Disclaimer

This Environmental and Social Review Summary (ESRS) is prepared and distributed in advance of the IFC Board of Directors’ consideration of the proposed transaction. Its purpose is to enhance the transparency of IFC's activities, and this document should not be construed as presuming the outcome of the Board of Director's decision. Board dates are estimates only. Any documentation which is attached to this ESRS has been prepared by the project sponsor and authorization has been given for public release. IFC has reviewed this documentation and considers that it is of adequate quality to be released to the public but does not endorse the content.¹

Project Description:
Yara International ASA (“Yara” or the “company”) is the world’s largest producer of nitrogen fertilizers and nitrogen, phosphorus and potassium (NPK) fertilizer. Yara operates 24 production facilities in 15 countries and employs close to 13,000 people worldwide.

Yara’s knowledge, products and solutions grow farmers’, distributors’ and industrial customers’ businesses profitably and responsibly, while protecting the earth’s resources, food and environment. The fertilizers, crop nutrition programs and technologies increase yields, improve product quality and reduce the environmental impact of agricultural practices. Yara’s industrial and environmental solutions improve air quality by reducing emissions from industry and transportation, and serve as key ingredients in the production of a wide range of goods.

The company is actively expanding its operations in emerging markets and has invited IFC to consider supporting its FY’15 - 17 capital investment programs in Africa and Latin America which is expected to benefit a large number of farmers, including small and medium sized enterprises.

The majority of Yara’s production sites are in Europe, and the remaining production is in Australia, Columbia, Trinidad, Canada, Brazil and Libya. The most important production process in Yara is natural gas based ammonia synthesis. Other nitrogen fertilizers are downstream production from ammonia. Besides production, Yara also operates warehouse/blending facilities and distribution networks in both Europe, the United States and emerging markets. IFC is considering a corporate loan to Yara so as to support the establishment of warehouse/blending facilities in Africa and Latin America; this includes a recently acquired facility in Zambia.

Yara’s largest production plant in Latin America is Yara Colombia S.A., and this facility was previously an IFC client (Abocol #26175) with main products being nitrogen fertilizers and NPK. This facility was originally owned by Abocol and IFC invested in the project in 2008; Yara then purchased this facility in 2014.

Overview of IFC’s Scope of Review:
The review of this project consisted of appraising technical, environmental, health, safety (EHS) and social information submitted by the Sponsor. The environmental and social (E&S) appraisal team visited Yara’s headquarter in Oslo, Norway, and undertook a field visit to Yara’s newly acquired warehouse/blending facilities in Zambia in May 2016. The E&S team also held meetings with the company’s management team and interviewed employees. Documents related to production, products, corporate EHS policies and procedures, corporate EHS management

¹ Sentences in italics are standard language and cannot be modified.
system, the corporate human resources (HR) policy, stakeholder engagement, security management etc. were reviewed and discussed during the appraisal.

IFC also considered relevant E&S documentation related to the previous investment in Yara Columbia S.A; during the time of IFC’s investment the E&S performance of this project was considered satisfactory.

IFC’s appraisal considered environmental and social management plans for the project and gaps if any between these plans and IFC requirements. Where necessary, corrective measures intended to close these gaps within a reasonable period of time are summarized in the paragraphs that follow and in the agreed Environmental and Social Action Plan (ESAP) disclosed in this review summary. Through implementation of these management plans and the ESAP, the Project is expected to be designed and operated in accordance with Performance Standards objectives.

**Identified Applicable Performance Standards:**

While all Performance Standards are applicable to this investment, IFC’s environmental and social due diligence indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards

PS1: Assessment and Management of Environmental and Social Risks and Impacts
PS2: Labor and Working Conditions
PS3: Resource Efficiency and Pollution Prevention
PS4: Community Health, Safety and Security


All Yara’s existing blending / warehousing facilities are located within industrial zones or in rural areas and PS5: Land Acquisition and Involuntary Resettlement, PS6: Conservation and Sustainable Management of Living Resources, PS7: Indigenous Peoples, PS8: Cultural Heritage is not considered to be applicable to the project at this stage. Going forward though Yara will screen all new projects to confirm the applicability of the Performance Standards and implement measures to ensure alignment with these where necessary.

If IFC’s investment proceeds, IFC will periodically review the project’s ongoing compliance with the Performance Standards.

**Environmental and Social Categorization and Rationale:**

All the existing warehouse/blending facilities are located in either industrial parks or rural areas. In accordance with the company’s group-wide E&S standards air emissions, wastewater discharge and waste management are all strictly controlled and the approach to occupational health and process safety management follows common set of Yara standards equal or above EU requirements at all facilities.

The key E&S risks and issues include the following; i) effective application of Yara’s corporate approach to E&S management to any new facilities to be developed or acquired; ii) ensuring application of labor standards including that related to occupational health and safety to new developments that is aligned with the requirement of Performance Standard 2: Labor and
Working Conditions; and iii) application of effective stakeholder engagement mechanisms allied to reporting.

Mitigation measures for the potential E&S impacts have been identified and are incorporated into an Environmental and Social Action Plan (ESAP). The potential adverse E&S impacts of this project are considered few in number, of limited significance and readily mitigated through the company’s existing robust systems and procedures. This is therefore a Category B project according to IFC’s Environmental and Social Sustainability Policy.

**Environmental and Social Mitigation Measures**

IFC’s appraisal considered the environmental and social management planning process and documentation for the project and gaps, if any, between these and IFC’s requirements. Where necessary, corrective measures, intended to close these gaps within a reasonable period of time, are summarized in the paragraphs that follow and (if applicable) in an agreed Environmental and Social Action Plan (ESAP). Through the implementation of these measures, the project is expected to be designed and operated in accordance with Performance Standards objectives.

**PS 1 - Assessment and Management of Environmental and Social Risks and Impacts**

**Environmental and Social Assessment and Management System**

Yara hires external experts to conduct E&S assessments for projects according to national laws/regulations, Yara’s “HESQ OPeration Standards” (HOPS), and Yara’s Code of Conduct. The company also has an established and robust corporate E&S management system that applies to all operations. Yara's chemical production sites are to a large extent certified to ISO 9001, ISO 14001 and OHSAS 18001, and the International Fertilizer Industry Association (IFA)’s Fertilizer Product Stewardship systems respectively. The TOPS are also compliant with the requirements of the European Union (EU) Integrated Pollution and Control (IPPC) and European Fertilizer Manufacturers Association (FE). There are detailed process safety and occupational health/safety (OHS) requirements in HOPS, which are applied to all Yara’s operations globally. Environmental performance is also managed according to local regulations and best available technology is applied when feasible.

**Policy**

Yara's E&S policy reflects the life cycle approach to the manufacture and use of fertilizers and addresses food security, resource efficiency and environmental protection. Promoting sustainable agriculture and delivering environmental solutions contributing to global growth are set as the key goals. Yara continues to emphasize energy efficient operations and reduce emissions and environmental impacts of the company's processes and products. Yara’s E&S policy is implemented though HOPS and TOPS (Technical Operational standards), which includes all the requisite EHS management programs/procedures, as well as technical standards.

**Identification of Risks and Impacts**

For mergers and acquisitions (M&A) and new/expansion projects in the EU, US, and other OECD countries, Yara conducts E&S appraisals according to applicable local regulations, HOPS and Yara's Integrity Due Diligence (IDD) Procedure to ensure compliances with both local regulations and Yara’s HOPS.
For M&A and the new/expansion projects in emerging market countries, Yara conducts E&S appraisals and environmental and social impact assessments (ESIA) according to local regulatory requirements, the HOPS, IDD Procedure, and best available technologies. As part of this investment, Yara will incorporate a requirement for review of projects in emerging markets against IFC Performances Standards (PS) and the applicable World Bank Group (WBG) EHS Guidelines into the existing E&S review process.

Management Programs
Management at each production site is responsible for educating, training and motivating employees to understand and comply with HOPS and the EHS management systems have been set up to monitor and support this work throughout the organization. Yara’s EHS management system is well developed and includes detailed technical standards, internal codes for EHS performance, and an extensive inspection/audit program. Systematic monitoring of environmental performance and process safety measures is in place for air emissions/liquid effluent controls, waste management, occupational health/safety tracking, and process safety management. Non-conformities to the technical standards are monitored and followed up in detail by management.

Organizational Capacity and Competency
There is a corporate Health, Environment, Safety, and Quality (HESQ) department in Yara, which reports directly to the CEO. The HESQ department establishes EHS goals and standards, and carries out internal EHS audits to ensure that corporate E&S policies are fully implemented. There is also a Safety Committee at the corporate level consisting of the CEO and other senior managers and representative from the EWC (European Worker Counsel)-. The Safety Committee reviews the work by the HESQ department regularly.

There is a corresponding EHS responsible at each Yara plant or facility, which reports to both plant/facility management and the corporate HESQ department. The plant/ facility EHS responsible manages its own EHS performance, local employee involvement, compliance with national legislations, and adherence to Yara’s high technical and operational requirements.

EHS training is required for all new employees and all new employees are required to pass different levels of examinations based on the specific positions they will assume before being allowed to work onsite. All the employees working at plants/facilities take different levels of annual EHS refresher courses based on their positions.

Yara's IDD Procedure requires the screening of all new suppliers against key risk factors and red flags, including EHS performance. The E&S requirements are included in all purchase contracts for major suppliers which require the major suppliers E&S performance to meet all local regulatory requirements and applicable HOPS. The local HES teams routinely audits E&S performance of major suppliers.

Emergency Preparedness and Response
According to HOPS, all the manufacturing buildings and warehouses are equipped with fire detectors and sprinkler systems. Toxic gas sensors are also installed at appropriate locations. Certified reliable firewater pumps are adopted and there should be enough water storage for approximately 2 hours of firefighting. At large manufacturing sites, there are part-time internal firefighters who undertake monthly trainings. Several of Yara chemical production plants are located inside existing industry zones, and the industry park can provide additional
firefighting/emergency response (ER) support if required. Facilities located in rural areas, local professional fire brigades are available to provide additional support. Emergency response plans are prepared at each site. Each site convenes one or two fire/emergency response drills per year depending on the operational risks. There have been no major accidents and emergency response incidents in the past few years of operations. Going forward the company will ensure relevant aspects of the HOPS are applied to new developments such that there is similarly a sound approach to emergency preparedness and response at these.

**Monitoring and Review**
There is a frequent tool box safety meeting at each operational unit. Each plant/facility provides safety reports to the corporate HESQ department also including severe environmental cases. The HESQ department issues monthly Safety report. The corporate HESQ department holds annual EHS meetings and reports annual EHS performance to the CEO and senior management. Yara has a corporate wide incident reporting tool and intranet site, which allows the corporate HESQ department access to the EHS performance at each facility in real time. Online conferences are held whenever necessary. EHS performance / associated non-compliance is set for five levels from 1 (the most serious) to 5 (minimum). Any non-compliance at Levels 4 (e.g. recordable accident) and above are required to be reported to the corporate HESQ department the same day and issued for shared learning.

For all plants/facilities, the corporate HESQ department schedules comprehensive internal EHS inspections every four years. The frequency is increased in case serious issues are identified in routine management. Independent Process Safety audits are conducted for 4-5 chemical plants a year to verify Process Safety management capacity. External experts are engaged for the audits. In case of non-compliance being identified in the monthly reports and inspections/audits, the corrective actions are proposed and documented for the future review to confirm implementation.

**PS 2 – Labor and Working Conditions**

**Human Resources Policies and Procedures**
Yara’s human resources (HR) functions are run globally, on all levels of the organization, and are supported by Yara's HR Information System (HRIS). Both managers and employees have access to HRIS through Manager Self Service (MSS) and Employee Self Service functions (ESS) respectively. Yara’s corporate HR policy provides HR frameworks/guidelines and requires all its subsidiaries to set up HR procedures following local labor laws. Yara’s corporate HR policy also requires all subsidiaries to comply with the general principles of freedom of association, privacy and equal employment opportunities. HR policy and procedure trainings are incorporated in the new employee induction. Employees have access to the HR policy/procedures in their own languages, besides the English version. The corporate HR department conducts internal HR inspections on its subsidiaries to confirm compliance with the Group standards.

**Working Conditions and Term of Employment**
The employment terms at each facility strictly follow the local labor laws, while the corporate HR policy also specifies key principles for working conditions, such as compensation levels, employment terms, overtime management, etc. Yara supports freedom of association and works with unions for related labor issues. In case of absence of unions in some plants/facilities, Yara also allows collective bargaining from employees.
Non-discrimination and Equal Opportunity
Yara is committed to promoting equal opportunities and negating all forms of discrimination. The HR policy specifies requirements related to non-discrimination and equal opportunity. No procedures and/or practices have been identified as discriminatory. All hiring and promotion are merit-based. When candidates have equal qualifications, preferences of hiring are given to local residents and females. Currently, 19% of Yara employees are women. The share of women among the key position holders in the company is only 10% however Yara aims to increase the proportion of women in management positions and focus on gender diversity in key human resources processes like recruitment, talent management, employee development and succession planning.

Retrenchment
Currently Yara has close to 13,000 employees worldwide, of which approximately 45% are in emerging market countries. Retrenchment is not expected for this investment. As part of this project, an undetermined number of employees will be hired for the expansion of warehouse/blending facilities in Africa and Latin America, plus construction labors through contractors.

Grievance Mechanism
The company strives to maintain a good working environment by encouraging open and direct communication between employees and their supervisors. Employees who have work-related concerns, or feel that they have been treated unfairly, are encouraged to speak with their immediate supervisors. If the employee and supervisor are unable to resolve the issue, the employee is encouraged to go the next higher level of management or to HR. All the grievances are formally recorded and Yara is committed to every grievance on a fair and equitable basis. Yara also has ethics hotline and whistleblower system for any employees who have concerns over mismanagement or other issues.

Protecting the Work Force
Yara has a corporate policy to forbid hiring of workers below the age of 18 years and forbid forced labor. HR checks birth and school certificates during the hiring process. These requirements also apply to all Yara’s contract labors. Yara has a strict labor audit procedure for its major suppliers, as a part of supplier audit program, to ensure no child or forced labor is used at major suppliers and the occupational health/safety performances of the major suppliers meet all local regulatory requirements and applicable Yara policies/procedures.

Occupational Health and Safety
Most of the major productions sites (Chemical production sites) are certified by OHSAS 18001. Yara has a "Safe by Choice" approach for occupational health and safety (OHS). The aim is to pro-actively create a safety culture in Yara where everyone takes responsibility. The focus is to further develop the safety culture in Yara with the aim to reduce exposure to hazards through safety leadership and greater responsibility for oneself, and others. OHS requirements are detailed in TOPS, which apply to all operations globally. All production sites have a mandatory health and safety committee that covers all employees working on the site.

Yara's OHS management is implemented through a set of safety tools and methods, including systematic inspections, walk through/observation, peer-to-peer behavior check, etc. Yara sets up challenging key performance indicators targets (e.g., total recordable incidents) for OHS
performance. Contractors working at Yara sites are subjected to the same company OHS rules. As a result, there has been a progressive reduction in the total recordable incident rate (TRI) for both employees and contractors, dropping from 4.3 injuries per million hours in 2013, to 3.4 in 2015, which is better than the industry average.

As part of this investment, Yara will further improve its OHS management for warehouse/blending facilities though its existing Small Site Productivity System, which manages technical and OHS operations at warehouse/blending facilities. Oversight of OHS contractor performance is provided by the corporate or site specific HESQ department as applicable.

Supply Chain
Labor practices and working conditions are included in Yara's IDD Procedure for all new suppliers. If an initial assessment identifies risks related to HR and/or OHS performance, an in-depth IDD may be required. The business department decides together with the Ethics and Compliance Department whether to approve a supplier. Yara also have the supply chain management program to monitor the HR/OHS performances of key suppliers, with periodical review and site visit if necessary.

The approach to HR as defined above is considered consistent with this Performance Standard and going forward Yara will apply a similar approach to HR at new blending / warehousing facilities in Africa and Latin America.

**PS 3 – Resource Efficiency and Pollution Prevention**

Raw Materials and Resource Efficiency
The main raw material for Yara is natural gas, which is used as both raw material and energy source. In 2015, Yara purchase 261 million GJ equivalent of natural gas, of which 90% is for ammonia production. Yara has fulltime energy efficiency engineers at headquarters and all the large manufacturing plants. Plant tests are routinely conducted for energy/production efficiency of the ammonia synthetic process and other large manufacturing processes. Yara has improved its ammonia manufacturing efficiency by 5% in the past four years. Currently, its overall energy efficiency is lower than the IFA global average benchmark.

GHG Emissions
In 2015, Yara generated approximately 12.8 million tons of equivalent CO₂, in the forms of both CO₂ and nitrous oxide (N₂O), mainly from the fertilizer productions. Since this investment is mainly to fund the warehouse/blending facilities in Africa and Latin America, additional GHG emissions due to this investment are considered limited.

Pollution Prevention and Compliances
Yara production sites are operated under strict environmental standards and managed in accordance with both ISO 14001 and Fertilizer Product Stewardship programs. The air emissions from Yara’s productions are N₂O, NOₓ, SOₓ, NH₃, F and dust. The majority of Yara’s wastewater is from cooling water and the contaminants are limited.

Yara developed a novel N₂O catalyst technology and implemented it in its nitric acid plants. As a result, Yara managed to reduce approximately 12 million tons of GHG emissions annually. The technology has also been made available to other companies in the fertilizer industry through Yara’s Industry Solution subsidiary. The DeNOₓ units are installed or revamped across all
Yara’s production plants in recent years, and as a result NOx emission intensities have been substantially reduced. Other pollutants are controlled through fuel optimizations, increased scrubbing systems, and enhanced wastewater treatments.

For all operations in OECD countries, Yara’s performance for air emissions, wastewater discharges, and waste management are compliant with local regulatory requirements. As part of this investment, Yara is committed to complying with IFC Performance Standards (PS) and applicable WBG EHS Guidelines for the new/expansion projects in emerging market countries. In accordance with the ESAP, Yara will assess any future Africa or Latin America blending and/or warehouse facilities against the requirements of the Performance Standards and WBG EHS Guidelines as per the E&S due diligence procedure defined previously. In addition, the company will undertake a desktop gap analysis of its current operations in Latin America against the Performance Standards and WBG EHS Guidelines and implement plans to address these gaps accordingly.

**Hazardous Materials and Operation Hazard**

Fertilizer industry’s raw materials, intermediate products, and some products comprise of hazardous materials. The manufacturing, storage, handling, and transportation of these materials may pose high risks to employees and nearby communities alike. Yara has detailed procedures in TOPS to manage all these hazardous materials. All ammonia is stored as liquid in double layer tanks. All other liquid chemicals are stored at tank farms with secondary containment dykes. Quantitative risk assessments (QRA) are conducted for all ammonia storage facilities. There is no community located within the worst impact radius calculated by the respective QRA’s.

Yara has a well-developed process management system, including detailed technical standards and an extensive audit program. Non-conformities to the technical standards are monitored and followed up in detail by HESQ. Yara continues the development of technical competence of process operations and process safety tools such as hazard and operability studies (HAZOP).

**PS 4 – Community Health, Safety and Security**

**Community Health, Safety and Security:** The normal operations at Yara have limited impacts to the communities nearby based on the E&S impact assessments and routine monitoring undertaken. The majority of Yara’s raw materials and products are transported through vessels, pipelines and roads/rail roads. Yara only contracts licensed transportation companies that have defensive driving programs, acceptable safe driving records, and sufficient emergency response methods as per the TOPS requirements.

**Security Personnel:** Yara hires, if not being employed by Yara, external agencies for site security that conduct routine ID checks at the gates and security monitoring. Yara prefers security agencies without armed weapons. For the newly expansion in Africa and Latin America, Yara may contract armed security agencies for certain high risk assets. As indicated in ESAP, Yara will develop and implement a security management plan framework for operations in emerging market according to the requirements of this Performance Standard.

**Stakeholder Engagement:**

Stakeholder mapping and Engagement
Yara systematically analyzes its stakeholder structure and views the good relationship with key stakeholders as a benchmark of corporate success. Farmers and communities near its operations are among the key stakeholders. Yara has stakeholder engagement plans to reach out to farmers and communities, respectively.

To prepare itself for expansion in Africa, Yara developed an Africa Engagement program. It has initiated multi-stakeholders dialogue to support African Green Revolution by linking public and private sectors with the key stakeholders. Yara co-founds and sponsors African Green Revolution Forum (AGRF). Through the platform of AGRF, Yara connects farmers with related business, governments, academics, and donors to support agricultures in Africa.

Consultation, External Communications, and Grievance Mechanisms
Yara has developed extensive agronomic knowledge that it shares with farmers. Yara has invested heavily in advisory services, helping farmer to ensure accurate matching of nutrient supply and crop needs to meet good agricultural practice. Through the consultation and external communication, Yara promotes the concept of sustainable agriculture aiming at preserving biodiversity and maintaining soil fertility and water purity.

Yara has more than 200 agronomists to support farmers, and a significant number of additional agronomists will be hired in 2016. Besides routine visits to farmers, agronomists also give lectures, provide trainings, and conduct trials for farmers. The grievances from farmers will be fed back by agronomists and sales representatives.

For the communities near its production sites and as a part of their environmental management system, all sites have formal procedures in place to address and resolve concerns or complaints raised by stakeholders, as well as emergency communication procedures to contact relevant stakeholders in a case of a potential accident. Emergency drills also involve the nearby communities where applicable.

A similar approach as defined above will be applied to all future blending / warehousing facilities in Africa and Latin America.

Information Disclosure and Ongoing Reporting to Affected Communities
Yara follows Global Reporting Initiatives (GRI) format as an information disclosure guide to communicate its principles and results to stakeholders. Based on Yara’s commitment, it also develops reports according to the UN Global Compact framework. Yara publishes an annual financial report and impact review report. In the annual Impact Review report, Yara discloses its E&S performance at the corporate levels, which relates to Yara’s responsible growth, environment, health/safety, and workforce. E&S impact/performance information for individual sites is also disclosed locally when necessary.

**Environmental and Social Action Plan:**

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<th>Task Title and Description</th>
<th>Anticipated Completion Date</th>
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<td>PS3: Resource Efficiency and Pollution Prevention</td>
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<td>1. Prepare a time based environmental improvement plan for the new operation in Zambia and those existing in Latin America to ensure fully compliance with IFC Performance Standards (PS), the World Bank Group (WBG) EHS Guidelines and the company’s EHS requirements.</td>
<td>June 30, 2017</td>
<td>Plan ready for IFC review</td>
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<td>2. Amending the company’s existing environmental and social due diligence procedure as to be applied to new operations in Africa and Latin America to include a review against the IFC Performance Standards (PS), and the World Bank Group (WBG) EHS Guidelines and the company’s EHS requirements. Based on the findings of the respective reviews, implement measures as may be necessary to ensure new operations comply with the defined requirements.</td>
<td>June 30, 2017</td>
<td>Amendment Summary ready for IFC review.</td>
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<td><strong>PS4: Community Health, Safety, and Security</strong></td>
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Note: Only left two columns will be disclosed.

**Local Access of Project Documentation:**
Yara will disclose this document at its website (web link…). For inquiries or concerns about the environmental and social impacts of this project please contact:

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