CHALLENGE 1 Social Labor:

How to better respect and protect workers' rights in the supply chain?

Respect the basic principles of Human Rights defined by United Nations Global Compact and International Labor Organization (ILO). Today's globalized economy and its multi-tier supply chain makes the preservation of worker rights more complex and difficult. In a world undergoing radical technological changes, digital technology would be a powerful tool for economic, social and environmental change.

Main focus: no use of child labor, no forced labor, no discrimination, fair wages, no excessive working hour, freedom of association & right to collective bargaining.

Expected solutions

- Digital Technology such as block chain to verify workers' ID information, working hour and overtime wage
- Innovative tools to promote social dialogue between workers and management, such as mobile survey
- IoT solutions to monitor in real time working conditions and protect juvenile workers
- Other innovative solutions to address above challenges

CHALLENGE 2 Health & Safety:

How to secure workers' safety and healthy working conditions?

Companies and factories shall provide its employees, contractors, partners or others who may be affected by Supplier's activities with a safe and healthy working environment.

The ILO estimates that 2.02 million people die each year from work-related accidents or diseases, a further 317 million people suffer from work-related diseases. The ILO has estimated that 4% of the world's annual GDP is lost as a consequence of occupational diseases and accidents.

Main focus: Occupational Safety, Emergency Preparedness, Machinery Safeguard, Industry Hygiene, Sanitation Food and Housing

Expected solutions

- Effective and efficient digital tools to enhance workers' safety awareness and capabilities, for instance via VR scenario simulation training
- Big data / AI tools to analyze Health & Safety issue root cause and prevent risks
- Real-time safety risk monitoring and risk alert in the factory production line (especially for dangerous/hazardous substances regarding chemical, high temperature, radiation...), warehouse, and dormitories

- Innovative tools to promote social dialogue between workers and management, such as mobile survey
- Workers' health & safety database management

CHALLENGE 3 Environment:

How to ensure green economy and protect environment?

Factories shall have processes in place to actively optimize the use of finite resources (such as energy, water and raw materials) and ensure appropriate management, operational and technical controls are in place to minimize the release of harmful emissions to the environment.

Suppliers shall strive to minimize the adverse environmental impact of its products and services during their whole life cycle: conception, development, production, transport, use and disposal or recycling.

Main focus: pollution prevention and resource reduction, liquid waste and solid waste treatment, hazardous substances and chemicals management, minimize Greenhouse Gas emissions (GHG) and energy consumption, circular economy (eco-design of products and services, waste collection/reuse/recycle/remanufacture)

Expected solutions

- Digital solutions to lower factory's environmental impact
- IoT technology to monitor in real time environment performance regarding dust, gas, CO_2, water and other hazardous materials
- Big data / AI tools to analyze environment issue root cause and prevent risks
- Innovative tools to calculate and reduce GHG
- Innovative idea to collect and recycle waste
- Other innovative solutions to address above challenges

CHALLENGE 4 Business Ethics:

How to maintain high ethical conduct and operate responsibly?

Conducting its affairs within an ethical business environment requires fighting against bribery & corruption, protecting IPR and responsible sourcing of minerals. As connected objects, big data technology and smartphones steamroll into our lives, cybersecurity and personal data are giving rise to a whole new category of questions concerning ethics and trust.

Focus: Anti-corruption and bribery, IPR, CSR engagement in supply chain, Responsible sourcing of minerals

Expected solutions

- Innovative solutions for personal data protection and cybersecurity
- Digital tools for anonymous reporting
- Block chain idea to trace conflict minerals
- Technology for IPR management
- Other innovative solutions to address above challenges

CHALLENGE 5 Capability Building:

How to improve factory's CSR capability?

Focus: strengthen factory capability in order to manage & measure CSR requirements with a structured and continuous improvement process; ensure supplier's long term improvement of sustainability performance

Expected solutions
- Digital tools of knowledge sharing in order to develop company's professional CSR skills
- CSR process management tools
- Solutions to raise CSR awareness to company and to society
- Innovative solutions to encourage public interaction around CSR issues

Frequent non compliances

Social Labor non compliances

Child Labor & Juvenile Workers (Child labor: less than 16 years old, Juvenile Workers between 16 – 18 years old in China)

- Incomplete worker records
- fake ID
- juvenile workers should not work overtime work, no night shift
- no regular physical examinations for juvenile workers (every 6 month)
- juvenile workers should not be involved in chemical job

Working hours

- excessive working hours per day/week/month
- rest day should be guaranteed (one day off per 7 days, for instance work consecutive more than 20 days)
- incomplete working hour record

Wages & Compensation

- minimum wage below legal requirement
- unable to verify overtime wage
- overtime wage are not fully paid
- social insurance are not provided to employees as legal requirement

Forced Labor

- factory should provide contract copy to employees
- in certain contract, employees are not allowed to leave the company before having worked for 1 year

Freedom of Association

- certain factory didn't establish a trade union or elect worker representative

Discrimination

- certain factory does not ensure the same labour standards for dispatched workers as for their own workers
- pregnancy test should not be conducted for women personnel during recruitment

Health & Safety non compliances

Safety Management

- factory has not carried out the assessment of work related risks
- factory did not establish corrective action/prevention action process in the accident disposal procedure
- factory did not conduct noise test / dust test in machining workshop
- factory did not install eye wash facility in dispensing chemicals areas
- soldering workers did not wear provided mask when working
- some workers have no ear protection in noisy area
- factory did not provide the Building Structure Safety Certificates

Emergency Preparedness

- evacuation plan is posted in the wrong direction
- no written fire safety plan
- no emergency light in the dormitory
- factory has not provided emergency light with individual battery backup
- no emergency exit sign in the workshop
- evacuation route is blocked
- emergent exit is locked
- emergency exits in workshops are not enough as requested by law
- fire alarm is invalid
- fire extinguishers are not well maintained

- water belt is broken
- no annual fire drills

Machinery Safeguard

- No certificates for X-ray machines
- The factory did not provided annual inspection reports for two elevators
- one forklift driving without warning light
- some power boxes in the dormitory building are naked without proper management

Exposure Hazardous Substances

- no secondary container for chemical material
- chemical material stored at dormitory area
- some bottles with chemicals (such as oil, thinner and so on) were not labeled
- no anti-explosive lights at the one oil spraying cabinet
- hazardous chemicals ("Alcohol" known as flammable) is placed in the production line without proper management

Sanitation & Food

- drinking water dispenser has no maintenance record
- food catering workers have no valid medical checkup report

Environment non compliances

Environmental Management System

- company does not have an environmental management system designated to detect, manage and reduce the environmental

Waste treatment

- discharge water pollutants exceeded the local discharge standard
- hazardous wastes were not transferred to qualified 3rd party
- the capacity of the oil filter used for air compressor was not sufficient, oily waste drain water of air compressor was directly discharged into rain pipe
- partial empty chemical containers in waste station were stored in the open air
- The normal waste stored onsite mixed with some hazardous waste

Environment permit

- no EIA (Environment Impact Assessment) report from government, which leads to the illegality of the production site

GHG (Greenhouse Gas)

- factory did not calculate and measure GHG emissions due to energy consumption (waters, diesel oil and electricity)
- factory did not set the GHG emissions reduction target
- factory did not monitor GHG regularly and self-declare on a yearly basis

Business Ethics non compliances

Against Bribery & Corruption

- no code of conduct
- no written policy against bribery & corruption
- factory did not conduct the risk assessment on business ethics
- business ethics were conveyed to senior management and employees in key position, not cover all employees
- factory has not established the mechanism to confidentially report the suspected ethical mis-conduct

IPR

- no procedure established to protect IPR
- IPR is not included as part of the supplier contract

Responsible Sourcing of Minerals

- factory did not established policy or procedure regarding conflict minerals