

RISK AND OPPORTUNITIES

Risk management is considered an integral part of company's corporate governance since the business is subject to risks, uncertainties and opportunities. Our Risk Management & Strategic Planning Committee headed by CEO and comprised of HOD's evaluates all matters related to risk management and strategic plans including opportunities twice a year. The risk and opportunities relevant to the business of ARL & their respective management response for monitoring and mitigation are also presented below. In addition, risk and opportunities could cause actual results to vary from those described here in the description below, which may include forward looking statements or could impact our ability to meet our targets or to be detrimental to our profitability or reputation.

ESG Risk & Opportunities		
Risk /Opportunity	Impact & Consequence	ARL Management of Risks & Opportunities
Change in Quality of Crude Oil	Change in crude oil quality may relate to either a change in its API gravity or to the amount of unwanted contaminants in it. This may impact the throughput of refinery, product slate and may also cause damage to the equipment resulting in financial loss/impact.	There is flexibility of operation at ARL distillation units with capability of handling light to heavy and sweet to sour crudes. In case of quality variance (increase/decrease in API gravity and Sulphur contents) the crude blends may be adjusted to suit the unit's capability. ARL demonstrated the above by processing a very heavy crude from Baluchistan on trial basis. In case of high sediments & salts, the Desalters at heavy crude unit are capable of getting rid of such impurities and save the downstream equipment from any adverse effect. ARL corrosion monitoring program is also in place with regular monitoring and inspection. If required, and as practiced in past also, primary treatment can also be carried out at oil fields.
Competitors Refineries in North region	ARL is the only refinery existing in the north region. In case if another refinery is setup in north region, the major share of crude received at ARL will be diverted to it, and there will be deficiency of crude for refinery operation.	Viability of an inland gross root complex refinery of small capacity far from port is minimal. Further, crudes available in northern Punjab will still be available to ARL being the nearest refinery. Due to the foregoing reasons, none of the various plans in the north have materialized as yet.
Occupational Health & Safety of employees and safety of Assets	High absenteeism rate, Direct and indirect accident cost and lower productivity	In order to minimize the chances of incidents and accidents, the Company carries out a detailed analysis of its operations and possible risks, consequently adjusts the existing processes, including increased control over the efficiency of equipment, employee training in the field of occupational health and safety, and permanent readiness for emergencies. The Company plans to further improve the processes of hazard identification, risk assessment, and use of a risk based approach for HSE planning.

China-Pakistan Economic Corridor	Business Expansion & Economic growth	ARL considers China Pakistan Economic Corridor as an opportunity & game changer for Pakistan and whole region. CPEC energy & infrastructure projects will have primary impact on industry & services. The company is closely monitoring the progress of these projects for taking appropriate actions and measures as deemed necessary for business continuity and growth.
Market Trends	Low throughput, Uncertainty in Business & decrease in profitability	The introduction of LNG into the country energy mix and improved quality petroleum products including higher RON PMG & Low sulfur Diesel is changing the petroleum products market dynamics and posing its impacts to refinery sector of Pakistan. Reduced refinery margins due to various reasons, including the pandemic (COVID-19), have severely impacted the refinery profitability. All these challenges and issues faced by refineries in Pakistan including ARL have been brought into the knowledge of Ministry of Energy (Petroleum Division) and their intervention for resolution of these issues has been requested.
PMG/HSD Specification	Government has implemented Euro-V specification for PMG and HSD. Refineries producing lower than Euro-V grade products will be penalized for quality differential in product price.	<p>In order to be able to produce Euro-V compliant higher RON PMG, ARL has planned to install a CCR unit. Basic Engineering Design for the CCR unit and revamp of existing Naphtha Complex has been completed.</p> <p>For production of Euro-V HSD, Licensor FEED is in progress for a revamp feasibility study of the existing DHDS.</p>
Disaster Sabotage/Terrorism	a. Security threat due to un-rest in IOK, fresh wave of Indian and Afghanistan sponsored terrorism in Pakistan, anti-Muslim laws in India and Regional Geo-strategic instability.	a. Appropriate security measures to be emplaced round the clock.
	b. Sabotage/ terrorist activities to inflict damage to Refinery	b. Continuous assessment of national and international environment for evaluation of threat assessment for mounting matching response.
		c. Liaison with Law Enforcement Agencies (LEAs) for provision of early warning on impending threat.

Land disputes	Litigation due to land disputes.	Security and Land Sections report all construction activities within 200 yards of ARL boundary in line with KPID instructions and necessary measures are adopted to deal with such violations as per policy. Pending land issues with DHA are being pursued for final settlement.
Man Power Retention	Low workplace morale/ Deteriorating Service Quality and Hiring/ Training cost	The management is fully cognizant of enrolling HR of the set standards, provision of healthy workplace environment, reasonable salaries and perks, career progression, training and development, ensuring work-life balance, provision of accommodation and recreational facilities are some of the measures to keep turnover within the desired limits. We try to meet the financial challenges by means of cost-efficiency without compromising the business standards. During the entire period of huge financial losses, since 2018-2019 to date, the Company stood committed to pursue good HR practices without any layoffs or holding the statutory payments during these times, to keep the morale of the employees high.
Circular Debt	Reduced Industrial Activity, Cash flow Shortfall, Social Effects	The issue of circular debt in petroleum sector has not been resolved but in case of refineries it has reduced to some extent as a result of payments made under recent agreements between Independent Power Producers (IPP) and Government of Pakistan (GOP). The Company closely monitors receivable/payable position and dispatches.
Fluctuating Exchange Rate	Uncertainty in Business Activities	The prices of ARL's products and crude oil are primarily determined in foreign currency therefore fluctuation in exchange rate has a mitigating effect in our case to the extent of respective flows involved. ARL does consider getting the forward exchange cover for its major capital expenditure.
Change in Taxation Policy and Other Laws		All proposed changes in the laws and policies which may affect the Company are thoroughly monitored and discussed at relevant forums at the initial stage to avoid any unexpected exposure upon promulgation of relevant law.

Interest Rate	Uncertainty in Business Activities	<p>Interest rate risk represents the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company has financial assets and liabilities as appearing in its statement of financial position and it is monitored by having a sensitivity analysis identifying the impact of interest rates.</p>
Pricing Formula	Uncertainty in Business Activities	<p>Under the present Refineries pricing formula the Company remains exposed to the risk of adverse fluctuation in the prices of petroleum products and crude oil. This risk has been mitigated to certain extent by introduction of fortnightly product prices. The Company has time and again taken up the matter with the Government and looks forward to formulation and implementation of a Refining Policy in consultation with all stakeholders to address such anomalies. The draft refinery policy is under consideration by the Government after taking the inputs from the stakeholders.</p>
FFO issue	Uncertainty in Business Activities	<p>Due to constraint placed by the Government on utilization of furnace fueled power plants in the country, the Company intermittently faces problems with respect to non-uplifting of FFO. A study has been initiated jointly by local refineries for up gradation of Bottom of Barrel to produce value added products.</p>
Refinery policy	Sustainability of Refinery economics	<p>Pakistan's refining sector has also been struggling for its survival due to various policy issues over the last two decades compounded by the last three years of a very difficult business environment. The last Refining Policy was announced in 1997. The said policy lost its efficacy within a few years as it could not keep pace with the accelerated changes happening in the refining sector. In spite of this local refineries invested in various expansion and up-gradation projects.</p>



		<p>ARL along with other refineries has been intensively engaged with Ministry of Energy (Petroleum Division)-(MEPD) for the development of a comprehensive Refining Policy for the sustainability and up-gradation of existing refineries for the last two years. A Working Group comprising representatives from MEPD and refineries was set up in December 2019. The Working Group has drafted Refining Policy and presented its proposals to competent authority for approval. The outcome would be a new and vibrant policy for the oil refining sector to attract investment in green field refineries and enable the existing refineries up gradation to produce more high value and environment friendly products.</p>
<p>Climate Change</p>	<p>Natural calamities, Disasters, Overloading of atmosphere with pollutants, Increase in earth temperature</p>	<p>Pakistan contributes less than 1 percent of the world's greenhouse gases blamed for causing global warming, yet it's amongst the world's most vulnerable victims of the growing consequences of climate change. Pakistan is in the top 10 countries affected most by climate change, according to the 2020 Global Climate Risk Index released by the public policy group German watch. Climate change is not a direct risk to ARL operation and location, however it may affect indirectly in case of high floods in terms of oil movement. Disruption in oil movement would limit production capacity and potentially increase operational cost. Still we proactively consider climate change risks and opportunities in our business decisions. We are playing our part by taking actions like tree plantation, utilization of renewable resources i.e. installation of solar systems, implantation of energy management system, measuring GHG emissions for quantification & possible reduction and increasing awareness etc.</p>
<p>Water Management</p>	<p>Constraints to growth, Decrease in profitability, Rising costs for raw-water reconditioning</p>	<p>Water is an essential utility in Plant Operations. It is used in cooling tower for water make-up; Boiler Feed Water; Plant Water; in crude desalting; for flushing of pipelines and for drinking purpose. Availability of water sufficient supply to ARL water reservoirs as per demand is very critical for smooth refinery operations.</p>

		<p>Treated effluent water from Effluent Treatment Plant (ETP) is recycled, after testing from Laboratory. Optimization of water usage is an ongoing activity that is adopted all year round</p>
<p>Covid-19 Pandemic</p>	<p>Threat to workers health, Indirect threat to the productivity and continuity of business</p>	<p>To prevent any damage to the health of employee, ARL has developed and implemented SOPs during the lethal waves of COVID-19 pandemic. The detailed initiatives are mentioned in chapter 4.</p>

