

## **Environmental & Social Review Summary** **Project# 33057 – Fortis Healthcare (India)**

### **Overview of IFC’s Scope of Review:**

IFC’s review of this investment consisted of appraising technical, environmental, health and safety (EHS) related information of Fortis Healthcare Limited (“Fortis” or the “Company”) including EHS policies and standard operating procedures at Group level, building management systems, EHS related performance reports of sample hospitals, and Company’s annual reports and other publicly available information.

The appraisal also included site visits to a selected few hospitals in and around New Delhi, India, and discussions with Company’s senior management in corporate headquarters.

### **Project Description:**

Fortis is a leading, integrated healthcare delivery provider in the pan Asia-Pacific region. The healthcare verticals of the company span diagnostics, primary care, daycare specialty and hospitals, with an asset base in 8 countries. Currently, the company operates its healthcare delivery network in India, Hong Kong, Singapore, Mauritius, Dubai, Sri Lanka and Afghanistan. The Company has divested its stake in Dental Corporation, Australia and Fortis Hoan My, Vietnam.

Proposed investment is a corporate financing through a combination of equity and foreign currency convertible bonds with proceeds expected to be utilized to fund the Company’s India growth plans and could partly be used for repayment of debt, in accordance with applicable regulations. The Company proposes to substantially increase its bed capacity in India over the next 3-5 years, including in second and third tier cities and low income states in India (“Project”).

### **Identified Applicable Performance Standards:**

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 - Social and Environmental Assessment and Management System;
- PS2 - Labor and Working Conditions;
- PS3 - Pollution Prevention and Abatement; and
- PS4 - Community Health, Safety and Security

### **E & S Categorization Rationale:**

Key risks and issues related to this project include: adequate social and environmental assessment of the impacts of the Project; the Company’s capacity to manage its social, environmental, health and safety performance, and engage with local communities in accordance with local requirements and IFC Performance Standards and EHS Guidelines; assurance of fair, safe and healthy working conditions; management of wastes (particularly biomedical waste) and emissions; impacts of transport

infrastructure on nearby communities; life and fire safety management for all public use buildings in accordance with international fire safety codes; and impacts of land acquisition as applicable.

Land required for all the operational hospitals are procured through market-based transactions – such as lease or outright purchase through auctions or acquisitions of existing hospitals. In future too, the land required for the Project will be leased / purchased from the government or private owners, on willing buyer, willing seller basis, PS5: Land Acquisition and Involuntary Resettlement is not applicable. However, since locations and layouts of future assets are not fully known yet, it is possible that the Project may result in impacts that will have to be managed in a manner consistent with IFC Performance Standard 5.

The Project sites are/will be located in urban areas and shall not be located in or near national/provincial/local designated conservation parks. No impacts on biodiversity are expected and hence PS6: Biodiversity Conservation and Sustainable Natural Resource Management does not apply. No indigenous peoples are affected and there are no expected impacts on any cultural heritage resources. Hence, PS7 – Indigenous Peoples and PS8 – Cultural Heritage do not apply.

The Project will result in a limited number of potentially adverse environmental and social impacts, which can be avoided or mitigated by adhering to generally recognized performance standards, guidelines, or design criteria. On this basis, this project is therefore classified as a Category B project according to IFC's Policy on Environmental and Social Sustainability and Performance Standards.

## **Description of key Environmental and Social Issues and Mitigation:**

Fortis has implemented measures to address the environmental and social impacts for its hospitals and has presented plans to address the E&S issues and impacts to ensure that the proposed project will upon implementation of the specific agreed measures, comply with the environmental and social requirements, including: the host country laws and regulations; IFC's Performance Standards; and the relevant World Bank Group (WBG) General and EHS guidelines for Health Care Facilities. The information about how these potential impacts will be addressed by the Company is summarized in the paragraphs that follow.

PS1: Social and Environmental Assessment and Management Systems:

- Environmental & Social Assessment:

Company has in place elaborate policies and procedures for screening new projects. Accordingly, a very comprehensive and thorough assessment is undertaken for potential projects (acquisition or Greenfield development) covering legal, business, technical and E&S aspects before finalizing new projects. Design and development are done strictly in accordance with local legal requirements - including the specifications outlined in the master plans of each city, and the requirements defined by the National Building Code of India 2005 (NBC) – as well as Company's corporate policies - such as green building architecture, construction safety and sustainability.

A formal environmental impact assessment study is generally not required for the hospital developments in the city. The Company procures all the regulatory permits from the relevant authorities to operate its hospitals and applies for renewal when required and complies with the applicable

mitigation measures as per the permit conditions. The Company has the necessary environmental approvals for establishing and operating its greenfield hospitals. In the context of acquisitions made by the Company where status at the time of acquisition reflects clearances required, pending or requiring revision, the Company is committed to approaching the environmental authorities and initiating appropriate action, under permissible rules, for obtaining the same.

- Management Systems:

Fortis has developed and demonstrated its expertise in managing hospitals over the years and is recognized for its best practices, at par with international standards. Fortis has received Joint Commission International (JCI) certifications for 4 hospitals in India.

In addition, most of the large hospitals have been accredited by the National Accreditation Board for Hospitals (NABH). India's NABH standards (<http://www.nabh.co.in>) focus on patient safety and quality of care and provide framework for quality assurance and improvement for hospitals. The requirements of this standard reflect:

- (i) Patient-centered Functions (such as Patient safety, Care of Patients, Management of Medication, Patient Rights and Education, Hospital Infection Control); and
- (ii) Healthcare Organization-centered Functions (such as Continuous Quality Improvement, Facility Management and Safety, Human Resource Management, Information Management System).

Company started its Fortis Operating System (FOS) initiative in March 2007 to focus on streamlining of non-clinical processes by measuring the efficiency metrics. The objective of FOS is to ensure that superior customer facing processes are standardized and adopted across the Fortis Hospitals making them repeatable and reliable.

Fortis has developed and implemented corporate level policies, design guidelines, and standard operating procedures (SOPs). As such, Fortis has developed more than 300 SOPs covering around 27 functions such as: human resources management, housekeeping, infection control, facility management, medical operating systems, food and beverage (F&B), as well as life and fire safety of facility, biomedical waste (BMW) management.

Company has a full-time team of internal auditors at corporate level. Periodic audits are conducted across majority of the hospitals, led by Internal Audit team.

As a condition of IFC's new investment, Fortis will establish an overarching sustainability policy defining its objectives and principles that will guide the Company to achieve sound EHS performance – including compliance with the applicable local laws and regulations and the IFC Performance Standards. Based on this policy Fortis shall define a framework for the E&S assessment and management process for future developments to assess the applicability of IFC's Performance Standards 5-8, and modify its relevant SOPs as necessary.

- Organization:

The corporate projects team of over 20 senior professionals is responsible for the design and development of new hospitals and expansions. This team engages specialized external consultants to ensure that the hospitals are designed in accordance with applicable regulatory as well as Company's internal requirements.

A full time Assets Protection team in corporate office is responsible for managing safety and security across all the facilities. Company also has appointed a full-time senior advisor, focusing on energy efficiency across all the facilities.

At facility level, Facility Director is responsible for the operations and is supported by the Medical Director and Administration Director (for all non-medical affairs). The engineering and safety/security teams, responsible for the EHS management, thus report to Administration Director for day to day matters and coordinate with corporate teams.

- Monitoring & Reporting:

Once operational, each hospital operates rather independently.. The Company has developed a detailed monitoring program. Accordingly, most facilities have to submit information on key performance indicators (KPIs) including that related to EHS issues such as energy and water use, waste generation, liquid effluent quality, OHS injuries (such as needle stick injuries), among other indicators. Fortis follows a Report Card system for all its hospitals to capture all the operational information for corporate level benchmarking.

-External Communications and Grievance Mechanisms:

Fortis has in place SOP for receiving and registering external communications from the public, in order to assess the issues raised and to provide responses. During construction phase this SOP will be developed by the Projects team. Currently, this is managed by administration and public relations department.

PS2: Labor and Working Conditions:

Fortis Hospitals has a workforce of over 12,500 in India, with approx. 55% women employees across the ranks. For most of its facilities, Fortis has outsourced housekeeping, security, F&B laundry for some to specialized agencies in the respective field while maintenance functions is in house.

- Human Resource (HR) Policy, Management

Fortis' Board of Directors has a HR and Remuneration Committee that provides an oversight to HR management across the Company. Corporate HR department is responsible for recruitment, compliance, training, compensation and benefits and strategy.

Formal and documented HR policies and practices in place, which are in line with the IFC's PS2 requirements. These cover: terms of employment and working conditions, including procedures for hiring, probation, training, performance review, promotion, insurance, salary and compensation, resignation, lay-off and firing, leave and vacation, and retirement - which are consistent with the national labor laws.

Workforce safety and hygiene practices are in accordance with the NABH requirements, and cover among others biological hazard safety (e.g. nosocomial infections, needle stick injuries), practices for handling hazardous drugs (e.g. chemotherapeutic drugs), radiation protection, preventive medicine, workplace monitoring and medical examination of employees.

#### - Freedom of Association, Grievance Mechanism

Fortis respects the staff's Freedom of Association, and, hence does not prevent formation of employee unions. Staff unions are active in few of Fortis's large hospitals. While nurses had entered into collective wage negotiations in 2012, Fortis offers an attractive remuneration package to its employees in order to attract and retain the best talent in the market.

As part of its HR policies, documented grievance mechanism is available for all the employees to raise any of their concerns.

#### - Training and Human Resources Development

Being a service organization, training, capacity building and professional development of its staff are an important part of Company's "People's Agenda". A structured program for training and staff development is in place across all its facilities developed by the respective local training head, which also covers elements related of EHS. Outside trainers are recruited as and when necessary.

#### - Contractors /Construction Safety

Fortis has documented SOPs on various requirements for the site operation and construction management. The aspects related to construction labor and occupational health and safety are covered in Conditions of Contract. Accordingly, Contractors are required to comply with national labor laws, including those governing living and working conditions of the labor force and occupational health and safety.

For construction of new hospitals, Fortis works with reputed construction companies in India who have articulated and formalized their own health and safety policies and management systems. Moreover, Fortis's project team monitors construction sites to ensure labor compliance, quality and safety during construction.

#### PS3: Pollution Prevention and Abatement:

##### - Resource Efficiency:

The Company has a strong emphasis on energy and water conservation as part of its sustainability agenda. During recent years, Company has taken and is further in the process of implementing the following resource efficiency measures in some of the hospitals:

- Optimization of Heating Ventilation and Air Conditioning (HVAC), Chillers, Air Handling Units and Pump operation, Air Balance study to improve air distribution.
- Optimization of boilers to improve efficiency and reduce fuel oil consumption. Leakages plugged and water pipe lines insulated.
- Provided hermetically sealed stainless steel doors for operation theatres to plug wastage of conditioned air.
- Streamlining of Sewerage Treatment Plant (STP) and Irrigation System for effective utilization of wastewater, resulting in water conservation.
- High speed diesel (HSD) fuel savings by running only one boiler thereby providing condensate storage in a tank and using hot water back in washers.

- External lights powered by solar panels
- Replacement of Sodium Vapor lamps with Compact Fluorescent Light for external lighting, use of Light Emitting Diodes (LED) and use of electronic chokes and T-5 tube rods against conventional ones.
- Installed energy efficient Air Compressor, UPS with high efficiency motors for conservation of energy.
- Use of Building Management Systems (BMS) resulting in reduction in Chiller running time.

The energy conservation measures have resulted in considerable reduction of energy and thereby reducing the cost. This has helped Fortis to significantly reduce per bed electricity consumption for most of its hospitals. Two Fortis hospitals have also received energy conservation awards from Government of India.

For the development of new hospitals, company hires sustainability consultants (in addition to architectural, structural, fire safety) who provide inputs on green building design principles. As such, solar passive architecture for maximum use of natural light and ventilation, total recycling of treated effluent, energy efficient lighting are some of the standard features adopted in some of the Fortis hospitals. Some of existing hospitals are certified for energy efficiency design.

Going forward, Fortis plans to develop all its greenfield hospitals as per the guidelines of Indian Green Building Council's (IGBC) LEED (Leadership in Energy and Environment Design), and would achieve at minimum Gold certification.

#### - Greenhouse Gases (GHG) Emission

GHG emissions resulting from operation of the proposed Project are estimated based on actual resource consumption at Fortis existing facilities in India. The GHG emissions during the operational stage have been estimated as 53,000 tons CO<sub>2</sub> equivalent per year. Actual records will be used to review amounts of tons CO<sub>2</sub> equivalent per year that will be emitted from the new hospitals once they are operational.

#### - Water and Wastewater:

Water for all the hospitals is sourced from the local municipal sources and/or groundwater wells. The raw water is further treated (filtration, softening as required) and the treated water quality is regularly monitored to confirm that it meets the national potable water quality standards as stipulated by NABH.

For most of its existing hospitals, effluent treatment facilities are available, comprising of primary treatment (screening, settling), secondary biological treatment (aeration, media filters) and tertiary treatment (activated carbon filter, softening). The treated effluent is reused within the premises for gardening, flushing or cooling tower makeup water. The sludge from the effluent treatment plant is further processed in filter press and later disposed of through the licensed contractors as per the environmental permit condition. The treated effluent is regularly monitored by the Company as well as regulatory agencies. In most hospitals, the infectious body fluids are collected and disposed of separately as per NABH requirement. For the upcoming greenfield hospitals Fortis will implement the similar wastewater management practices.

#### - Energy Supply and Air Emissions

Fortis sources electricity for hospitals from the grid. However, diesel generators (DG) are provided as back-up in case of grid power cuts. The diesel generators are provided with acoustic enclosure. The DG and boiler stack heights are maintained and emissions monitored as per applicable statutory norms.

- BMW / Solid Waste Management:

Fortis has a documented SOP for biomedical waste management in place which provides guidelines to ensure correct sorting, labeling, handling, storage, transporting and disposal of solid and liquid waste and, thus, prevention of infection and contamination of personnel and equipment. Accordingly, all the hazardous waste such as (mercury, residuals from wastewater treatment, etc.); and general health care wastes are sent to the authorized central municipal, biomedical and hazardous waste treatment facilities as stipulated by local regulations. Fortis has updated its SOP to include a requirement of verification of the chain of custody documentation for the authorized waste management contractors (which will be as per individual hospital requirements) from time to time.

PS4 – Community Health, Safety and Security:

- Vehicular Traffic

For any healthcare facility, significant volume of vehicular traffic is expected during construction and operational phases. At the time of site selection and hospital design Fortis assesses the accessibility and the availability of parking space. Fortis's security team facilitates the vehicular movement and parking for the doctors, staff, patients and visitors to ensure minimum inconvenience to the neighboring residents. In case inadequate parking is available on the hospital site, Fortis provides for valet service as per its SOP.

- Fire Safety

Fortis has developed standard requirements for fire safety systems design and operation which build upon the stringent requirements of JCI (where applicable), NABH and local fire safety regulations. Fire detection, alarm and firefighting infrastructure has been put in place across most hospitals. For smaller hospitals firefighting systems are in place, in accordance with local fire safety regulations and include fire extinguishers, hydrants etc. as applicable. Similar systems are also developed in the design of new hospitals. SOP has been developed for safe evacuation of patients in case of fire. Regular training and fire/ evacuation drills are conducted to maintain the system.

Every Fortis facility undergoes an Infrastructure Safety and Security audit every quarter. The audit is conducted by a team of fire officers, biomedical engineer and chief engineer from another hospital belonging to the Fortis Group so as to ensure objectivity during the audit process. Company has developed audit checklists for this purpose. For instance, fire safety audit checklist covers 106 points from National Building Code, NABH and JCI requirements which are audited quarterly. The audit team conducts an exit meeting with facility director and facility heads to share their observations.

Fortis has demonstrated a strong fire safety performance in all its hospitals since its inception in 2001. During all these years, there have been no fire incidents resulting in fatalities or major injuries to the employees and community.

For the development of new hospitals and expansions, Fortis has developed internal guidelines, which

spells out basic design requirements such as space and zoning requirements for strategic service lines (medical units, operation theatres, laboratories etc.), support services (engineering, patient services, etc.) and life and fire safety. This brief requires the design for all new hospitals to be in compliance with latest recommendations and requirements of NABH and India's National Building Code (NBC) - the requirements of which are materially the same as those of US National Fire Prevention Association (NFPA) code. This includes installation of sprinkler systems throughout new health care facilities. The brief also spells out basic design principles such as use of natural light; safety and security of patients and hospital resources and compliance with Green Building certification requirements etc.

For all the new hospitals being developed under the Project, Fortis will commission a fire safety professional, acceptable to IFC, to review the site specific Architectural Brief and confirm that all the LFS-related aspects of design are consistent with an internationally recognized fire and life safety code guidelines, as required under the life and fire safety section of the WBG EHS General Guidelines.

Following construction, the fire safety professional shall inspect the newly constructed buildings. Fortis will submit to IFC certifications from this professional that each facility is designed, constructed, and operated in full compliance with local building codes, local fire department regulations, and all LFS aspects of the previously approved Architectural Brief.

- Community Exposure to Disease:

Fortis has a strong program relating to patient safety, aligned with the requirements of the JCI and NABH, which includes control of nosocomial infections. Fortis has in place comprehensive engineering and administrative controls such as proper ventilation systems, architectural segregation, decontamination practices, and controls on water, food and waste, among other preventive and corrective measures. The new hospitals will be designed and operated under these criteria to manage nosocomial infections.

On the basis of the above information, and by implementing the Environmental and Social Action Plan the Project will be operated in compliance with IFC's PS and relevant environmental, health and safety guidelines.

## **Client's Community Engagement:**

Over the years, Fortis Healthcare has been involved in a number of social initiatives to support the community and bring about a positive change in preventive healthcare, through education and awareness building activities. Its CSR programs are delivered through the Fortis Foundation, which is committed to providing health services and subsidized medical care to the socially and economically marginalized sections of society. The focus is on the mother and child. The foundation also takes up issues that make a difference to the environment. It reaches out to the community by organizing health check-up camps, and also focuses pre-emptively on education and awareness building activities for children and adults, on health issues and environmental concerns.

## **Local Access of Project Documentation**

Fortis will disclose this ESRS and the ESAP at its website: <http://www.fortishealthcare.com>, as well as locally at the following address:

Fortis Healthcare Limited  
 Tower A, Unitech Business Park  
 Block –F, South City 1, Sector 41  
 Gurgaon, Haryana – 122001

The appended ESRS and ESAP have been modified to reflect new updates.

All inquiries and comments may be directed to: Mr. Anurag Kalra, VP Investor Relations, Fortis Healthcare Ltd Tel: +91 9810109253 | Email: [anurag.kalra@fortishealthcare.com](mailto:anurag.kalra@fortishealthcare.com) .

## Environmental and Social Action Plan:

Task Description	Status
<p>1. Establish an overarching sustainability policy defining its objectives and principles that will guide the Company to achieve sound EHS performance of the Project – including compliance with the applicable local laws and regulations and the IFC Performance Standards.</p> <p><u>Deliverables:</u> Sustainability Policy articulating its commitment to comply with IFC Performance Standards</p>	Completed
<p>2. Based on Sustainability policy, develop an SOP for all the new developments to assess the applicability of IFC’s Performance Standards 5-8, and manage the impacts if applicable.</p> <p><u>Deliverables:</u> SOP for E&amp;S assessment and management process for future developments.</p>	Completed
<p>3. Update the SOP for BMW Management to include a requirement of verification of the chain of custody documentation for the authorized BMW waste management contractors from time to time.</p> <p><u>Deliverables:</u> Updated SOP for BMW Management</p>	Completed
<p>4. Provide to IFC a third-party certification from the competent professional that the design of all new hospitals being constructed under the Project are in material compliance with local as well as internationally accepted life and fire safety standard(s).</p> <p><u>Deliverables:</u> Copy of the certification from the competent third-party professional</p>	Before commencing the construction work of all new greenfield hospitals
<p>5. Provide to IFC a third-party certification from the competent professional that all new hospitals have been constructed in full compliance with international life and fire safety code (as referred in the ESAP #4 above) local building codes, local fire department regulations and local legal requirements</p> <p><u>Deliverables:</u> Copy of the certification from the competent third-party professional</p>	After completion of construction of Hospital all new greenfield hospitals and prior to commencement of operations