaporation ponds** addressing long term water and soil pollution impacts.

II. External shocks including COVID-19 reinforced the need to improve the forex management and convert liabilities from USD into local currency.

Kazakhstan has been in a state of emergency declared on 15 March 2020 followed by the lockdown for individuals and businesses across the country. [REDACTED] Moreover, the Russia–Saudi Arabia oil price war resulted in a sharp drop of oil prices in Q1, with the price becoming negative in April. While the prices have since rebound to USD 40+/bbl level, the management of both ANPZ and KMG revised the business plans for 2020 to protect companies' creditworthiness [REDACTED].

Although the Company's production rate has been stable (95%+ capacity utilisation) throughout 2020 and the KZT-denominated revenues were not affected in the short term, ANPZ's financial position has come under pressure primarily due to a large portion of the USD-denominated debt in its debt portfolio [REDACTED]. The management has therefore continued to focus on measures to mitigate the FX risk occurring due to the above-mentioned mismatch. **Restructuring its balance sheet by increasing the KTZ portion of its long-term liabilities through converting its USD-denominated debt into the local currency will help mitigate the impact of KTZ devaluations in the future and make the Company more resilient**. The refinancing will result in a decrease of the USD-denominated obligations of the Company and increase the debt portfolio maturity. EBRD is one of the only two financial institutions in Kazakhstan that is able to provide long-term KZT financing alongside the Development Bank of Kazakhstan [REDACTED. Therefore, a portion of the proposed EBRD loan is earmarked for this purpose in order to assist the Company in achieving this very important goal.

III. Contribution to the Gender and Economic Inclusion reforms

Policy Dialogue on the development of the National Occupational Skills Standards

The Government of Kazakhstan is developing a National Qualifications Framework (NQF) that includes the development of the National Occupational Skills Standards (NOSS). This is important for a number of reasons, since the introduction of skills standards that are comparable and recognisable at a national level can increase the employability of young people, the ability of companies to recruit based on transparent skills frameworks and requirements and the capacity of Technical and Vocational Education and Training (TVET) system to provide the skills that employers need. To date there have been more than 550 NOSS developed with the help of the World Bank's "Skills and Jobs" project, but these still do not exhaust the labour market needs. The EBRD can play a great role in filling this gap and facilitating and implementing this reform process by providing technical assistance and engaging with the industrial sector and other key stakeholders. In fact, EBRD recently supported Samruk Energy in the development of two NOSS, which covered 14 professional cards, based on employer's requirements and in collaboration with sectoral organisations, such as KazEnergy, which have been approved by Atameken National Chamber of Entrepreneurs (NCE).

Recognising the need for more NOSS – especially those that are based directly on employer needs – the Ministry of Labour and Social Protection of Population (MoLSPP) has started the "Atlas of New Professions" project, covering 9 sectors – selected for being the main drivers of Kazakhstan's economy, including Mining and Metallurgy, Energy, Oil & Gas and others. The "Atlas of New Professions" is going to define promising industries and occupations for the next 5 to 10 years. It will help to understand which industries will actively develop, what new technologies, products or management practices will be needed and what new skills and competencies will be in demand by employers.

This transaction will contribute to the Bank's Policy Objectives – "…improve national skills standards and equal opportunities in the energy and natural resources sectors, including by addressing skills mismatches through improvement of the National Qualification Framework"– and continue to implement the policy dialogue with the MoLSPP and the Ministry of Energy targeting improved access for young women and men to accredited dual learning opportunities that are in line with the new NOSS requirements.

The aim will be to further develop occupational standards in petro-chemistry that will help in aligning companies and education institutions around a common understanding of occupations in this industry (OECD, 2018, "Enhancing Competitiveness in Central Asia"). Hence, ANPZ has agreed to support the development or improvement of **National Occupational Skills Standards for at least four occupations**. These occupations are expected to cover about 28 professional cards and will represent a combination of existing and those to be mapped as result of the Atlas of New Professions project. The NOSS will be developed following the methodology developed under the Samruk-Energy Transformation Loan, which is based on a functional analysis approach as a supplement to the industry analysis, and they will constitute a building block for the oil and gas sector in the new NQF. The NOSS will then be submitted for pre-approval to the Sectoral Commission under the Ministry of Energy and for approval to Atameken NCE.

Skills development and inclusion

As one of the largest employers in Atyrau, the oil capital of Kazakhstan, ANPZ has developed a strong focus on talent management, skills and human capital development of its workforce. This emphasis became particularly important following the refinery modernisation that inter alia required skills upgrade in view of higher processes automation levels and broadened the scope of skills required as it started production of higher value added petrochemical products.

Operational since 2012, in connection with the modernisation and the identification of petro-chemistry as a priority sector for the Atyrau region, the Atyrau Refinery Training Centre (ARTC) focuses on 'chemical technology of organic substances' for the training of young specialists working in the production of aromatic hydrocarbons (such as benzene and paraxylene) and deep oil refining. With the Bank's support, ANPZ will modernise the supply of its training centre by introducing a new "Crisis Management" course, which will target [REDACTED] employees among middle and upper management. Responding to the COVID-19 crisis, such as dealing with excess capacity, will be one of the case studies to be included in the course.

With the Bank's support, the Company will also develop a new accredited module in partnership with Atyrau Oil & Gas University (AUOG) and the Bachelor programme of its Oil & Gas Faculty to **provide young women and men with the market-relevant skills** needed to utilise the advanced techniques promoted in line with the modernisation of the wastewater treatment facilities. [REDACTED] [S]tudents [REDACTED] will benefit from this intervention. More specifically, in collaboration with AUOG's Department of the Organisation of Dual Education, Professional Practice and Employment, the Bank will help the Company implement **a dual-learning programme** that, over the seven-year tenor of the loan, will allow **[REDACTED] young people** to gain accredited market-relevant and practice-focused technical skills. This training is expected to continue well beyond this period, however, with more young people benefitting over time.

The dual learning programme will be developed with a gender lens to contribute to enhancing the role of women in this traditionally male dominated sector, where the national average of women in the workforce is only 20% (Committee on Statistics, 2018), as well as to contribute to narrowing the gaps between young women and men in science, technology, engineering and maths (STEM) subjects in Kazakhstan. The project will aim to reach [REDACTED] **female participants**. This will build on ANPZ's initial successes in promoting equal opportunities among its workers, with 26% of female employees, an active Women's Club and strong policies on maternity leave (e.g. monthly allowances for up to 1.5 years of leave).

The investment is consistent with the objectives stated in (i) the Bank's Energy Sector Strategy, (ii) the Economic Inclusion Strategy and the Strategy for the Promotion of Gender Equality which together promote inclusive development with a special focus on improving access to skills and dual learning opportunities for young women and men, and (iii) the Strategy for Kazakhstan.

1.2 TRANSITION IMPACT

The tables below set out the TI Objectives and details of the project.

Primary Quality: Green

Obj.	Objective	Details
1.1	*The percentage of EBRD use of proceeds allocated to the project that qualifies as GET is 50% or higher.*	[F]inancing will be used to replace and modernise process/waste water treatment facilities and remediate [REDACTED] land situated 3 km from the City of Atyrau. The upgrade of mechanical (operating since 1973) and biological (operating since 2006) treatment facilities is expected to improve resource efficiency by increasing water reuse rate [REDACTED], and thus further decrease water intake from the Ural River [REDACTED], **saving [REDACTED] water**. Newly constructed closed-type treatment facilities will also prevent VOCs air pollutant evaporation from [REDACTED] open surfaces of current treatment facilities. In addition, the land remediation component the project includes the construction of effluent pipeline, which will reduce associated air pollutant evaporation. The GET Clearing House has confirmed 50% of EBRD use of proceeds qualify as GET in line with the Bank's Green Economy Transition approach.

Secondary Quality: Inclusive

Obj.	Objective	Details
2.1	*The project will introduce improved policy*	ANPZ will support the development or improvement of National Occupational Skills Standards (NOSS) for at least four occupations, in line with its needs and requirements. These occupations will represent a combination of existing ones and

	practices (e.g. market-relevant skills standards)	those to be mapped as result of the Atlas of New Professions project (e.g. Advanced Control Panel Operator). To this end, the client will review and comment draft versions of NOSS, with Bank's support and in collaboration with the KazEnergy sectoral association and the Kazakh Institute of Oil and Gas (KING). The NOSS will be submitted for pre-approval to the Sectoral Commission under the Ministry of Energy of Kazakhstan and for approval to Atameken NCE.
2.2	*The project will introduce a new, replicable and accredited training programme to equip [REDACTED] young people with higher skills levels, in partnership with a local vocational school or university*	With the Bank's support, the Company will also design a new accredited module in partnership with Atyrau Oil & Gas University (AUOG) and the Bachelor programme of its Oil & Gas Faculty to provide young women and men with the market-relevant skills. In collaboration with AUOG's Department of the Organisation of Dual Education, Professional Practice and Employment, the Bank will also help the Company develop and implement a dual-learning programme that, over the seven-year tenor of the loan, will allow [REDACTED] young people to gain accredited technical skills. While AUOG offers its expertise in designing modern curricula on green and ICT skills for petro-chemists (through the interactions between its Oil & Gas Faculty with the faculties of Industrial Technology and of Business & Information Technology), ANPZ will offer students the possibility of working at its sites to gain market-relevant skills. The new accredited module to be introduced will be on Advanced Chemical Engineering for the Organic Technology Department and it will award credits to 2nd and 3rd -year students. The focus will be on providing young women and men the skills that chemical engineers and processing technicians need to utilise effectively the greener technologies and more advanced processing techniques, promoted in line with the modernisation of the wastewater treatment facilities. The dual learning component will be practice-driven and comprise modules on industry-relevant digital skills and soft skills, as well as include Health, Safety and Environment behaviour training in line with international best practices. The ultimate aim will be to strengthen the role of the company in improving the school-to-work transition for technical college graduates and support its youth career development function. The programme will aim to reach [REDACTED] female participants. It will be developed with a gender lens to contribute to enhancing the role of women in this traditionally male dominated sector, as well as narrowing the gaps between young women and men in science, technology, engineering and maths (STEM) subjects in Kazakhstan. Career advice to young people and outreach to local schools through female and male role models (chosen among successful client's employees) will be embedded in the programme to improve the perception and awareness of equal opportunities in the industry.

Delivery risks: The key risks associated with the project are the successful implementation of the water treatment facility to achieve the promised environmental benefits for the Green quality and the success of the training and policy dialogues initiative for the Inclusive quality.

1.3 ADDITIONALITY

Identified triggers	Description
A significant share (at least 30%) of the project is for refinancing purposes.	A significant share [REDACTED] of the requested funds is for refinancing USD-denominated debt into the local currency (due to FX risk management considerations. The refinancing will result in a

	decrease of the USD-denominated obligations of the Company. [REDACTED]

Additionality sources	Description of additionally sources
Financing structure – EBRD offers financing that is not available in the market from commercial sources on reasonable terms and conditions, e.g. a longer grace period that is rarely available in the market, restricted foreign currency financing etc. Such financing is necessary to structure the project. – EBRD contributes to a restructuring package that is not available from other financiers. – EBRD offers local currency financing on terms not readily available in the market.	EBRD is one of the [REDACTED] financial institutions in Kazakhstan providing long-term LCY financing [REDACTED]. Given the recent economic slowdown caused by the outbreak of COVID-19 [REDACTED], availability of KZT funding from local banks has become [REDACTED] limited. In such a stressed situation, the Bank's involvement is expected to be highly additional and crucial in supporting Company's strategy to mitigate FX risk and restructure its balance sheet.
Standard-setting: helping projects and clients achieve higher standards – Client seeks/makes use of EBRD expertise on **higher inclusion** (e.g. adherence to labour standards which goes beyond the provisions set in PR2 of the environmental and social policy, development of comprehensive and institutional corporate social responsibility programmes), **gender standards and/or equal opportunities action plans** (e.g. improving women's access to safe transport and/or women-led businesses participation in the client supply chain). – Client seeks/makes use of EBRD expertise on best international procurement standards.	A binding ESAP will enable the Company to bring up the environmental and social practices to a more advanced level. The dual-learning programme will aim to reach [REDACTED] female participants. It will be developed with a gender lens to contribute to enhancing the role of women in this traditionally male dominated sector, as well as narrowing the gaps between young women and men in science, technology, engineering and maths (STEM) subjects in Kazakhstan. Career advice to young people and outreach to local schools through female and male role models (chosen among successful client's employees) will be embedded in the programme to improve the perception and awareness of equal opportunities in the industry. As a state-owned company, ANPZ will follow the EBRD Procurement Policies and Rules and implement the best practices for the future projects.
Resource mobilisation – The EBRD project mobilises additional commercial funding through a local parallel financing structure otherwise not achievable.	[REDACTED]

1.4 Sound Banking - Key Risks

Risks	Probability/ Effect	Comments
Credit risk	High/ Medium	[REDACTED] Mitigation: ANPZ demonstrated a good track record in honoring its commitments and benefits from the Sponsor support. The Company's cost-plus refining fees, which are approved by KMG and confirmed by the Ministry of Energy [REDACTED]. Moreover, refinancing will help the Company to continue restructuring its debt portfolio, resulting in FX loss reduction and a more balanced liabilities structure. The loan is secured by a full financial guarantee from the Sponsor that has a robust financial position. [REDACTED] KMG [REDACTED]. As of the end of 2019, all three rating agencies assessed the company outlook as stable/positive - Fitch: BBB-/Stable, S&P: BB/Stable, and Moody's: Baa3/Positive. However, due to 2020 oil price drop, S&P revised its outlook on KMG to negative from stable, but affirmed KMG's "BB" rating. Rating remained unchanged due to S&P oil price recovery expectations by 2021-2022, KMG's strong cash position as of YE2019 and belief in the Government support (if becomes required).
Completion risk	Medium/ Medium	Implementation of the waste water facilities upgrade might fall behind the schedule. *Mitigation*: The Borrower has a good recent track-record of implementing complex investment projects. Selection of the contractors will be done on a competitive basis putting significant experience in successful implementation of similar projects as one of the key qualitative criteria. A technical cooperation will be put in place to support project implementation, including assistance with the procurement process to be done in accordance with the Bank's Procurement Policies and Rules.
Competitive market position	Low/ Medium	Currently local oil producers are obliged to sell a certain amount of oil on domestic market to ensure sufficient supply for refineries. The third-party suppliers, [REDACTED] may opt to change the refining services providers [REDACTED]. *Mitigation:* The obligations are part of the licence agreements and are difficult to change. Moreover, ANPZ is the main and the most advanced refinery in Western Kazakhstan, where major oil producers operate. In addition, the modernised refinery produces high-quality petroleum products at competitive prices, making imports from elsewhere economically unviable.
Operational risk	High/ Medium	Continuous use of old equipment may result in suboptimal performance that could result in a financial loss. *Mitigation:* ANPZ has a long track record of operating the facilities. The refinery went through modernisation, which was completed in 2018, and the process water treatment facilities are the last block requiring upgrade which will be financed by the Bank.
Change of refining fees (tariffs)	Medium/ High	Change of refining fees can affect the operating cash flows of the Company. *Mitigation:* The refinery is integrated into KMG value chain, KMG's professional finance staff oversees financial position of KMG and its subsidiaries, and is responsible for smooth implementation of financial strategy on the holding and subsidiary levels. The fees are set up by ANPZ, approved by KMG and then confirmed by the Ministry of Energy. The fees are set for an unlimited period and can be changed, if the Company, depending on its capex and operational needs, initiates a new increase. The minimum refining margin has been covenanted and

		will serve as an indicator of the refinery's operational profitability. The loan is fully guaranteed by the Sponsor.
Environmental risk	Medium/ Medium	The project and the operation of the existing refinery are associated with various environmental and social risks. *Mitigation:* External consultant has been involved in conducting E&S due diligence and has developed an E&S action plan to align the project and the existing refinery with the Bank's E&S requirements and EU Best Available Techniques. E&S due diligence has shown that the Company has the capacity to implement the project in line with the Bank's requirements.
COVID-19 risk	High/ Medium	The second wave of COVID-19 and the measures taken by the Government lead to a drop in consumption of petroleum products across all sectors. *Mitigation:* Despite the volatility of demand for its products in Q2, the Company has been working with a high capacity utilisation rate [REDACTED] throughout 2020. ANPZ's unique location and the quality of its products will enable to secure stable demand and maintain a high capacity utilisation rate in the long run.

2. MEASURING / MONITORING SUCCESS

Overall objectives of project	*Monitoring benchmarks*	*Implementation timing*
- Good financial and operational performance - On-time project implementation	- Growth in revenues, profitability and cash flows - Completion according to the timeline and within the budget	[REDACTED]

Primary Quality: Green

Obj. No.	Monitoring indicator	Details	Baseline	Target	Duration (yrs)
1.1	Water Saved (m3/y)	Fresh water intake from the Ural River reduced.	[REDACTED]	[REDACTED]	[REDACTED]
1.2	Water Saved (m3/y)	Water intake from the City waste water treatment plant.	[REDACTED]	[REDACTED]	[REDACTED]
1.3	New GET technology leading to water savings to be introduced	Closed-type mechanical and biological treatment facilities with reverse osmoses introduced, allowing to increase reusage of water.	[REDACTED]	[REDACTED]	[REDACTED]
1.4	CO2 emissions avoided (te/y)	CO2 emissions avoided due to modernisation of mechanical and biological treatment facilities and remediation of evaporation ponds.	[REDACTED]	[REDACTED]	[REDACTED]

Secondary Quality: Inclusive

Obj. No.	Monitoring indicator	Details	Baseline	Target	Duration (yrs)
2.1	Client engages in policy dialogue	ANPZ will contribute to the dialogue with the Ministry of Labour on the improvement of the NQF, in collaboration with the KazEnergy sectoral association, the Kazakh Institute of Oil and Gas, the Sectoral Commission under the Ministry of Energy, and Atameken NCE.	[REDACTED]	[REDACTED]	[REDACTED]
2.1	Legal, institutional or regulatory frameworks in target areas improved	The project will contribute to the introduction and development of 4 National Occupational Skills Standards.	[REDACTED]	[REDACTED]	[REDACTED]
2.2	Partnerships between private sector and education providers established or strengthened to support new learning opportunities	The project will improve its cooperation with Atyrau Oil & Gas University (AUOG) and the Bachelor programme of its Oil & Gas Faculty, as well as its Department of the Organisation of Dual Education, Professional Practice and Employment.	[REDACTED]	[REDACTED]	[REDACTED]
2.2	Tailored training programme developed and implemented	With Bank's support and in collaboration with AUOG, the client will develop and implement a dual-learning programme. The curriculum will reflect the needs and requirements of the industry and follow the principles of work-based learning.	[REDACTED]	[REDACTED]	[REDACTED]
2.2	Number of young people earning an accredited certification and enhancing their skills as a result of training	A substantial number of youth will be benefiting from the accredited dual-learning programme on green technologies and advanced processing techniques for prospective chemical engineers and processing technicians. [REDACTED] participants will be women.	[REDACTED]	[REDACTED]	[REDACTED]

3. KEY PARTIES

3.1 BORROWER - ATYRAU OIL REFINERY (ANPZ)

ANPZ, based in Western Kazakhstan and operating since 1945, is one of three major refineries in the country. As part of the national modernisation policy, the Borrower underwent significant upgrade programme completed in 2018, with commissioning in 2019. Two-phased upgrade work at ANPZ focused on construction of higher value added aromatics complex (2015) and increasing refining depth, particularly improvement of heavy-residue cracking (2018), which allowed to increase the output of Euro 4-5 gasoline and jet fuel.

Historically the Company has been operating at a high utilisation rates [REDACTED] and produced 5.4 mt of oil products, with increased share of cleaner high-octane gasoline and lighter oil products. Thanks to increased refining fees, the Company's performance improved significantly [REDACTED].

ANPZ is a subsidiary of KMG, which directly owns 99.54% stake. It employs 1,701 people (2020) and is a part of KMG's vertically integrated value chain. [REDACTED]In line with the KMG's strategy, its refineries provide refining services to KMG group and third parties at the rates established by KMG (and are not directly involved in purchase of oil or sale of refined products). ANPZ provides refining services to other medium and small size independent oil producers and refined products traders at the same rates.

The Company is fully committed to the principles of sustainable development and complies with ISO 14001:2004 (environmental management systems) and ISO 50001:2011 (energy management systems), among others.

3.2 SPONSOR – NATIONAL COMPANY KAZMUNAYGAS (KMG)

KMG is a Kazakhstan's O&G national holding involved in the exploration, production, processing and transportation of hydrocarbons [REDACTED]. KMG is fully owned by the Kazakh state, with 90.42% held via Samruk-Kazyna and 9.58% via the National Bank of the Republic of Kazakhstan. Being the project's sponsor, as part of the proposed transaction KMG will provide a full financial guarantee for the proposed loan.

With production of 23.6 mt (incl. its share in equity affiliates) as of 2019, KMG accounts for about 1/4 of Kazakhstan's oil and 1/6 of its gas production. KMG also controls the country's downstream market, owning almost all of the oil and gas refining capacity and key pipeline infrastructure. It also owns minority stakes in major international projects: Kashagan (8.44%), Tengizchevroil (20%), Karachaganak (10%), with Chevron, Exxon, Agip, Total, Shell, Lukoil and other international majors having larger/majority stakes.

4. MARKET CONTEXT

Kazakhstan oil market. Kazakhstan has the world's 12th largest proven reserves of oil (1.7% of global reserves) and is the top 13th oil producer globally. BP estimates Kazakh proved reserves at about 30 billion bbl, 3/4 of which are concentrated in the off-shore Kashagan, Tengiz and Karachaganak deposits. Kazakhstan produced 1.99mn b/d of crude oil in 2019.

Oil refining in Kazakhstan. Consumption of domestically produced oil is defined by the combined capacity of its major refineries. With three refineries located in Atyrau, Pavlodar and Shymkent, Kazakhstan had a refining capacity of about 397,100b/d as of 2019. These refineries, which have 95% of the country's refining capacity, operate at historically high utilisation rates [REDACTED], particularly over the past five years. Apart from them, there are four mini refining plants operating in the country with minor capacities (24ktpa up to 1,000 ktpa) mainly producing heavy refined products such as road bitumen, masut, heating fuel, etc. Caspi Bitum JV LLP (bitumen) and Kondensat JSC (refining of unstable gas condensate) are the largest among them with installed capacities of 1,000 ktpa and 850 ktpa accordingly.

Prior to adopting a national refining sector modernisation policy, local production of refined products did not fully cover the entire domestic demand, with the deficit being met by imports from Russia. From 2019, upon completion of modernisation of all refineries which added estimated 70,000 b/d to total capacity, domestic production is expected to be sufficient to satisfy local refined products demand of 390,700b/d, with gasoline and diesel accounting for over 2/3 of production. Consumption of refined fuels is forecasted to rise steadily throughout 2020-2029 to be fully met by domestic production.

Details of major refineries in Kazakhstan

	Founded	Capacity, mt	Ownership	Share of light products
Atyrau Refinery	1945	5.5 mtpa	99.54% - KMG	57%
Pavlodar Refinery	1978	5.1 mtpa	100% - KMG	67%
Shymkent Refinery	1985	6.0 mtpa	50% - KMG, 50% - CNPC	64%

Sources: KMG annual reports

Regulations. Under the current Kazakh legislation, refineries are subject to standard corporate regulation and tax policies. Prior to 2017, oil refining was in the list of the regulated industries, and thus ANPZ was directly regulated and monitored by the Committee on the Regulation of the Natural Monopolies ("KREM"), that also approved the level of the Company's refining fees. From January 2017, in accordance with the Law "Concerning the introduction of amendments and additions to certain entrepreneurial regulatory acts of the Republic of Kazakhstan" dated October 29 2015 No. 376-V", oil refineries were removed from the list of natural monopoly entities. Since then KMG replaced KREM as the ANPZ's approver of the refining fees.

5. FINANCIAL / ECONOMIC ANALYSIS

5.1 FINANCIAL PROJECTIONS

[REDACTED]

5.2 SENSITIVITY ANALYSIS

[REDACTED]

5.3 PROJECTED PROFITABILITY FOR THE BANK

[REDACTED]

6. OTHER KEY CONSIDERATIONS

6.1 ENVIRONMENT

Categorised B (2014 ESP). The project will result in significant E&S benefits, including reduced emissions and raw water demand and the remediation of contaminated evaporation ponds. Any adverse impacts, notably with respect to implementation of the wastewater treatment plant project and the remediation of the evaporation ponds, are expected to be readily addressed. The project will not result in an increase in processing capacity of the refinery. E&S due diligence was conducted remotely by a consultant in line with ESD's COVID-19 approach to ESDD. ESD also undertook a site visit in early 2020. The due diligence considered the project as well as the E&S performance of the refinery as a whole and was benchmarked against the Bank's PRs and EU Best Available Techniques (BAT) for the sector.

Wastewater generated by the refinery is currently treated by an old and ineffective mechanical and biological treatment facility before discharge of the partially treated wastewater to evaporation ponds, which extend over 860 ha. Such wastewater has high levels of contaminants, including hydrocarbons, salts and heavy metals. The City of Atyrau (specifically the part of the City on the south bank of the Ural River) similarly discharges wastewater, but with no treatment, in adjacent ponds. These ponds are large man made wetlands, which promote evaporation of wastewater and the natural breakdown of organic matter and some contaminants. The discharge of wastewater to evaporation ponds is a common approach and is permitted in Kazakhstan. The ponds are located relatively close to the City and complaints (odour, contamination, etc.) by residents of the City have prompted a Government decision to address wastewater treatment processes at the refinery, introduce wastewater treatment for the City and to remediate the contaminated evaporation ponds.

The introduction of modern wastewater treatment equipment will enable a substantial increase in water recovery (decreasing fresh water demand from the Ural River), substantially improve wastewater treatment, reduce GHG (CO_2) emissions from the process and from the evaporation ponds and address the long lasting water, soil and air pollution issue through dewatering and remediation of the evaporation ponds. Some wastewater will be discharged off site but will be directed to the new City treatment plant for further treatment before recirculation of a proportion of this back to the refinery. The City plant will discharge treated wastewater to an unused, and larger, evaporation pond area. The project is currently subject to a local EIA process including public consultation. The ESDD has identified some gaps in the EIAs and the Company has confirmed that the design of the biological treatment process and remediation approach of the ponds is still being refined. The gaps will need to be addressed by the Company and the treatment technology will need to comply with EU BAT and apply good international practice for remediation and monitoring. While closure of the refinery ponds will address long-term pollution issues, it will displace biodiversity (reeds, birds, etc.) that has been established in the ponds over time. With the commissioning of unused ponds and the discharge of treated wastewater, such biodiversity is expected to rapidly re-establish itself in these new ponds and over a larger area. The Company will need to further assess potential biodiversity issues as well as continue its contamination investigations to determine the most appropriate approach to the remediation and monitoring of the remediation ponds. Further the Company will need to consider, together with the City, any potential impacts associated with the new City evaporation ponds.

E&S due diligence indicates that the Company has the capacity to implement the Project in line with the Bank's requirements. Management systems are in place for environmental and health and safety matters and a team of Company experts is in place to ensure implementation and monitoring performance and impacts (emissions, etc.). These will need to be extended to the project and project contractors and specific systems, plans and procedures put in place for the project. HR matters were found to align with PR2 requirements although the worker grievance mechanism will need to be improved and extended to the project. The Company will also need to introduce a system to consider potential E&S risks within its supply chain. The Project is expected to take place within the boundaries of the refinery. Temporary land may be required for works and potentially worker accommodation. The Company will need to ensure that any land acquisition is in line with PR 5 and worker accommodation meets EBRD's requirements.

The refinery has in previous years undergone significant investment to increase capacity and improve efficiencies and E&S performance. The Company, in response to expected potential changes to the national Environmental Code, is in the process of determining what improvements are likely to be required at refinery. The E&S performance of the refinery has been reviewed by the consultant to identify risk areas and determine whether further investments are required to align with refinery with EU BAT. Investments required include the need for a continuous emission monitoring system, vapour recovery on tanks and improvement of secondary containment and the soil and groundwater contamination investigations at the refinery. Further the Company will need to align its emission monitoring with EU BAT and where emission do not comply, implement measures to reduce emissions. Data reviewed indicate the potential need for abatement to reduce NOx and dust emissions. These and other investments will be information by a detailed BAT review required by the ESAP and will need to be implemented over the duration of the loan. The Company will further need to conduct an asbestos and persistent organic pollutants (specifically PCBs) at the refinery and define a removal and replacement programme.

Health and safety issues are managed through the refinery's management system. The ESDD identified some areas where the refinery's risk assessment on industrial safety needs to be improved, including the consideration of additional accident scenarios and external events (e.g. an accident at an adjacent facility affecting the refinery). The updates will need to consider the requirements of the EU Seveso III Directive on industrial safety and the EU ATEX Directive on explosive atmospheres and inform revisions to mitigation and control measures as well as emergency preparedness and response planning. Where community risks are identified these will need to be communicated by the Company. The refinery, like others in the region, is surrounded by a sanitary protection zone (SPZ). The SPZ is a buffer zone in which residential development is not permitted. This is to prevent community health and safety risks.

The findings of the ESDD have resulted in an E&S action plan (ESAP). This ESAP will be agreed with the Company before Board to align the project and existing operations at refinery with the Bank's requirements. The ESDD further included the development of a Stakeholder Engagement Plan and a Non-Technical Summary, which will be disclosed with the PSD and by the Company. This will complement existing Company stakeholder engagement and information disclosure practices and the EIA process, including a grievance mechanism. The Company will be required to report to the Bank on the implementation of the ESAP and E&S performance of the project and the refinery. ESD will also conduct monitoring visits, where necessary, once travel restrictions are lifted.

6.2 INTEGRITY

In conjunction with OCCO, integrity due diligence was undertaken on the Atyrau Refinery (ANPZ), its shareholder (state-owned KazMunayGas 100%), senior management and other relevant parties. The review [REDACTED] concluded that this project does not pose an unacceptable integrity or reputational risk to the Bank. [REDACTED]

All actions required by applicable EBRD procedures relevant to the prevention of money laundering, terrorist financing and other integrity issues have been taken with respect to the project, and the project files contain the integrity checklists and other required documentation which have been properly and accurately completed to proceed with the project.

ANNEXES TO OPERATION REPORT

ANNEX 1	TRANSITION IMPACT SCORING CHART
ANNEX 2	SHAREHOLDING STRUCTURE
ANNEX 3	HISTORICAL FINANCIALS
ANNEX 4	NWF SAMRUK-KAZYNA JSC EXPOSURE
ANNEX 5	PROJECT IMPLEMENTATION

ANNEX 1 – TRANSITION IMPACT SCORING CHART

Score for primary transition quality

Quality: Green

Component: Other

Quality average score: 60.0

ATQ adjustment

Country: Kazakhstan

ATQ adjustment: Other: -1.5%

Adjusted Quality score: 59.1

Score for secondary transition quality

Quality: Inclusive

Component: Youth

Quality average score: 76.0

ATQ adjustment

Country: Kazakhstan

ATQ adjustment: Youth: -2.7%

Adjusted Quality score: 74.6

Weighted TI score*

Base TI score (ATQ-adjusted): 63

Adjustment for Country Strategies

Adjustment: 2.0% – Strategic project alignment

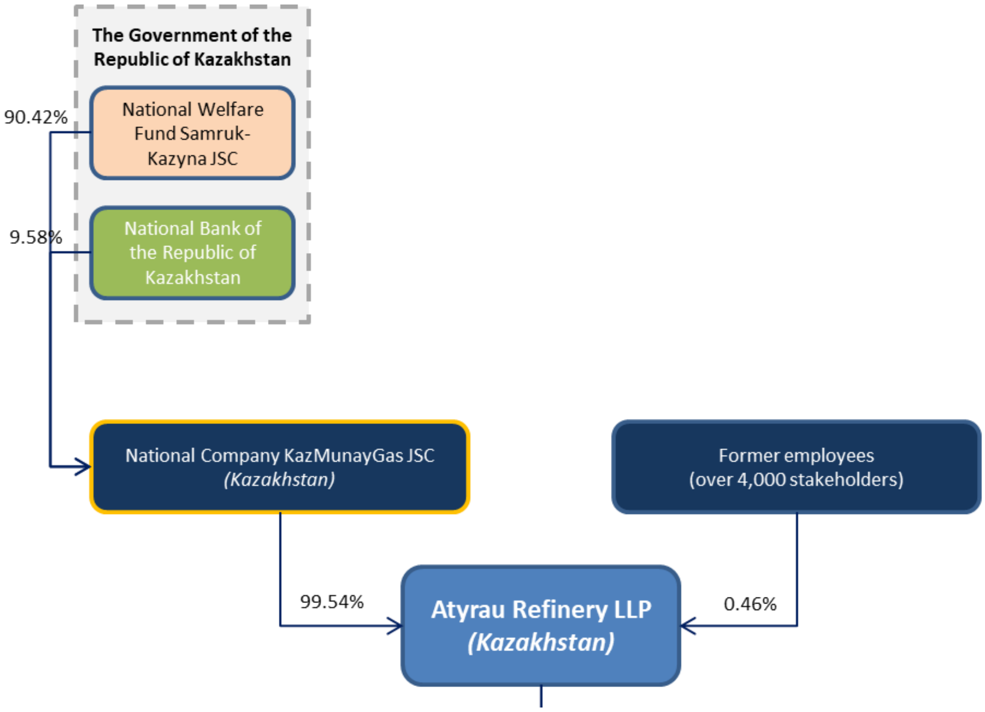
CS **Adjusted score:** 64.3

Final TI score

Final TI score: 64

* The Primary Quality score is weighted 75% for the calculation of the Base TI Score. The Secondary Quality is weighted 25%.

ANNEX 2 – SHAREHOLDING STRUCTURE



[REDACTED]

Sources: information from Atyrau Refinery LLP, state registry of legal entities

ANNEX 3 – HISTORICAL FINANCIALS

[REDACTED]

ANNEX 4 – NWF SAMRUK-KAZYNA JSC EXPOSURE

[REDACTED]

ANNEX 5 – PROJECT IMPLEMENTATION

[REDACTED] The Project will be implemented by Atyrau Oil Refinery (the "Client"). The Client has no experience with implementing MDB financed projects, however, it has well established procurement and engineering departments, which have been involved in the project preparation and will carry out project implementation.

Contracts risk assessment - *Moderate High*

Whilst contracts for land reclamation and remediation of evaporation ponds as well as refurbishment of effluent canal are simple (FIDIC Red book) and represent "Low" risk, two contracts for technological water treatment plants to be arranged on a design and built basis (FIDIC Yellow book) may pose implementation risks to the Client, given their limited experience with such contractual arrangements and technology.

Project implementation arrangements:

The client will be responsible for implementation of the project. It is expected that the Client will be supported by qualified international consultants to assist them with the procurement process and supervision of the works.

Procurement arrangements:

Goods, works and services financed by the loan will be procured following open tendering procedures, in accordance with the requirements of Part III Section 3 of the Bank's PPR for public sector operations and using the Bank's standard tender documents. All tenders will be carried out via ECEPP. It is envisaged that single stage procurement process will be required for land reclamation and remediation of evaporation ponds as well as refurbishment of effluent canal and two stage procurement process – for process water treatment plants, given the design angle and technology intensive nature of the works. The first contract will be subject to the selective review. If deemed necessary and subject to assessment of market conditions the contracts for process water treatment may be merged.

All consultants will be procured in accordance with Part III Section 5 of the Bank's PPR.

All loan-financed contracts will be subject to prior review by the Bank. [REDACTED]